

Public acceptability of low consumption lifestyles:
understanding consumer experience, policy support
and behaviour change

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Abstract

This thesis is a critical realist mixed methods exploration of low consumption lifestyles using deliberative focus groups and experimental paradigms. A rationale connected literature from political ecology, ecological economics, sociology, and climate modelling with social psychology of environmental consumption behaviour. The thematic analysis in the qualitative phase illustrated the relevance of social norms and fairness, guilt and cognitive dissonance, self-interest and co-benefits of lifestyle change, and the limitations placed upon individual agency by structural neoliberalism. These themes are discussed in reference to understanding public acceptability of low consumption and the potential for the integration of degrowth ideals in future imaginaries and pathways to carbon emissions reduction targets. A sequential quantitative phase then employs two experimental paradigm design studies by operationalising key qualitative findings to explore the efficacy of social norms framing and hypocrisy inducement upon preferences for social policies and their governance pathways, and influences on individual behavioural intentions. Social norms are not found to be significantly effective, but the activation of hypocrisy significantly reduces behavioural intention to consume. The research also finds evidence to support the provision of information in order to increase policy support for radical policy change and to foster forms of grassroots community governance. Preferences were found for government regulation on production and consumption of goods, and community development for sharing economy and reduced work hours, over the deregulation of individual and market freedoms. Taken together, the research phases offer understandings of agency where acquiescence appears to overwhelm action and suggests that behaviour change models focusing on consumer behaviour rather than citizenship might reinforce this. It is found that social psychological models of behaviour change could instead be geared towards policy support, in order to create a social mandate for new ways of living. The drive for self-interest in a neoliberal society might be co-opted towards low consumption by highlighting the greater potential for co-benefits such as self-fulfilment and life-satisfaction or geared towards experiential and utilitarian forms of consumption. Implications for policy development and behaviour change programs are discussed.

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Glossary of terms and acronyms

Abductive Theme – An aspect of thematic analysis that is derived from theoretical reinterpretation rather than a preconceived thematic plan

Cognitive Dissonance – The holding of (or the resultant effect of holding) contradictory or inconsistent attitudes and beliefs

CR - Critical realism/realist – A philosophical positioning that bridges ontological realism with epistemological relativism.

Deductive - An aspect of thematic analysis that is derived from a preconceived thematic plan

Degrowth – A social movement seeking to deprioritise the dominance of an economic growth model

Ecological Modernisation – A theoretical model for environmental sustainability that concerns technology, green growth and economic benefits

GDP – Gross Domestic Product – A measure of value added created through the production and consumption of goods and services in an economy

Hypocrisy – The holding of (or the resultant effect of holding) attitudes and/or beliefs that are contradictory or inconsistent with behaviour

Inductive - An aspect of thematic analysis that is derived directly from the data

Latent code – An aspect of thematic analysis that forms a higher order theme

Manifest code - An aspect of thematic analysis that is derived from an initial coding taken directly from the data

Neoliberalism – A socio-political ideology where society promotes individual liberty and autonomy to operate in a deregulated market

NET – Negative Emissions Technologies – Technologies that remove carbon dioxide from the atmosphere in order to prevent the effects of climate change

PEB – Pro-Environmental behaviour – Behaviours that are motivated by, or geared towards, the protection of the environment

Retroduction - A feature of science, in particular critical realism, that seeks to explain data and infer conditions for causation

SEH – Socio-ecological harmony- A harmony between social prosperity and ecological protection

SSE – Steady-state economy – A model for a non-fluctuating economy that maintains consumption levels and economic growth in order to maintain environmental stability

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Chapter 1: Introduction

There is a well-established consensus that the world is experiencing drastic changes in its climate system, with the scientific community in agreement on the severity of climate change risks (Cook et al., 2016) and the need to avoid them in order for human societies and ecosystems to co-exist (IPCC, 2018). The Paris Agreement has set targets to limit global warming to 1.5°C requiring aggressive emissions reductions. If we continue on the current trajectory and exceed 3°C of warming, the results are likely to be catastrophic, with even 2°C rises painting a picture of a future where ‘natural’ disasters such as water scarcity, widespread drought, deadly heat waves and wildfires are commonplace occurrences across the world (Wallace-Wells, 2019; Xu and Ramanathan, 2017). At 4°C the risks rise to a point where there is the potential for six natural disasters such as the ones listed above to happen, not only across the world in different places, but concurrently in multiple places across the globe (Wallace-Wells, 2019).

Growing bodies of science and theory discuss economic growth as being oppositional to environmentalism due to its reliance upon the conversion of natural resources into capital wealth through productivist and consumerist models (DeMaria et al., 2013; Jackson, 2016; Meadows et al., 2004). The planet will not cope with over-exploitation of natural resources, particularly the continued use of fossil fuels, and as such the vision of exponential growth that dominates our economic discourse is unrealistic and myopic (Harvey, 2007; Fournier, 2008; Klein, 2014; Mason, 2015; Randers & Maxton, 2016). Governments across the world are reluctant to implement the voluntary Intended Nationally Determined Contributions (INDCs) set out in the Paris Agreement if they threaten a slowing of economic growth (Wang & Su, 2020); the trade-off between economy and environment has never been more starkly poised. This is especially relevant when considering the global COVID-19 pandemic; economic recession after periods of reduced economic activity, and the temptation for speedy economic recovery will be acute. There is a risk that climate mitigation will be deemed less important and that there is no alternative to capitalist recovery (Everingham & Chassagne, 2020). Furthermore, periods of globalized economic growth after global shock events such as world wars, often result in a peak of inequality (Murshed, 2020; Milanovic, 2016), whereas there is the potential for devolved economies to restore autonomy in national economic policy and reduce domestic inequality (Lee, 2020). In fact, there is a chance to

utilize this moment of change in our society, towards a greener, ethical, just, and fulfilling economy (Spash, 2020). Not only has the Covid-19 pandemic exposed neoliberal capitalism's fragility, least of all in domains of privatized healthcare and the need for state welfare, it presents us with a new potential for post-capitalist organization of society that has previously been absent (Nelson, 2020).

Despite rigorous critiques of the dominant assumption of exponential economic growth at the core of global economic policy, it continues largely unchallenged. The pursuit of economic growth is shown to be a huge contributing factor to the failure of the planet's ability to regulate its ecosystem in accordance with the changing climate, causing catastrophic events across the world. Growth will likely come to an end in this course, and without a carefully planned transition there will be devastating consequences (Victor, 2018). Indeed, we have already seen declining growth rates in many developed and developing economies for many years (Rye & Jackson, 2020). In light of the recent COVID-19 induced recession we can recognise how damaging an unplanned economic downturn can have in a growth-oriented system that is under extreme stress, with little tolerance (Howarth et al., 2020; Leach et al., 2020). Ripple et al. (2019) published an article signed by over 11,000 scientists illustrating the threat that a continuation of current economic growth rates contributes to the risk of catastrophic climate change. Some climate scientists agree that continued economic growth is inconsistent with a global climate change of 1.5°C to 2°C of global warming (Hickel, in Liegey and Nelson, 2020).

Furthermore, and aside from its damaging effects to the earth's natural systems, it is not appropriate to assume that economic growth is always a good thing for society and its inhabitants. Growth of gross domestic product (GDP) is widely used as a measure of success in mainstream politics, yet there is support from many economists that GDP per capita is not a good proxy for social welfare (van den Bergh, 2011; Mason, 2016; Jackson, 2016; Maxton & Randers, 2016; Raworth, 2017). The 'Easterlin Paradox' details how higher GDP does not equal higher self-reported happiness levels (Easterlin et al., 2010). The Gini co-efficient, which measures income inequality, shows us that economic growth positively correlates with further inequality, countering the fundamental principles of economic liberalism and 'trickle down' economics (Randers & Maxton, 2016; Mason, 2015). Where growth targets drive much of our global and national economic policies,

they are necessarily having to eschew an engagement in the biophysical material reality of our planet. To illustrate some of the flaws this approach is we can look at what a projected growth trajectory of 3% annual GDP growth would require of the planet; if this were to be realized, we would have a global economy 20 times that of today. Taking into account that our current levels of production and consumption require 1.7 planet earths in order to maintain a stable environment (Global Footprint Network, 2019), continuing to seek further economic despite this physical limitation of our planet is likely to pose a serious threat. Because GDP is measured through production and consumption in an economy, at the far end of the scale it essentially relies upon consumers to pay for more things and upon a culture of consumerism to drive this. There is an argument that a dematerialized and circular economy could decouple growth from material demand, and thus avoid the dangers associated with economic growth (Czech & Daly, 2004; Wang & Wang, 2019). However, a systematic literature review of research on decoupling GDP from resource use and greenhouse gas emissions shows that the rapid rates of reduction required will not be enough without lifestyle changes that prioritise sufficiency-orientated consumption to compliment decoupling (Haberl et al., 2020).

The links between market activity at the macro level and economic activity at the consumer level can help us to realise how lifestyle level behaviour changes are relevant to this issue. In order to limit warming to 1.5°C, future scenario pathways show that new technology and increased energy efficiency will not be sufficient, and significant lifestyle changes are required (Rogelj et al., 2018). With a quarter of global emissions linked to the consumption and production of material products such as clothing, vehicles, electronics and household items (Cherry et al., 2018) there is a need to reduce consumption of these material goods in order to help tackle this problem effectively as part of a wider emissions reduction strategy. The same production and consumption that contributes to economic growth, is also recognised as problematic in terms of its contribution to global carbon emissions figures. This makes the case for a strong link between growth and individual consumption behaviours.

Few mainstream politicians have expressed a critique of this dominant economic growth paradigm, despite these growing concerns about its suitability for sustainable future. More research into public opinion on these matters could further support political agendas that reflect deprioritisation of growth. MP for Brighton and Hove, and the then

leader of the UK's Green Party, Caroline Lucas, held an all-party parliamentary group called the 'limits to growth' in November 2016, and in her opening statement said the following

“The pursuit of economic growth is a fundamental goal with policymaking. It's widely assumed that growth means progress and that prosperity depends on growth, but what if those assumptions are false?”

(APPG: The end of growth?, 2016)

Elsewhere in her speech she refers to the “social and political taboo” of questioning growth, highlighting this elephant in the room of most political and economic policy making. There is a discrepancy between a recognition of problematic economic growth and its fixed assumptions, and, broadly speaking, a lack of political will to develop new understandings of sustainable prosperity that decouples growth of GDP and environmental damage. This creates an imperative to expand our understandings of life and human experience under growth-centric economic structures, and public acceptance of the potential for living differently in the future. In doing so, there is the potential to influence change through democratic governance pathways. Understanding levels of public acceptability of economic approaches can help policymakers build support from their electorate, and give the political mandate required to encourage changes to individual lifestyles to help mitigate climate change (Willis, 2020). More generally, incorporating public perspectives into policymaking is important for normative, substantive and instrumental reasons (Howarth et al., 2020; Fiorino, 1990).

This brief introduction to the thesis has set forth three key assumptions used to inform this thesis on the public acceptability of low-consumption lifestyles and policy. Firstly, that current models of economic growth based on material consumption are incompatible with tackling climate change, and arguably economic growth per se may be problematic ; secondly, that a relevant aspect of lifestyle level engagement with tackling environmental problems is that of decreasing individual consumption; and thirdly, that the current lack of political feasibility of policy that reduces consumption could be advanced with a better understanding around the public acceptability of alternative consumption policy pathways and low-consumption lifestyles.

In order to build a rationale for this investigation, a literature review will draw upon research that is relevant to consumption policy pathways, as well as relevant theory from social psychology literature on relevant concepts such as pro-environmental behavior

change, consumerism, materialism, and the cultural context of capitalism and neoliberalism. The research will adopt a critical realist framework that will work towards uncovering a conceptualization of what might be a pre-requisite for public acceptability of low-consumption futures or generate an understanding of the conditions that exist now which might be limiting such a transition. These insights will be guided by empirical data analysis from qualitative and quantitative research phases in a mixed-methods design.

In summary, this thesis will generate knowledge of how the public understand their current lived experience in a growth-orientated consumerist society, as well as engage critically with their perceptions of the acceptability of future scenarios that depict low-consumption lifestyle change and policy support. A mixed-methods approach will explore insights on the subject matter from a social psychological perspective. The goal is to advance understandings that will feed into the generation of policies and communication strategies that are more effective at changing behaviours and raising policy support with regards to climate mitigation in the realm of consumption behaviour.

Chapter 2: Literature Review

2.1 Pathways to reducing consumption

The introduction chapter has set forth the rationale for exploring alternative ways of living in order to meet targets of 1.5c, with a strong case for limiting economic growth and reducing individual consumption. Some members of the scientific community suggest that the pursuit of economic growth presents an obstacle to ecological conservation and threatens to limit the opportunity for climate mitigation (Ripple et al., 2019). However, there are other perspectives and pathways to the reduction of consumption that seek to reduce environmental damage and carbon emissions, whilst maintaining economic growth. As such, this thesis will be examining the public acceptability of lifestyles and policy that seek a reduction in consumption levels.

Gough (2017) has proposed three pathways concerning production and consumption in order to attempt to reduce associated carbon emissions which detail the approaches to reducing consumption. The discussion of these pathways here will assess their viability and contextualise them alongside competing approaches. The 'emissions efficiency' model, that assumes the development of technology that reduces emissions whilst maintaining goods and services, is a strategy that would not require reductions in consumption due to the technological gains in efficiency that reduce the impact upon carbon emissions and the environmental resources. This remains somewhat unconvincing to some critics, who question the ability for this strategy to facilitate safe levels of climatic change (Jackson, 2009 in Stern, 2015; Allwood et al., 2013).

Another pathway is to 'recompose consumption' by transitioning towards low-carbon goods and services, cutting carbon emissions, but not cutting levels of overall consumption. This is a much-contested proposal which has been subjected to considerable criticism due to the reliance upon as yet non-existent technologies to reduce the deficit of excess carbon (Anderson, 2015; Blauwhof, 2012; Deutch, 2017; Foster, 2002). Another key argument against the decarbonizing of consumption whilst maintaining high levels of consumption is detailed in 'Jevons paradox', a theory based around the rebound effects of lower energy use that leads to higher use overall at individual level (Jevons, 1866; Chitnis et al., 2014).

These two pathways are coherent with the notion of sustainable development in a green economy under an agenda of ecological modernization, and they represent the dominant

perspective across the world's economic institutions such as World Bank and OECD (Jacobs, 2013). Ecological modernization is a theoretical model for sustainability that seeks to initiate sustainability whilst stimulating growth in the economy (Ibid.). This type of financialization of the environment, where generation of economic growth can help to mitigate climate change and that any environmental costs are able to be internalized and balanced by financial gains, forms the basis for the UK government's adoption of the Dasgupta review (2021). The majority of national and international policies imply the acceptance of a dominant vision of sustainability driven by green growth, technological advancement and environmental regulation (Hickel & Kallis, 2019). These perspectives rest upon the assumption that GDP can be absolutely decoupled from carbon emissions, which is the subject of much debate and has been challenged and refuted by many in the scientific community (Haberl et al., 2020). Whilst it is recognized that these efficiency gains and technological advancements will have to play a role in a 1.5 °C future, it will not be possible without the accompaniment of significant lifestyle changes to accompany them (Rogelj et al., 2018). Therefore, the exploration of these orthodox approaches to consumption reduction will be useful to compare to more heterodox macro- and micro-economic models of consumption.

Gough's final pathway details 'post-growth' where there is a reduction in the material demand of consumers, leading towards a 'steady-state' economy (SSE). This pathway is regarded as a pragmatic route in the short term, and seeks to reduce and stabilize consumer demand. It rests on the assumption the damaging impact of unfettered consumption of materials and fossil fuels of the first two pathways are unsuitable, recognizing that significant changes to our economic model and individual consumption are needed. This pathway has been considered half measure by some, who criticize SSE for being unfeasible due to the delaying of necessary action (Zaccai, 2012; Hopwood et al., 2005; Vivien, 2008, in Martinez-Alier et al., 2010) and as more crucial stepping stone towards more significant systemic change (van den Bergh, 2010).

Going beyond the typology from Gough (2017) there is also a call to transition towards a more radical 'degrowth'; an emergent movement that is gaining popularity, and seeks to employ heterodox economics that take account for the biophysically constrained reality of our planet. This necessitates the further examination of radical changes to the

organization of markets, the political leadership, and the visions of how society might transition towards a 1.5 °C future.

2.2 Degrowth

Rooted in the seminal work from the Club of Rome in the 1970s with their *Limits to Growth* (Meadows et al., 1972), degrowth¹ looks toward a revolution of values and power structures that will no longer focus on growth as a driving factor in society (DeMaria et al., 2013). Often misunderstood as a movement encouraging austerity, puritanism and poverty, degrowth in fact seeks to realise a vision of security, fulfillment and collaborative living (Liegey and Nelson, 2020). Its approach argues that we must move towards a radical scaling down of economic growth, whilst acknowledging the need for the re-organization and re-orientation of social, political and economic structures with regards to many societal goals (Kallis et al, 2013). Not only does it seek an overturning of these power structures, it wishes to shift the qualitative boundaries for what success is for humanity – formulating plans for a “society built on quality rather than on quantity, on cooperation rather than on competition, [a] humanity liberated from economism for which social justice is the objective.” (Latouche, 2003, p. 18). Perhaps most illustrative of the scale of its goals, a degrowth agenda proposes “changes in values, ethics, preferences, financial systems, markets, work and labour, the role of money, or even profit-making and ownership” (Latouche, 2009; Schneider et al., 2010; van den Bergh, 2010, p.4). As a priority, the rationale for including an exploration of degrowth in this work borrows most heavily from the ecological definition, which “implies physical degrowth or downsizing economic throughput as measured by material and energy flows” (Martinez-Alier et al, 2010, p. 1743). This allows for the most direct links between material use, consumption, and economic activity with the associated carbon emissions and resource usage that are

¹ There is some deliberation and disagreement over the terms used to name the movement, where alternative labels such as post-growth and a-growth are often suggested. Some scholars maintaining that degrowth is provocative and less likely to be co-opted by capitalism, in the way that ‘sustainable development’ has been (Liegey and Nelson, 2020). Others claim that post-growth or a-growth is more readily accepted and less easily confounded with notions of ‘decline’, ‘recession’, ‘austerity’ and other negative connotations that may be brought about through such misunderstandings of the concept (Ibid.). Whilst this thesis chooses to adopt the more prevalent label of ‘degrowth’, this is out of prevalence rather than preference, it is simply the more commonly used term. However, it should be noted that in reference to other materials, the chosen term of the author(s) will be used, and this should be considered as somewhat interchangeable with degrowth, unless otherwise specified. This is not such a crucial position to consider in terms of data collection, as the research project itself will not use any of these terms when exploring any relevant concepts with the participants, thus circumventing any need to align with one term or consider the framing effects and influence of the chosen nomenclature.

important for tackling the ecological crisis. However, just as important as this physical and material aspect of degrowth, the movement and research borne from it, is also noted for its extension of political economy into psychological realms of individual well-being – making links between continuous economic expansion and life satisfaction (Büchs & Koch, 2017; Goodland and Daly, 1996; Kallis, 2011) – which will be explored later in this chapter.

The complexity of the ecological crisis, and its many wide-ranging and interconnected perspectives related to climate change solutions, social justice, politics, governance and economics makes it a challenge to bring together the theory and research into a coherent study. However, this complexity bolsters the argument for exploring these issues from the perspective of degrowth, as the movement has been recognized for its strength for bringing about a coalescence between “heterodox thinking and surprisingly heterogeneous action” (Paulson, 2017, p. 426). Degrowth has articulated its agenda by navigating an ever-evolving matrix of complementary thoughts, all sharing the common goal to create a society that is freed from capitalist growth hegemony in order to increase human flourishing and fulfillment whilst protecting and conserving the natural world and its environment (Liegey and Nelson, 2020). It proposes different forms of behavioural action and structural governance that seek the common goal of socio-ecological harmony (SEH) (Paulson, 2017). ‘Socio-ecological’ refers to the interplay of humans and the natural world, and therefore a reference to the ‘harmony’ of the social and the ecological represents a social prosperity that operates within ecological boundaries. It is specifically this failing relationship between human societies and ecological systems that represents anthropogenic climate change and the predicted risks that are likely to be the result. This relationship has suffered due to a dominant economic paradigm of capital growth and a subsequent obsession with the commodification of natural resources (Latouche, 2006). Degrowth’s vision for society prioritises the *mutual* long-term sustainability and prosperity for humans *and* the planet, recognizing that the earth’s capacity to maintain a habitable society is threatened by climate change, the nitrogen cycle and biodiversity loss (Koch et al., 2017; Rockstrom et al., 2009). With this view towards decreasing the impact society has upon the natural world, a degrowth agenda hopes to avoid catastrophic climate change primarily through a transformation away from a productivist, consumerist, and capitalist system (Kallis, 2011).

2.3 Neoliberalism and capitalism

As degrowth seeks to offer new visions of society that depart from a capitalist model, it is necessary to explore the relevance of our dominant system. A recent review article examining the historical trend of global carbon emissions has found that the dominance of political-economic orthodoxy towards neoliberal free market capitalism has frustrated and obstructed effective climate mitigation (Stoddard et al., 2021). Neoliberalism and capitalism are relevant here as they provide the backdrop for the politico-economic landscape supporting and fostering the perspectives of ecological modernisation and green growth, which were explored previously. Neoliberalism has been the dominant political ideology across much of the western world, notably the U.K. and U.S.A. since the 1980s, widely attributed to its adoption by the governments of Thatcher and Reagan (Dean, 2008; King & Wood, 1999). Most generally defined as ideology where society and its inhabitants are guided by the liberty to operate in a free market (Dean, 2008). As such, a keystone of neoliberalism is a 'laissez-faire' government that looks to minimize regulation and leave market forces to dictate social order and policy (Harvey, 2007). This organisation of society encourages individual responsibility for action by assuming rational economic decision making based on maximising individual gains and minimising losses, which theoretically incorporate, and extrapolate to, the needs and requirements of society at large, rather than the engagement with political life (Cosgrove & Karter, 2018). The ideology has been aligned with capitalism, where meritocratic views on success, entrepreneurship and wealth revolve around individual freedom and competition (Bettache, Chiu & Beattie, 2020).

The prioritisation of market liberty allows for industry and corporations to operate relatively freely with minimal regulation, and for them to influence society towards one that is post-democratic and depoliticised by replacing democratic politics with deregulated free markets (Maxton-Lee, 2020). When looking at the role that private industry and the economic pursuit of capital growth, global corporate businesses should be held accountable for their contribution to carbon emissions. Statistics to support this claim show that ninety corporations are responsible for 63% of emissions produced since 1850 (Bonneuil and Fressoz, 2016). However, Soper's (2020) take on this is pertinent to the direction of this research and helps us to understand why individual consumption is in fact not without accountability; the vast majority of these emissions will have been a result of fossil fuel use, concrete in the construction industry and many consumer items.

These areas are often experienced at the end of the line by the individual consumer, and therefore they cannot be totally removed from the examination, even when some tactics towards social change will place the blame squarely at the feet of the corporations. In fact, whilst there are convincing accounts regarding the need for business to change, we need to understand more about the modes of agency for individuals to be responsible and accountable. Knowing how this accountability might be understood at the level of individual experience might help to uncover strategies and levers for human behaviour change commensurate with socio-ecological harmony. Exploring these concepts and ideology here is important, not only due to the accordance of neoliberal capitalism with economic growth and environmental resource depletion, and the challenges it poses to requisite regulatory, legislative and collaborative efforts required to tackle the climate crisis, but also because neoliberalism is often overlooked in mainstream psychology (Sugarman, 2015; McDonald et al., 2017).

The existing research that has investigated the relevance of neoliberalism within social psychology has tended towards the effects and co-existence of neoliberal values with other individual differences. Azevedo et al. (2019) found that neoliberal values were correlated with right-wing authoritarianism, social dominance orientation, economic system justification and gender-specific system justification, illustrating that the preservation of social and economic status quo is linked to the holding of neoliberal values. Furthermore, neoliberalism has been shown to correlate with the acceptance of social inequality (Bettache et al., 2020), which was explored with relevance to increasing levels of economic growth and wealth distribution, and likely effects of climate change impact. Beattie et al. (2019) recognise that these correlational studies do not infer the direction of any causal effect, and could be the result of bidirectional causation linking similarly politically-aligned concepts.

Mark Fisher (2009) wrote that a capitalist ideology is so deeply entrenched within our society that visions of the future that diverge from it are impossible to imagine, let alone transition towards; building his theoretical model of 'Capitalist Realism', that takes inspiration from philosophers Frederick Jameson and Slavoj Zizek, who proposed that it is easier to imagine the end of the world than the end of capitalism. This notion that the capitalist model is sufficiently well-established to the degree that alternatives become difficult to imagine and move beyond is precisely why it is important to engage with new

ideas about how we might live in the future. Harvey (2013) suggests that it is because we are consistently told that there is no alternative to capitalism as we know it, that there is an imperative to create new imaginaries. For these reasons, and the rationale for exploring alternative economic models to exponential growth it will be useful to present materials to research participants that require engagement in new ideas and ways of living that might help to reduce consumption and environmental resource depletion.

2.4 Degrowth and low-consumption lifestyles: voluntary simplicity

The preceding subsections have explained some of the foundational principles of degrowth, neoliberalism and capitalism, helping us to understand the relevance of macro-structures have to this thesis. We must now explore more specifically the relevance of our individual consumption behavior and continue building the rationale for how and why a psychological investigation is much needed. To reiterate, capitalist modes of production and cultural norms of consumption support (and are supported by) the exploitation of resources that contribute to economic growth, as measured by GDP, and in turn contribute to the degradation of our planetary conditions. We can take from this that excessive levels of consumption (defined as levels that are inconsistent with ecological limits) are not good for the planet. As we look at concrete examples of how to promote emissions reduction in low consumption futures, there is a need to explore the relationship between macro-level and individual aspects of consumption. A concept of 'dematerialisation' is pertinent to degrowth theory, defined as "a reduction (in fact tremendous reduction) in the quantity of materials used to serve the production and consumption needs of our planet" (Lorek, 2015, p. 83). Whilst work from Walker, Simcock and Day (2016) and Druckman and Jackson (2010) looked at what energy use and household carbon emissions levels, respectively, are deemed *necessary*, it will be useful to interrogate further the direct lifestyle implications of changes required for further reduced consumption. The most relevant path to dematerialization focused on in this research will be concerning the scope for the reduction in 'resource-extensive lifestyles' (Angrick, Berger & Lehman, 2013), which would directly confront how, at the individual level, we might be able to sufficiently decrease our impact on the earth's resources through lifestyle change.

Whilst there exists a wealth of data about these ecological limits to growth, and much of it shows that consumerist societies in the global north are disproportionately responsible

and must change, this thesis argues for a focus on the perspectives of the individuals who will be subjects of such change. This means that rather than a focus on the macroeconomics and political science of degrowth, this research will instead focus on consumption practices at the individual level, exploring how our current lifestyle choices might be impacting an ability to reduce consumption, and explore how lifestyles indicative of degrowth might be perceived.

Voluntary simplicity (VS) represents a lifestyle coherent with degrowth and low consumption (Alexander, 2012; 2015) and will be pertinent to explore in this chapter. VS “...involves a choice to earn, work, and spend less than one might otherwise, i.e., to live contrary to the consumer capitalist lifestyle.” (Kasser, 2017). We can see how earning and working less, therefore spending less, and not consuming as heavily, can be considered relevant to the central theories of degrowth and the ecological crisis. The motivation for this slower and simpler lifestyle is most often considered to be twofold: a desire for a more sustainable life, and one that is more enriched and fulfilling. There is considerable crossover here with the notion of socio-ecological harmony, this time rooted in individual experience and values, as opposed to a societal observational analysis. Where degrowth spans the macro-level critique of economic productivity and the generation of capital in society, voluntary simplicity represents a micro-level expression of individually motivated set of behaviours and a lifestyle that is conceptually coherent with degrowth, and specifically the need to reduce consumption. Alexander (2012) states that “Degrowth implies Voluntary Simplicity” by recognizing that the macroeconomics of limitless growth requires insatiable consumption, and therefore the macroeconomics of degrowth require the microeconomics of lifestyles representative of VS, claiming that it is a “necessary cultural precondition” (p.2). Some key elements of both degrowth and VS should be examined in further detail, where research on shared concepts of working less, buying less, and living a more fulfilled life, will provide a rationale for the inclusion of both degrowth and VS in this thesis’ goal to explore acceptability of low consumption lifestyles.

The literature surrounding VS is sizeable enough to propose several interpretations and perspectives on its constitution and definition. Leonard-Barton (1981) lists values of: material simplicity, self-determination, ecological awareness, human scale and personal growth, illustrating some relatively abstract and flexible conditions, albeit defining in

their essence. Etzioni (2004) offers a more focused description, whilst maintaining context for the lifestyle within its culture and society. He defined VS as “a choice of free will rather than coerced by poverty, government austerity programs, or being imprisoned, to limit expenditures on consumer goods and services, and to cultivate non-materialistic sources of satisfaction and meaning.” (Etzioni, 2004, p. 379; in Zralek, 2016, p 363). A list of behaviours that could be said to be emblematic of these values and lifestyles (which cannot be fully comprehensive) could also be compiled in order to bring about specificity to the concept. These behaviours relate to changes in core areas of one’s life such as: food/diet choices, transportation habits, recycling and avoiding waste, ethical purchasing, self-reliance, decreasing number of possessions and/or size of home (Leonard-Barton, 1981; Bekin et al., 2005; Huenke, 2005; Shaw & Morales, 2007; Alexander & Ussher, 2012; Ballantine & Creery, 2009; Alexander, 2015). Pragmatically, VS can be summarized as “assigning less importance to material concerns and reducing work time to a reasonable number of hours in order to focus on those aspects of life that are intangible and for this reason are deemed as more essential.” (Boujbel & D’Astous, 2012, p. 491).

‘Work-time degrowth’ is a defining feature of the VS movement and is defined as a reduction in working hours and increase in time that can be allocated to one’s personal life (van den Bergh, 2010). The macro-economic level argument *against* increased work time is that, due to progress in technology, education and labour division, we are attempting to exponentially increase production, which contributes to the over exploitation of resource materials and energy (Ibid.). However, this increased productivity could actually be appropriated to reduce working hours, reduce material and energy expenditure and produce what only is *necessary* (of course what is deemed necessary is contentious and the subject of much debate (Druckman & Jackson, 2010; Walker, Simcock & Day, 2016)). It would have the potential, at the individual level, to free up time for labour forces, or to put it more humanistically, increasing personal time that one could spend engaging in life activities outside of employment.

A paradox is evident whereby materialistic consumption is geared towards increasing efficiency and the saving of time by outsourcing activities to that of technological advancements and products (Ellul, 1988), and a need to spend enough time working to earn enough money to support these purchases. This refers to what Juliet Schor (1998)

terms the 'work-spend cycle' where consumption necessitates more working in order to provide finance for purchasing, and the increasing work hours dictates a lifestyle where a lack of freetime encourages conveniences afforded by yet more consumption, such as ready meals (Arnold, 2021). The VS movement encourages a decrease in working hours, and consequently a decrease in earnings. This gives people more time to engage in activities that support their lives, rather than paying for people or products to do them more quickly. Not only does this limit consumption, it could help to limit any potential rebound effects that might be the result of increased free time, due to the decrease in the amount of money one would be earning (van den Bergh, 2010). A number of studies place boundary conditions upon the effectiveness of reducing work hours in order to reduce carbon emissions, which will be examined below.

Research in the U.S. has shown that a state's average working hours positively correlates with its state-level climate emissions (Fitzgerald et al., 2018). Their findings support that longer working hours contribute to emissions through increased labour productivity and higher GDP. They also conclude that reducing work hours per person has the potential to reduce unemployment and levels of stress, and increase quality of life. These benefits are proffered alongside concerns surrounding the potential negative impacts of introducing such reduction in work hours in a country where private healthcare, high income and wealth inequality are the norm. Recent trends for zero hours work contracts are one example where a reduction of work hours can have a potentially negative impact on employment security and finance. Fremstad et al. (2019) corroborate findings linking longer working hours with increased emissions; however their calculations of the effects of reducing work hours project that only modest reductions in carbon emissions are likely in the US. Once again, political support for environmental policy and social welfare are cited as major conjunctive determinants of the effectiveness of reducing work hours in order to reduce carbon emissions. A qualitative study from Hanbury, Bader and Moser (2019) explain how individual level motivations and actions still have a large impact on how effective the reduction of work hours is for reducing carbon-intensive lifestyles. They found that reduced working hours resulted in lower carbon-intensity lifestyles only for those individuals that increased engagement in certain types of activity (inc. parenting, further education) but not for other types (sports and outdoor activities). Further insight into how a decreased number of hours worked could change an individual's lifestyle, in the context of wider political change and policy introduction will

help to further understand how feasible the implementation and encouragement of societal change might be.

As the name implies, VS is adopted voluntarily by its practitioners, and is differentiated from simple living that is forced upon individuals through poverty, reduced employment options, and poor access to facilities (Elgin, 2010). However, a clear distinction between VS and degrowth that must be made is that of the *voluntary* nature of such change; to expect widespread adoption of VS to emerge without intervention and facilitation is unrealistic (Alexander, 2012). There is an imperative to explore the role of society in individual consumption, to further explicate how public acceptability of a degrowth transition might be actualised. Because this lifestyle is a conscious choice, and it is away from the mainstream, there are often a significant number of barriers to engagement (Zralek, 2016). Prominent obstacles are noted by Alexander (2012) as: lack of access to sustainable transport, lack of suitable working options, lack of information on products and their ecological footprint, and lack of sustainable social infrastructure. Whilst these difficulties should not be discounted, they would not be insurmountable if there was sufficient drive from policy in various domains to inculcate the lifestyle within a culture. An investigation into the experiences of consumption and degrowth lifestyle practices will enable the location of barriers to low consumption lifestyles bolstering the aforementioned research.

A scaling up of grassroots practice is called upon by van den Bergh (2010), and he specifically places the onus on psychology and economics as he considered them to be best suited to investigate how best to support such behaviour change research. With both top-down and bottom-up approaches offering combined solutions, there is a need to help ascertain public acceptability of these strategies, and gauge levels of understanding and perceptions of the various routes forward. As a clear link between degrowth and individual lifestyle behaviours has been made with this literature on VS, it is going to be an important resource for this research project and will serve as a springboard for research material development (See Section 4.2.3.3) regarding visions of low consumption futures that will be used to ascertain public acceptability and generate further understanding.

2.5 Consumerism and consumption behaviour

Analysis of consumerism and consumer culture is important to this research, since we have established the need to understand individual consumption in relation to global economic change and climate change mitigation. Varying definitions of the term 'consumerism' itself help us to understand the broad range of influence such a concept has upon our society and our individual lives within it. Consumerism's historical application and definitions were explored by Swagler (1994), where they ranged from the protection of the consumer's interest and extended to the recognition of consumerism as an economic marketplace which is governed by the needs and wants of 'consumers', and evolved further to represent a culture of excessive materialism that supports exponential accumulation of goods and products. This span shows that we can look at consumerism at the individual level, with an individual agent represented in the role of consumer, or at the structural level where a society is characterised by forces of collective consumerism. This necessitates the approach this research has adopted, to explore macro-structures of economic systems and the role of the individual, in order to best understand consumption and its potential for reduction. Kasser and Allen (2004) provide a formative application of the concept, with their integration of sociological perspectives on consumerism and psychological understandings of individual behaviour. They note the failure of psychology to appropriately target consumerism as a valid area of interest, setting forth an agenda for psychological exploration of the topic. Existing literature from environmental sociology has gone some way to exploring this, where findings suggest that comfort and convenience are top priorities for consumers, both of which are difficult to meet in conjunction with environmentally sustainable levels of consumption (Shove, 2012). The relevance of working patterns has been explored by Schor (1998; Arnold, 2021), where time-scarcity leads to the increased need for convenient consumer solutions, which are typically more resource-intensive.

Winter (2004) establishes the dangers of human overconsumption by illustrating its effect upon climate change, deforestation, clean water, and agriculture, before suggesting that examining human behaviour and our social experience would aid our understanding. Kanner and Soule (2004) similarly show how a social psychological perspective can help illustrate the impact that the environment of global capitalism has upon individual behaviour. The link with a global economic system of growth and the role of businesses that we have established as being in dire need of reorientation speaks directly to these

calls for research to address the under-explored role of individuals in this transformation. An evidence review produced by Jackson (2005) synthesises many of the relevant theoretical models of human behaviours and consumer practice as a means to aid understandings of how one might motivate sustainable consumption. The report illustrates the importance of reducing consumption in order to protect the environment, as well as to increase individual and collective well-being. Jackson recognises that there are functional and symbolic roles for consumption, in the provision of food and shelter, and the facilitation of “status, identity, social cohesion, group norms and the pursuit of personal and cultural meaning.” (p. v, *ibid.*). He also stresses that choices around what to consume, or not, is dictated by a huge variety of factors that are *not* limited to individuals with freedom of choice, but are also affected by “incentive structures, institutional barriers, inequalities in access, and restricted choice.” (p. vi, *ibid.*). The combination of the individual and society here can take the form of habits, social norms, and routine practice. We can take from this that the society we live in, and the institutions and markets that form our consumer culture can ‘lock-in’ certain ways of behaving, and will limit individuals access to opportunity (Alexander, 2012; Sanne, 2002; Shove, 2012; Unruh, 2002).

There are many psychological theories and models for behaviour which can help us understand consumption behaviours. These range from rational choice and social psychological models that tend to assume deliberative and cognitive assessments based on self-interest, moral stances, personal values, social norms, and expectations of outcome, such as Stern’s (2000) model of environmental behaviour (Jackson, 2005). These models presume a significant degree of agency of individuals (albeit sometimes moderated by ‘contextual factors’) and theories on human behaviour from psychology do not always address the shortcomings of this appropriately. This is a source of debate from theorists of social practice, where the centrality of attitudes and behaviour are deprioritized in favour of a focus on the meaning and social context of habitual practices (Shove, 2011; 2012). Jackson and others (e.g., Barr, 2015) argue for a wider lens through which to view environmentally sustainable consumption, that uses insights on individual action and critical analysis of institutional and cultural structures. With direct reference to policy Jackson advises towards a creative approach, that must accept and investigate the influence of government upon;

- incentive structures (taxes, subsidies, penalties)
- facilitating conditions and situational factors (access to recycling, public transport etc)
- institutional context (rules, regulations, market structures)
- social and cultural context (strength of community, family etc)
- business practices and their impact on both consumers and employees
- helping communities to help themselves
- its own environmental and social performance.

Jackson (p. xii, 2005)

These domains will be explored in the research materials for this thesis, and in reviewing the intentions and behaviours of the public from the perspective of a low consumption lifestyle, under an alternative model of culture and society (i.e., one of degrowth), will facilitate important insights. The research agenda here seeks to undergo an exploratory examination of consumption behaviours and their relevance to transitions towards a new economy, and will attempt to locate emergent public understandings of low consumption policy. Part of this exploration will be rooted in the examination of current economic models and how they operate on a societal level, as well as how they facilitate individual forms of action and agency, specifically with reference to consumption behaviour.

2.7 Materialism, human needs and well-being

When looking within the discipline of social psychology for relevant empirical research, a well-explored and pertinent body of research on materialism stands out as valuable for this thesis to consider. This subsection is a review of this literature and contributes to the rationale for further research in the area of reduced consumption in a degrowth scenario. It focuses on how materialistic and high-consumption lifestyles can be detrimental to many psychological concepts of life-satisfaction and well-being, as well as the socio-ecological costs illustrated already in prior subsections.

Materialism is the centering of one's hopes, aspirations and happiness around the accumulation or desire for material possessions (Lee & Ahn, 2016). Holding materialistic beliefs not only encourages the increased consumption of goods and services, it has also been said to reinforce capitalist economic organization and consumer-centric public life (Kasser et al., 2007). As previously discussed, the prioritization of economic growth from much of the world has placed an increasing amount of demand upon the planet's natural resources (Hamilton, 2010; Jackson, 2009; Speth, 2008). Hurst and colleagues' (2013) meta-analysis found negative associations between materialistic values and pro-environmental behaviours (PEB) and attitudes, indicating that materialists are more

likely to engage in environmentally damaging behaviours or that they held attitudes that would not condemn such behaviours.

Furthermore, those high in materialism were less willing to trade off economic goals to protect the environment (Ibid.); we can notice a problematic situation whereby a damaging cycle perpetuates. Economic growth relies upon the consumption of material goods and services, and the consumption of them increases the prioritization of economic growth. It has been proffered that materialistic consumption is something akin to the individual level manifestation of capitalism (Hurst et al., 2013), where the drive for economic growth and the endorsement of neo-liberal politics, de-regulation of markets and self-interested individualism are prioritised above all else (Barnett, 2005).

Similarly, research has found associations between measures of PEB and self-transcendent values (Brown & Kasser, 2005; Steg et al., 2011; Poortinga, Steg & Vlek, 2004); while materialism is strongly associated with self-enhancement values that represent power and achievement (Burroughs & Rindfleisch, 2002), the same values that are strongly linked to support for financial security and drive for wealth associated with neoliberalism and capitalism (Pulfrey & Butera, 2013; Schwartz 2007). This is supported by research that found materialism to be consistently aligned with self-interestedness, and oppositional to environmental concern (Grouzet et al., 2005; Crompton, 2011). Hurst and colleagues (2013) found that materialists are likely to be obstinate and unlikely to perceive a threat to the environment, and therefore unlikely to engage in PEBs. As the authors point out in the rationale for their meta-analysis, materialism is a worthy consideration, with previous research suggesting it might be more susceptible to change than other individual differences (Hurst et al., 2013). However, they found it unlikely to be provoked by an environmentally focused motive. In order for widespread participation in a post-materialist, de-growth centric future, there will be a need for change in more than just those with a proclivity towards pro-social behaviours and therefore we should not rule out attempting to change behaviours related to materialism through other framing methods.

These sources show us that materialism is linked to the maintenance of a growth-centric economy and reproduces low-uptake of PEBs. Given that there is a pressing need to move away from growth-centric economy, and increase engagement in PEBs, there is an imperative to gaining an understanding about materialism and what role it plays in the

everyday. Further exploration of existing perspectives on materialism and consumerist lifestyle will go some way towards considering what a 'post-material' lifestyle, and/ or society, might be like for an individual. Existing literature linking PEB and materialism with well-being, happiness and human needs will evidence the relevance of these issues to the exploration of public acceptability of low consumption lifestyles, and will support research design and analysis carried out in this thesis. Indeed, Kate Soper has gone as far to say that,

Even if there were no environmental or moral obstacles to the triumphant spread of the consumer lifestyle, even if it could be extended to everyone forever, human happiness and well-being would not be enhanced

(Soper, 2020, p.3)

A difficult dilemma emerges for low consumption futures when considering that the pursuit of need satisfying goals leads to increases in happiness (Sheldon et al, 2010). This is because human needs require a level of materialism, as discussed in post-materialist theory (Inglehart 1977) which develops Maslow's hierarchy of human needs. Beyond the provision of the essentials for shelter, warmth, cooking etc. that Maslow's theory details, material consumption is also recognized as being socially reinforcing and a contributing factor to one's identity (Belk, 1988; Dittmar, 1992), this places materialism in a dominant position with a reinforcing drive for individuals to engage with it. These notions mean that whilst there are forms of material accumulation that are essential to human flourishing, in that they provide essential products for living, there is also a form of material consumption that goes beyond mere survival and contributes towards a positive emotional valence. We should not dismiss this type of benefit to humankind out of hand, but rather seek to better understand how consumption can create this sort of positive response, ideally in the absence of some of the problematic consequences we notice at the extreme end of the scale, when one is materialistic.

Acknowledging that there are levels of consumption that are necessary for not only survival, but meeting human needs that allow for the living of a meaningful and prosperous life is an essential observation, however, knowing where the limit of this is pertains to the central tenets of this thesis; where does public acceptability of low consumption lifestyles sit in relation to our economies, our societies progress and our individual well-being? This asks questions about material consumption and ways of living

that were raised in the seminal work cited previously, *The Limits to Growth* and the section here, also quoted in Soper's (2020) *Post-Growth Living*

To try to fill those needs with material things is to set up an unquenchable appetite for false solutions to real and never-satisfied problems. The resulting psychological emptiness is one of the major forces behind the desire for material growth. A society that can admit and articulate its nonmaterial needs and find nonmaterial ways to satisfy them would require much lower material and energy throughputs and would provide much higher levels of human fulfillment.

(p. 216, 1972)

Whilst we can take from this that there is the *potential* for greater well-being in a low consumption lifestyle, Soper expresses that a lack of evidence around what such consumer preferences might provoke as yet undefined greater fulfillment means that she proposes an alternative structure to satisfaction, rather than presupposition of needs. This research seeks to address this lack of evidence around specific aspects of new lifestyles, will open the theoretically grounded ways of living in accordance with planetary limits up to deliberation, and seek to understand what can influence them. This includes understanding of political pathways, but also how these visions affect well-being, in light of the recognition that endless material accumulation doesn't make us happier.

Issues concerning conspicuous consumption also deal with this as a concern, (Lury, 1996; Slater, 1997) as well as more recent writings from Sekulova (2015, p. 115) who argues for the "extraction of social prestige from material possession and accumulation" in order to increase happiness. Other intellectuals within the roots of degrowth concern themselves with such issues, such as Illich (1973) and his notion of conviviality, which provides reference to a society built around the sharing of 'tools' in a self-organised and communitarian framework outside of industrial productivity and control of a business economy. This industrial productivity and business economy forms what he termed a 'radical monopoly', which threatens to deprive individuals and communities of their freedom to "produce, exchange and share their possessions outside of a market" (Deriv, 2015, p. 79). Exploring what perceptions of consumption and its associated behaviours mean to people in their own lives and those of others, and how engaging with them relates to goals and aspirations, will be an interesting avenue for this thesis to investigate, helping us to build a more accurate picture of what types of consumption and material wealth are more genuinely beneficial and rewarding.

This echoes calls in other research agendas, where the reification of what constitutes material *necessities* and *luxuries* could help us to delineate what we ‘need’, and what we merely ‘want’ (Gough, 2017). These basic needs are ‘universal preconditions for non-impaired participation in any form of life (Gough, 2015, p. 7), but Koch et al. (2017) go further than this and state that a focus on a theory of human need has the promise to overcome structural power relations. As we have discussed with regards to a transition towards degrowth, reorienting away from an economic measure of success, and one of prosperity and human flourishing, we can see how using human needs as the measure of what makes a successful society could replace the economic growth metric. Fundamentally, as has been stated a number of times, degrowth represents reduction in negative impact on the environment by reducing material and energy use, whilst maintaining human needs for survival and a sense of worth and fulfillment in the lives of people (Boillat et al., 2012).

O’Neill’s (2015) global analysis of per capita footprint showed positive correlation with measures of life satisfaction, while research from Fritz and Koch (2016) illustrates that the richest countries, with the most unsustainable resource and energy use, are the highest in terms of subjective well-being. This gives weight to the argument that consumption is good for our well-being, and the reduction of it may have a detrimental effect on our happiness. However, recent research has confirmed the presence of the aforementioned ‘Easterlin Paradox’ across the majority of western countries (Kaiser & Ventrack, 2019). This paradox shows that over and above certain levels of wealth, increase in well-being seems to flatten off, which has been found to maintain an effect in both the medium- and long-term. Additionally, in a scenario of lowered consumption, the resulting extra freedom for personal time and increased autonomy however could be compensatory to any potential lowering of well-being, as we see in the case of voluntary simplifiers. Furthermore, research in the wake of the financial crash of 2008 showed that after 6 years measures of life satisfaction had returned, despite the maintained loss of wealth and income, illustrating that short term drops in life-satisfaction or happiness will rebalance over time (Headey, 2019). Despite this positive projection, Koch et al (2017) specifically warn against dishonesty surrounding degrowth scenarios and the maintenance of the levels of comfort and convenience we experience in the Western ‘way of life’. Where material wealth is contributing to basic needs being met, it is inarguably beneficial (such as improving quality of life in developing countries); however higher

materialistic traits can result in mental health problems such as depression and anxiety (Kasser, 2002) which would clearly be much better avoided. These trade-offs apparent within the pros and cons of consumerist lifestyles will therefore be incorporated into the research materials that are used for data collection purposing, ensuring contextual evaluation within the measurement of public acceptability of low consumption lifestyles. These trade-offs concerning well-being and human needs are not only evident on an individual level but can be observed globally. Global inequality is a problem that has links to environmentalism, as an increasing percentage of resources come from the developing countries that are beginning to rely upon western consumption to maintain their changing economies. Furthermore, lots of production in developing countries feed western economies with cheap consumption, often by exploiting poverty (Butler, 2000). Mining and material production generate pollution, threaten ecosystems, and deplete scarce natural resources (Tukker and Jansen, 2006), whilst extraction of metals finance armed conflicts and employ child labour (Young, 2018). It is also relevant to issues pertaining to economic growth, due to the Gini co-efficient, which illustrates how as economies grow, inequality within that society also grows (UNDP, 1999). Some calculations estimate that global inequality has tripled since the 1960's (Hickel, 2017). These statistics and observations go some way towards illustrating Soper's (2020) recognition that globalized markets, economic growth and technological progress have resulted in the provision of consumption to some, whilst unequivocal workloads and environmental burdens on others. For these reasons it is useful for this thesis to explore notions of social justice and inequality, therefore these factors will be incorporated into research materials to try and understand how publicly acceptable these disparities are in a prosperous western democracy, and how it might relate to behaviour change and policy support.

2.7 Public acceptability of environmental policy

In democratic societies, it is important to consult those who would be impacted by policies. Also, by consulting the public we can improve the quality of policy outcomes by broadening the range of insights; and, finally, engaging publics can reduce opposition and build support for policies (Fiorini, 1990; Howarth et al., 2020). These rationales for public participation are particularly important when considering transformational policies with broad societal implications across multiple scales (including for lifestyles), such as the

aforementioned in this chapter. Ascertaining the most attractive and democratically viable policy solutions to tackle over-consumption necessitates a psychological study into individual-level decision-making regarding consumption practices. It is thus useful to consider what we know about environmental policy acceptance and relevant public acceptability, in order to appropriately design the current research project.

The current research focusses on the UK as a developed nation, with high consumption-based carbon footprints linked to imports from China and elsewhere (Malm, 2016). In the U.K. the impact of average consumption levels from rises from a global average of 1.7 planet Earths to 3.8. Without consumer demand side, one could argue that there would be none of the problems created by the supply side. This is a simplistic reduction of the situation, and questions regarding the structural influence of society and its features are somewhat inseparable from the individual agency the assumption rests upon. What remains a priority is to understand what the cultural appetite for varying levels of consumption are; such a strategy should seek to bridge the macro and micro issues of concern and explore individual lifestyles and consumption practices with reference to structural re-organisation.

Fundamentally, the visions of success and material accumulation are what need to change, especially if as is shown above, that only a minority are contributing to the transgressions of our material and emissions limits. This means that we must learn about how we can extract social desirability from the capitalist growth canon, and undermine the claims that growth is making upon our hopes and dreams, all too often placed in the endless search and drive towards unfettered consumption of products and experiences at the individual level (Soper, 2020). Reestablishing a new relationship between the economy and the individual will be crucial in doing this and will be precisely what this thesis explores by the presentation and co-production of new imaginaries in which to exist.

A report from Oxfam (2019) found that the

poorest half of the global population – some 3.5 billion living in regions vulnerable to the effects of climate change – only cause around 10 per cent of total global emissions associated with individual consumption. In contrast, the richest 10 per cent are responsible for around 50 per cent of such emissions; the average ecological footprint of the wealthiest 1 percent globally might well be 175 times that of the poorest 10 percent

(Liegey and Nelson, 2020, p. 45)

These statistics bring about a number of practical realisations that will help to conceptualise the research to be carried out in this thesis. The reality of this global inequality around the impact of, and contribution to, climate change should be considered by those who are in a position to reduce their consumption. The majority of citizens (90%) across the world are responsible for just half of consumption associated carbon emissions, illustrating that the other half of global emissions are accountable to 10% of people. Other figures show that 80% of the world's population are living in material poverty and are deserving of further growth of material consumption (Tukker et al., 2014). Because there is a drastic need in the global north to reduce our carbon emissions, and perhaps a need for emissions in the global south to increase, we can recognise that whilst there are significant lifestyle changes required, the most drastic shifts need to be from the wealthiest, and those in the global north who are experiencing unsustainable material abundance and excess.

This minority of the wealthy and affluent who are disproportionately responsible should not dictate a global lack of change in consumption practices to live within our means; there remains a need for the *majority* in society to support a transition away from these harmful levels of consumption. Whilst we might expect a democratic populous to be in favour of reducing inequality, and for the elite to reduce their carbon emissions, empirical studies indicate this is not necessarily the case (CAUK, 2020). Perhaps those people who are not the richest still aspire to become so, and those who do not consume more than necessary, would prefer to at least aim to consume more and accumulate more material wealth, all in the name of progress and development (Tsing, 2015). There is an observation from Arnold (2021) citing Schor (1999) that our aspirations for consumption have moved beyond comfort and towards ever-expansive luxury where social norms of consumption are referenced to celebrity culture and social media rather than our immediate peers. Deliberative research from Climate Assembly U.K. (CAUK, 2020) found evidence to support this type of aspirational consumption with a notion of deservedness (be it an undeserving free rider benefitting despite their laziness, or a deserving and hardworking individual earning more). Furthermore, and of direct pertinence to this research, they found the public to understand a society with equal distribution of wealth and carbon usage to be politically unfeasible. This paradox of feasibility illustrates a complex dynamic where there can be no political feasibility for reduced consumption without a public desire for reduced consumption, yet a reduced demand for consumption

relies upon its political feasibility. This has been recognised as a 'governance trap' (Pidgeon, 2012). This paradox speaks to the necessity of a guided transition, where bold policy might bring about a supportive framework for reducing consumption in a fair and democratic way and highlights the need for research like this to inform the strategy for doing so.

In this review article, Pidgeon (2012) assesses the state of public understandings of climate change and climate policy, illustrating how structural and psychological barriers to engagement with climate change issues present a double pronged assault on the necessary levels of climate mitigation. Pidgeon (Ibid.) illustrated that previous literature from psychology, geography and sociology detail a complex social environment where both structural and psychological barriers make troublesome obstacles to social change. Structural obstructions such as powerful corporate influence on policy, and governments unwilling to risk political stature, mean that people struggle to act according to their beliefs and wishes (Lorenzoni et al., 2007). Applying the insights of this article and highlighting the coalescence of structural and psychological barriers to engagement to low consumption behaviour may yield new developments and understandings of how best to initiate behaviour change. Where climate change is often viewed as psychologically distant and abstract, with a nebulous and wide-ranging set of factors and consequences, framing low consumption around more concrete lifestyle changes and ways of living may bring about a more nuanced strategy to overcome this stalemate, at least on behavioural domain of climate mitigation. Indeed, if we cannot build support for a democratically mandated level of social change required to resolve the threats posed by climate change and environmental damages, the only other option might be a kind of benign authoritarian rule, or eco-dictatorship, which is an unattractive and problematic concern, that threatens more risk than the adoption of low consumption lifestyles led by public opinion (Moulier-Boutang, 2011). For this to be realized, we must assess public acceptability of low consumption in the realms of policy and behaviour, and develop understandings of public opinion on the wide variety of societal changes that might form part of these new lifestyles.

One such aspect of a new way of living is the 'sharing economy', a model of material consumption that is focused on service provision and shared resources over individual product sales and private ownership. This is relevant to this thesis, since a reduction in

material consumption can be aided by sharing resources. Empirical research on alternative modes of consumption practice has illustrated that willingness to move towards low-consumption models such as collaborative-consumption, or second hand purchasing, varies across different consumer domains, with short term renting of seldom used products being the most acceptable, but longer term renting was seen as unfavourable (Edbring et al., 2016). When investigating the public acceptability of a sharing economy has shown that it is important to foster social equality in ensuring easy access to sharing schemes in order to increase support for policy and practices related to a reorientation of material consumption (Cherry & Pidgeon, 2018). Additionally, ensuring fair business practice (with a shared interest in business, consumers, and the environment) and the encouragement of local independent communities to act in the transition were found to be important factors (Ibid). Various strands of research have shown that people express a preference for a *fair* society (i.e., where even gets the same opportunities), over an *equal* one (i.e., where everyone has the same resources; Starman, Sheskin & Bloom, 2017). Further exploring where distinctions and preferences lie with regards to economic growth and wealth inequality will be key to understanding public opinion. Cherry et al. (2018) acknowledge the importance of engaging the public in resource-efficiency pathways related to consumption-related emissions reduction. It is important not to overestimate support for policy and make assumptions about reasonable uptake of the target behaviours (Wilson & Dowlatabadi, 2007; Whitmarsh et al., 2011a). Therefore, research investigating the lifestyle changes and cultural context of degrowth and low consumption lifestyles should make extended efforts to explore public opinion.

Where there has been much philosophical discussion, practical activism and economic analysis conceived through the socio-ecological necessity of a degrowth agenda, there remains little exploration of the public acceptability of the proposed lifestyle changes. Because the movement is non-hierarchical and self-governing, we know relatively little about how it might be perceived in the mainstream. The only inference that could be made around this would be that it is likely to be met with skepticism from those who benefit from the status quo. We know that this system is propitious to just a small percentage, with research showing that just 26 of the world's richest people own more capital than the poorest 3.5 billion (Oxfam, 2019;). Therefore, most people do not stand to gain from this arrangement with the promise of trickle-down economics in a global

economy and should theoretically be in support of a framework that is designed to distribute wealth more equally, as well as raising general well-being and life-satisfaction. As noted earlier, while empirical studies suggest there may be public reticence about certain degrowth policies (CAUK, 2020), there is a need to establish greater understanding of responses to diverse degrowth policies.

Existing research concerning attitudes and perspectives on degrowth, or related concepts, will help to assess where the best launch point might be for the current research. Ancic and Domazet (2015) analysed International Social Survey Programme (ISSP) 2011 data in order to assess the potential for supporting environmentally focused degrowth. Measures of material sacrifice showed a European average of below the mid-point of the scale, indicating there is little will to sacrifice material wealth in order to protect the environment. Great Britain was close to the average across the items used to measure this, yet it is notable that there was much higher willingness in Scandinavian countries, and lowest willingness in Eastern Europe. Through inferential regression analysis, education and trust in others were shown to be most predicative of a willingness to sacrifice material wealth, but with a small amount of the model being explained in the regression. Other results show that wealthier countries are more likely to engage in PEB, but less likely to support degrowth economic policy, especially where there is a tradeoff between environment and economy. Support for a redistributive role of national government was most associated with support for degrowth. This complex analysis of secondary data is useful for determining some of the correlates with degrowth support, but the small effect sizes imply many factors remain unexplained. Furthermore, the study did not examine experiences of consumption or perspectives on degrowth in terms of lifestyle, having instead focusing on abstract policy.

Other research on the predictors of policy support sheds light on the factors that were not explained by Ancic and Domazet's analysis. A synthesis article from Maestre-Andrés, Drews, and van den Bergh (2019) reviewed evidence on policy acceptance related to carbon pricing as a means for reducing emissions by discouraging the production and consumption of carbon-intensive practices. They found that perceived fairness was positively associated with policy acceptance and support for environmental policy, with a strong concern over uneven distribution of policy burdens. Their dataset examined a set of personal lifestyle factors, and reported the influence these would have on support

for the policy. Relevant to this study, they found that when freedom of choice was limited there was opposition to the policy (Baron & Journey, 1993; O'Connor et al., 2002) as well as reduced support if the policy resulted in less comfort or lower well-being (De Groot & Schuitema, 2012). These factors will therefore be important to delineate between, and account for, in the current research, where freedom of choice might be impacted by regulation, and the culturally constituted notions of comfort and well-being might be reoriented. Their meta-analysis also found that many studies reported that information provision about the policy would increase support and acceptance, bolstering support for deliberative engagement in source materials relating to the policy and its antecedents (CAUK, 2020).

There are other advantages of qualitative and deliberative methods in this context. A relative majority of people believe that growing the economy and protecting the environment are compatible, though when asked to choose between the two they will more often prioritise the environment (Drews et al., 2018). This is in line with Domazet and Ancic (2015), where items that force a dichotomy of choice between the two, we find an imbalance of support in favour of the economy. Yet, there appears to be a notion of compatibility around environment and economy, suggesting that people believe economic growth and environmental protection are both concurrently possible, which is at odds with research (Haberl et al., 2020). This raises support for deliberative research methods which could present participants with information to evaluate. Assessing public opinion of economy and environment has been a common framing of research that seeks to ascertain public acceptability of degrowth. Whilst this is undeniably a core theoretical underpinning of the movement, we must recognise that there could be problems that result from doing so. The common formulation of presenting the two in potential opposition precludes assessing spontaneous understandings of their relationship, which can be more accurately assessed through free association methods. Mohai et al. (2010) found that economic growth was most often freely associated with improvements to living conditions, and jobs and employment, with only 6% of responses referring to negative outcomes like 'pollution'. This illuminates how a somewhat artificial and forced pitting against each other of the environment and the economy might overinflate and exaggerate public opinion one way or the other. Whilst the links between the two are well-established, as evidenced earlier in this chapter, the public perspectives are under-explored, and acceptability of policy measures are potentially flawed. Drews et al. (2018)

claim that most people have a poor understanding of economics, its measurement, and the factors upon which it can exert influence in our society and daily lives, and therefore warn against various pitfalls of researching economy-environment trade-offs. They make suggestions for future research to explore qualitative accounts of concepts related to the economy-environment relationship. This research will explore lifestyle implications of various types of societal transitions with regards to these two factors. This will aim to overcome the problem encountered when discussing these policy objectives on an abstract level. Bearing this in mind it will be important to disclose exactly what this means on the individual level behavior or examples of concrete policy suggestions.

2.8 Conclusion, research questions & summary

Understanding more about perceptions of different low-consumption lifestyles and acceptability of behavior changes commensurate with socio-ecological harmony, is important for developing socially robust sustainability policies. There is both a mode of agency for the public as consumers and as part of the electorate; public acceptability in a democracy can (or at least should) lead to political feasibility and mandate for change. There is a distinct and pertinent chance to mitigate the worst impacts of climate change, reduce the most inequitable aspects of capitalism, and improve the experiential value and existential sense of worth of people across the world by changing our approach to consumption. There is a need to evaluate public opinion on how these lifestyle changes are to be perceived. However, this should be done by putting people into the position of those who are embracing ideas like voluntary simplicity, post-materialism and degrowth and allowing them to make their own assessments of the lifestyle changes that are part of this shift. This vision of the future will be contrasted with trajectories proposed by proposed models of sustainability that continue to prioritise economic growth and technology in a future indicative of ecological modernization.

Exploring how consumption behaviours can contribute to a sustainability transition also requires examining our current relationship with consumption. In order to explore how there might be public acceptance of low consumption lifestyles there is a need to understand the consumption of material products and how they affect our well-being, life-satisfaction and the meeting of basic needs. Beyond this, there is the potential to take perspectives and experiences of consumption, exploring how a different organization of society might also influence well-being and need satisfaction. As well as these individual

factors, the public perception of individual and government responsibility to enact change will be paramount planning for societal transition. These issues will be explored within the exploratory research questions detailed below. These research questions will guide a choice of research methods, design, and data collection in the forthcoming research phases. The overall research questions stated below will frame the overall aim of the thesis to explore the public acceptability of low-consumption lifestyles and policies, which will be supplemented by distinct research questions of each phase of data collection in a sequential mixed methods design.

2.8.1 Research questions

- What facilitates or obstructs acceptance of low-consumption lifestyles?
- Are there ways to frame low-consumption lifestyles so they are more acceptable?
- What can we learn about the different policy approaches for the governance of low-consumption lifestyles?

2.8.2 Summary

The exploration of literature and research that has been reviewed in this chapter has established how climate change is profoundly impacted by society's prioritisation of economic growth, and that this is manifest at the individual level by our consumer behaviours. What remains unknown is the public acceptability of an alternative model for society, that discourage excessive consumption and overcomes the negative environmental and social impacts of such practices. This research will explore relationships that individuals have with their consumption practices and consumer behaviours as they currently perceive them, and asking them to reflect on alternative pathways to transition towards a low consumption lifestyle that offers levels of climate mitigation deemed appropriate by the consensus within climate science. This will result in the assessment of how best to encourage low consumption behaviour, but also an understanding of the most effective strategies for building support for low consumption policies. This attempts to illuminate a route away from the paradox that political feasibility is achieved only through public support, and public support is aligned with political feasibility – the research will produce an understanding of what is necessary to increase public acceptability for low consumption lifestyles in the absence of political feasibility and in turn increase the scope for the adoption of alternative economies. The following chapter will explore how a critical realist methodology will inform a multi-stage mixed methods approach to data collection and analysis.

Chapter 3: Methodology – A critical realist mixed methods research design

This chapter sets out how the ontological and epistemological stance of the thesis will best achieve a comprehensive and coherent set of findings that can answer the research questions set out in Chapter 2. The appropriateness of a critical realist methodology is examined and provides a rationale for the adoption of its philosophical positioning on the nature of reality and how we might produce knowledge about it. Furthermore, the use and implications of a mixed methods approach are discussed and an outline is provided of how the qualitative and quantitative methods were applied, including how the analysis of the two will be integrated. Further procedural details about the application of research methods and analysis are given in following chapters where the empirical data is presented.

3.1 Philosophical positioning of research

This thesis adopted a critical realist framework and has applied theoretical and practical methods from the metatheoretical perspective. After having generated research questions that seek to explore the public acceptability of low consumption lifestyles and policy, this research has aligned itself with this appropriate philosophical approach that shaped the design and analysis of subsequent empirical data collection and analysis (Silverman, 2020). This section will expand upon what a critical realist perspective entails, why it was appropriate for this research agenda, and explore why and how a mixed methods research project has been carried out in coherence with its ontological and epistemological assumptions.

3.1.1 Critical realism

Critical realism (CR) was founded by a social scientist, Roy Bhaskar (1975, 1978, 1989), who formulated a metatheoretical concept that acknowledged the distinct contributions that positivism, interpretivism, and post-modernism, and other epistemological movements, can have upon the understanding of reality; in this way it proposes that realist ontology that can be understood through epistemic relativism (Price and Martin, 2018; Smith, 2006). This marrying of ontological realism and epistemological relativism gives a critical realist approach the benefit of being able to acknowledge that facts are observable and quantifiable, but also socially contingent and produced within the

confines of any cultural, political and historical context, and are therefore imperfect and transient (Smith, 2006). Rather than accepting knowledge as absolute truth, CR accepts that rigorous and valid explanations of phenomena can represent the best and most convincing version of the truth that is possible within the aforementioned contextual constraints. CR seeks to reconcile philosophical divisions between positivism and interpretivism (and even some readings of constructivism) by developing a more nuanced and flexible realist ontology (Zachariadis et al., 2013). From many perspectives these two approaches are distinct and incommensurable, with the former adopting a stance that facts are objectively true, and the latter takes the view that reality or 'truth' is constituted through individuals and their interpretations (Breakwell et al., 2006). If we look at positivism, which attempts to provide reproduceable and generalizable laws, or interpretivism, which seeks to portray the lived experience and understanding of individuals, or even constructionism with its quest for understanding the shared production of meaning (and perhaps most importantly remembering that they reject the validity of each other's claims); CR goes beyond any of these, and attempts to uncover the explanations as to why empirical observations such as generalizable laws, instances of lived experience, and the production of meaning, might come to be best understood. It does not reject any of their epistemologies, but instead recognises their contribution to the illumination of a realist ontological project. With regards to low consumption, this research project sought to generate empirical data and analysis that will; present the significance of statistical insight, value the contribution of experience, and recognise the structural influence of society. This is deemed appropriate in order to best understand how public acceptability for policy and behavior change can help mitigate the destructive effect of over-consumption upon natural resources and mitigate climate change. This has illustrated how critical realism allows for a more full and detailed exploration of the topic, as opposed to a singular theoretical approach.

Another way to describe how critical realism generates understanding is to consider the subject(s) under investigation, compared to that of other traditional epistemologies. In the social sciences, we are usually concerned with either agency or structure, and prioritizing one over the other dictates the methodology that guides understanding and construction of knowledge (Layder, 1994; Lopez & Scott, 2000). For example, structuralism is concerned with the social worlds of individuals and the discourses that help to express and communicate them, and agential approaches, such as phenomenology

are concerned with how human agents respond to their circumstances through their lived experience (McEvoy & Richards, 2003). Critical realism attempts to overcome the differences of these distinct approaches by emphasising the reciprocity between structure and agency, where social structures facilitate and limit ways of thinking, living and being in the world (Ibid.) – therefore by adopting a critical realist stance we can uncover workings of the structures that exert influence in society, as well as investigate how individuals might act out and experience them. This symbiotic interdependence is important to acknowledge for the current research project, where we are concerned with both individual behaviour and the influence of social structures in which they operate. Of further relevance to this study, lending more weight to the application of critical realist methodology within a social psychological study concerning economics is work from Davies (2004). He sets forth that the agency-structure debate from within a discipline such as social psychology there is great use in a critical realist perspective. Where the disciplinary antecedents of sociology and psychology often focus on social structures or agential individuals respectively, there is benefit to a more pluralist conception of the two. By seeing individuals as embedded in social and economic structures, as well as engaging in a constituted and reconstituted, socially influenced process of self-evaluation, we can readily observe the influence of both structure and agency upon each other (Lawson, 1997). This reciprocal process is an important tool for social psychological investigations of heterodox economics, where there is an advantage to understanding both motivated reasoning of individuals as well as influential context of institutions, social norms and convention. Where heterodox economists already employ good analysis of the influence of society upon the individual, there is more opportunity to understand how agents might influence the production of society. Critical realism allows for the interpretation of empirical data through a “variety of processes through which agency and structure interact and as a result is more able to do justice to the complexity of the structure–agency relationship than schools which prejudge its nature.” (Davis, 2004 p. 150).

Stoddard et al. (2021) recognise the requirement for more ambitious climate mitigation necessitate an overturning of political-economic institutions through the application of a heterodox economics. The paper restates that heterodox economic models are more mindful of the interactions between structure and individual agency, therefore it follows that a thesis examining aspects of degrowth employs a methodology suitable for

exploring the relationship; which we have established critical realism as a suitable candidate. Exploration of the public acceptability of low consumption lifestyles dictated that we must consider both what constitutes low consumption lifestyles, which will be experienced at the individual level; and public acceptability of these lifestyles, which necessitated an understanding of the social conditions and societal structures, which might support or disincentivise engagement in them.

A key part of critical realist research is the locating of 'generative mechanisms' (Bhaskar, 1975, 1978, 1989). The main objective of critical realist research should be to "use perceptions of empirical events [those that can be observed or experienced] to identify the mechanism that give rise to those events" (Volkoff et al., 2007, p835). A generative mechanism is not required to be empirically observable, but can help to explain how and why empirical events tend to occur in the way they have been recorded (Zachariadis et al., 2013).

In summary, the adoption of CR offers a unique and valuable contribution to this project by allowing for a variety of epistemological positions through a mixed methods approach. As in the rationale from chapter 2, we know there is a need to understand both the individual and societal aspects of low consumption, and hope to generate understanding of how these might interact. We have argued that a systematic approach to deprioritising growth-centric economic policy will have lifestyle level implications upon individuals. In order to achieve understandings of the public acceptability of this systemic and individual change the research must be able to explore how people experience consumption in their societies and lifestyles, and extrapolate this towards the potential for future ways of living. As well as this, we aimed to operationalise relevant frames and measure key psychological constructs, as a way to establish statistical significance of how we can influence and change individual behavioural intentions and systemic policy support towards the goal of low consumption. The combination of these methods will be best realized through a CR framework that allows for combination of method and epistemic relativism, with a view towards the uncovering of a generative mechanism.

3.1.2 Mixed methods

CR is a proponent of methodological pluralism and as such recognizes the value of distinct research methods, supporting their use in the same research study (Zachariadis et al.,

2013). In research, the ontological and epistemological commitments that are adopted in order to best answer the research questions have dictated the choice of research methods. Positivism tends to favour quantitative data, the findings of which are the result of observable events, and constructivism favours qualitative data that seeks to understand the experiences and social meanings that people use and produce to understand the world around them. These two approaches are often seen as being distinct and incommensurable, as we also noted in reference to CR. This incompatibility is challenged by mixed methods research and its assumptions. Such research is multifaceted, with different component parts to an overarching research agenda requiring different treatment in order to most appropriately explore them (Schwandt, 2000 as cited by Johnson et al., 2007; Mertens, 2007). This thesis worked with Tashakkori and Cresswell's (2007) definition of mixed methods research as "research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry" (p4).

From a mixed methods approach the ontological position is believed to be that reality can be viewed from a multitude of perspectives, which will result in the creation of dimensionally diverse conceptions of reality (Johnson et al., 2007; McLafferty & Onwuegbuzie, 2006). Furthermore, the current project aimed to produce a more complete, meaningful and purposeful set of research findings when using mixed methods, when compared to more specific and inherently limited singular approaches (Bergman, 2008; Whitehead & Schneider, 2013). Not only is this indicative of mixed methods, it is also coherent with a critical realist perspective in allowing for the coexistence and integration of a number of paradigms within a research project without compromising the integrity of the work or the methods that are employed.

A combination of methods is entirely appropriate for this current research project as there are exploratory research questions where theory from disparate academic disciplines were brought together and examined from a novel perspective. This project has not prioritised one phase over another and has made contributions to the body of literature from both qualitative and quantitative findings, playing to the strength of each method within the critical realist mixed-methods framework. Methods and materials were used in order to explore a wide range of perspectives in the qualitative phase,

informed by the initial literature review, and explored further with quantitative examination of emergent constructs from the analytic findings. This particular form of research process is known as a sequential research design, with an initial qualitative phase, followed by a quantitative phase (Morse, 1991; Cresswell, 2014). This strategy was useful for the development of quantitative research hypotheses from the qualitative phase's findings, which might not be possible before conducting the research (Whitehead & Schneider, 2013), due to a lack of empirical examinations of the topic under exploration. A purely quantitative phase may struggle to appropriately operationalise relevant psychological constructs without well-formulated hypotheses based on existing research findings.

The qualitative phase was designed and analysed with a view towards identifying relevant psychological constructs and mechanisms that might be most useful to explore empirically using quantitative instruments. Danermark (2019) stressed that CR mixed methods research designs should not attempt to validate divergent method, but rather be used in conjunction to recognize empirical regularity as a way to uncover mechanisms that can explain social reality. However, this kind of 'preparatory' research phase is still a useful means to "give the scientist the necessary insight into a phenomenon new to her" (Ibid., p. 169), as will be employed here. Morgan (1997) stated that focus groups can be used as a *supplementary* method of data collection, where the analysis forms preliminary data sets to inform and generate survey questions or point towards pertinent variables that could be operationalised and measured in the subsequent stages of research, as this thesis did (Ibid.). It should be reiterated that this will *not* be in order to generalize, or to corroborate and confirm, but rather to further uncover and explore aspects of the full spectrum concerning active mechanisms (Mearman, 2006; Zachariadis et al., 2013). So, whilst it should be noted that this sequential approach was necessary for data collection, it was not adopted as an overall research framework. Distinct phases of empirical collection were treated with equal worth, and their unique contribution to the answering of the research questions was recognised and integrated.

The research within this thesis focused on low consumption lifestyles by examining the relevance of public policy and individual behaviour. We were able to examine the context of social, economic and political structures of participants' lived experience, and the instances relevant to their consumption of material goods, as well as seeking to explore

how this related to actual behaviours that are observable. Having reviewed literature that has highlighted a dearth of research that examines lifestyle level implications of an economy that seeks to deprioritise economic growth there is a need to set forth a research agenda that facilitates a flexible approach to methods. A mixed methods research design was employed to effectively address the research questions, providing both the exploratory direction of the unexplored aspects of degrowth economics at the level of the individual in the qualitative phase; and the ability to produce a quantitative empirical examination of constructs relevant to the public acceptability of low consumption lifestyles.

Danermark (2019) described the intensive and extensive roles of qualitative and quantitative research phases from within a mixed methods design under the theoretical framework of CR. Qualitative enquiry should be intensive, and collect substantial insight into the phenomena under scrutiny, and be focused on the established recognition of 'demi-regularities' evidenced across 'a case, or a few cases' (p. 178). This process focusses on how participants (or cases) experience and interpret issues pertaining to degrowth and low consumption, acknowledging their intentions and what might influence them by examining their contingent context. Quantitative enquiry would approach this differently and seek to identify 'demi-regularities', which are evidenced using frequencies and patterns established through statistical analysis. The combination of these two approaches in one instance signifies the use of critical realist mixed methods research design. Exploring low consumption lifestyles in this way facilitated the understanding of relevant psychological processes that play a role in how best to increase public acceptability. These processes therefore were examined qualitatively *and* quantitatively in order to generate a deep exploration of observable empirical events that can help us understand public acceptance of low consumption lifestyles and behaviours, and how a society might come to be organized around them.

3.2 Qualitative phase methods

The research questions set out in the literature review were developed to explore the public acceptability of low consumption lifestyles. In the first instance, this was driven by the qualitative research phase in order to provide a deeper context and more nuanced understandings of how people engage with the topic of low consumption lifestyles. The research explored definitions of low consumption lifestyles from the perspective of the

participants, how their current lifestyles were similar or different to these, and explore the conditions under which the participants could imagine living in accordance with them. In this way, the qualitative analysis generated empirical research that helped us to understand the phenomenon of low consumption lifestyles. The qualitative research phase collected data using deliberative focus groups (including use of vignettes) and was analysed using thematic analysis.

3.2.1 Data collection

3.2.1.1 Deliberative focus groups

Research concerned with attitudes, beliefs, likes and dislikes, and opinions on products, policies and other such phenomena are well suited to exploratory focus group research, and therefore make for a suitable method of data collection for this empirical data collection (Fern, 2001). Focus groups are often understood as group interviews, however there are significant characteristics that diverge from this definition (Morgan, 1997). The *focus* of the questions or topics is often proffered by the researcher, and the *group* dynamic allows for interaction between participants in ways that are not always possible in a group interview (Ibid.). Focus group data should not claim to produce completely naturalistic data, which might be achieved through ethnographic research, or participant observation (Ibid.), however the researcher's ability to guide the *focus* of the research in a way these other methods cannot, is something that needs to be considered in relation to the research being carried out. This was particularly important for the current research phase where we examined people's views, experiences and preferences, i.e., their own interpretations of their world, and not their behaviour per se. However, a naturalistic approach is maintained in focus groups by ensuring good practice is upheld and the mark is not overstepped by the researcher (Bloor, 2001), such examples of which might be keeping quiet when conversation is on topic and prompting towards memory cues rather than the expected content of responses.

Whilst this phase requires significant direction from the researcher, it is important to capture social interaction around the topics being discussed, where debate between participants can explore tension and accord across the group. Recognising points of coalescence or divergence in group opinion can help to bring about a more detailed exploration of the phenomena under discussion. Focus groups can better capture this *group meaning*, where individual or group interviews might fail (Bloor, 2001). Creating

data that emerges through this interaction between participants allows for relevant issues of concern to the researcher to be more fully explored from a variety of perspectives prompted by the participants themselves, as well as (but not solely) the researcher (Kitzinger & Barbour, 1999). Discussion around shared understandings of how consumption was understood and perceived was a core aim of this phase, and this research has helped to illustrate where some of the catalysts and barriers to change might be. The fact that this data has been collected in a social environment was advantageous.

Exploring people's evaluations of their current lifestyles, as well as future scenarios involving lifestyles that may not be easily understood without guidance, requiring the provision of information to participants about the topic as part of the design. Some of the material will be novel, needing careful explanation and directed discussion and as such, this phase employed the use of deliberative focus groups. Deliberative focus groups are akin to typical focus groups but have some transferrable aspects from deliberative workshops. The deliberative element concerns the provision of information and content of which to 'deliberate' over; so rather than looking to merely converse about participant experience and perspective, there is an additional process of information provision and reflection that is encouraged (Fishkin, 2011). This overcame the risk that focus groups tend to be limited to the existing knowledge of the participants which, in this current study, would not have allowed for the sufficient exploration of future scenarios and projected lifestyle changes that they may not have been already familiar with (Gutmann, 2007). This method of qualitative data collection is also noted as being useful for preliminary work on public policies, well-suited to the content of the focus group schedule that explores different approaches to policy implementation (Rothwell et al., 2016). A lack of understanding, or a poorly informed view of issues relating to science and public health, can be seen to reduce support for solutions, and therefore policy recommendations (Pew Research Center, 2015). This necessitated a more deliberative format where participants learned about the links between climate change mitigation, mental well-being, and their consumption practices.

Deliberative focus groups have been acknowledged as an appropriate data collection technique in the establishment of people's needs and wants and how they relate to one's life-satisfaction (Walker et al., 2016), which is an important factor related to consumption, and useful when exploring public acceptance. In addition to this, Stirling

(2007) has claimed that sustainability transitions should be approached as ‘deliberative social learning exercises’, emphasizing the importance of including the voices of the general public in how they learn about the topics, and engage with relevant content. Indeed, there are examples of when public acceptability has not been considered prior to policy that has resulted in backlash and outrage (Gaskell et al., 1999; Pew Research Center, 2015). Geels (2010) highlighted this need to create and understand shared visions of sustainability, and to better understand this sometimes ambiguous concept. This can be achieved through the facilitation of projects that stimulate reflexivity and learning, such as deliberative research, as well as aiming to explore how routine behavior and ways of thinking could be changed in order to increase sustainability (Bos and Grin, 2008). The exploration of the day-to-day lives, and how this might be related to consumption-orientated lifestyles was at the centre of this research phase, and informed the focus group schedule content, and the use of vignettes.

3.2.1.2 Focus group schedule

Merton et al. (1990) proposed four broad categories that are of upmost concern to a focus group schedule: range, specificity, depth and personal context. This means having scope to explore the full *range* of research aims and allow space for participants to introduce themes that the researcher may not have been aware of. By incorporating these elements into the schedule, participants were able to express their own views, *specific* to their experience. The schedule accommodated for the elucidation of *depth* in the accounts of the participants by allowing sufficient time and initiating turn-taking for feedback, providing a space for *personal context* to be expanded upon and explored. As previously discussed, one of the main strengths of focus groups in comparison to individual or group interviews is the bringing together of personal views as interactions and fostering this comes from careful consideration of the four broad categories of concern listed above. Together, these four dimensions can be satisfied through careful moderation of the discussion and the creation of an inclusive environment in which conversation can flourish.

Morgan (1997) details how a “funnel” based approach where schedules are much wider in their scope at the beginning of the focus group, which can put participants at ease. The interview schedule for this research phase started broadly, giving participants space to discuss what they feel is important, empowering their sense of importance and value.

This allowed for the unframed discussion of the research focus and funneling towards more specific aspects of the project with directed questions towards the end of the schedule.

3.2.1.3 Vignettes as a methodological tool

This phase of data collection and analysis employed the use of vignettes as part of the focus group schedule. A vignette is a short story designed to represent a scenario and/or explain a hypothetical circumstance of relevance to the research topic and is used as a methodological tool to present content to participants for deliberation (Schoenberg & Ravdal, 2000). Bloor and Wood (2006) defined the use of vignettes as “A technique used in structured and in-depth interviews as well as focus groups, providing sketches of fictional (or fictionalized) scenarios ...[used to] collect situated data on group values, group beliefs and group norms” (p. 183). The aim of the vignettes in this research was not to accurately predict behavioural responses in the given scenarios, rather to achieve a greater insight into the ‘interpretative framework and perceptual processes’ of the participants. This allowed for subsequent analysis of the data to explore the current public acceptability of certain aspects of an alternative future scenario and how they are perceived.

In order to do this in a realistic and engaging way, this research wrote the vignettes with a view towards recreating mundane aspects of daily life in an alternative vision of the future. It is important to place the focus on the experiential content, as this study wishes to focus on the psychology and lifestyle impacts of aspects of degrowth and low consumption, rather than emphasizing fringe movements and systemic ideology. This is supported by Finch (1987) who stressed realism in vignette development, where realistic responses can be produced, rather than expecting the responses to an explicitly hypothetical scenario to be relevant to public acceptability. This is a challenge, as the scenario will be set in the future, and are necessarily hypothetical, but by grounding the detail in relatable experience this was hopefully minimized (Hughes and Huby, 2004).

The primary aim of this research in understanding levels of public acceptability is well suited to the use of vignettes, with previous research having incorporated their use into the acceptability of possible future action or circumstance (Burgio et al., 1995). Additionally, as this public acceptability is concerned on a psychological level with lifestyle changes, we can be encouraged by claims from Greenhalg et al. (1998) that

vignettes can be used to advance understandings of the barriers that might obstruct social, cultural and behavioural change. Vignettes are able to facilitate discussion around topics that the participants may not be familiar with in their personal lives (Finch, 1987), which is an important advantage for the exploration of alternative low consumption lifestyles, the facets of which participants may not have prior knowledge.

The attempts of this research agenda to bring together insights from a variety of disciplines was also facilitated by vignettes, where a broad spectrum of ideas and seemingly disparate content can be woven into a narrative (Shoenberg and Ravdal, 2000). With direct relevance to a CR approach, vignettes can arouse discussion that explores individual life situations as well as reflections upon the conditions of the society in which it takes place or is being compared to their current social context (Ibid.). Indeed, the method itself allows for an exploration of the participant's interpretative process and the multi-faceted nature of their lived experience as an agent within a structure is expressly explored (Schultz, 2006), drawing parallels with the assumptions of CR.

In the context of the mixed-methods research project as a whole, we can see how the role that these vignettes played in the initial qualitative stage provided insight into public acceptability and explored meaning and significance of participant's interpretations of agency and structure with regards to low consumption lifestyles. Any behavioural responses and future intentions were quantified using more appropriate experimental methods, which will be discussed later in this chapter. Atkinson and Coffey (2002) maintain that qualitative data that emerges from the use of vignettes can provide a unique contribution to knowledge, irrespective of its relation to participant behaviour and action. This is not to say that it holds no predicative power; Jenkins et al. (2010) maintain that interviewee's responses to vignettes are not entirely distinct from how they view everyday life in the current moment (or that of interview). Furthermore, where this initial stage of data collection was concerned with understanding public acceptability, subsequent discussion of the vignettes was able to determine areas that are more or less acceptable, and predicative power wasn't the primary objective. It has been noted that vignettes sometimes result in the interviewees responding in socially desirable ways (Constant et al., 2004), any potential bias that this might illustrate when taken as a prediction of behaviour, can be co-opted into a positive rationale, due to the importance of understanding what the participants view as being socially desirable, which is a large

component part of public acceptability (Hughes and Huby, 2004). This illustrates the importance of a mixed-methods approach that doesn't prioritise one phase over the other but recognises the inherent strength and unique contribution of exploring the public acceptability of low consumption lifestyle using a variety of methods and techniques.

3.2.2 Data analysis

The qualitative data was analysed using thematic analysis, an approach that is malleable to a wide variety of ontological and epistemological positions, depending on the types of research question (Joffe, 2012; Willig, 2013). As previously explained, this thesis adopted the theoretical model of critical realism (CR), and as such aligned thematic analysis with its philosophical assumptions. Furthermore, the production of themes through the analytic method used a CR framework in order to best create knowledge that represents reality, turning the ontological and epistemological positioning of CR into method and practice. Just as CR is able to transcend, and in some cases reject, a commitment to one method in the name of the epistemic fallacy, thematic analysis is also commensurable across the philosophical differences of research methods (Braun and Clarke, 2006). Joffe (2012) maintains that thematic analysis is consistent with a CR approach and is able to combine the more objective claims around empirically observable and manifest codes, and leading towards the production of latent themes, which are emergent and reflexive.

As opposed to the more common dichotomy of inductive and deductive approaches, where research is data-driven or theory-driven respectively, CR recognises the processes of abductive reasoning and retroduction. Where inductive reasoning builds theoretical understandings from observations in the data, and deductive reasoning uses data to test theoretical understandings, abductive reasoning offers a different approach. Rather than setting out theoretical assumptions to be tested a priori, as in deductive reasoning, abductive reasoning can interpret data using existing theory that falls outside the boundaries of the original theoretical premise (Meyer & Lunnay, 2012). Being open to this mode of theory-driven theme building is valuable to this research, due to its exploratory and novel research focus. The other amendment this thesis made to the typical thematic approach is the acknowledgement and incorporation of retroduction. Retroduction is another analytic process more explicitly detailed in CR methods, but that is a crucial factor of scientific method in the widest sense, but is usually implied rather than explicated (Price & Martin, 2018). The application of retroduction, is the process of

hypothesising about the existence of an unobservable, but theoretically grounded, generative mechanism which is the rooted causal influence upon the phenomena. It is a way of understanding the necessary conditions under which something cannot exist without (Fletcher, 2017). It is argued to be a crucial stage of research in science and is a means for establishing fundamental circumstances that impart causal influence (Danemark, 2019). In this case of this research, we hoped to uncover what the necessary conditions are for acceptance of low consumption lifestyles.

The practical application of manifest and latent coding, and theme-producing, is discussed in relation to inductive and abductive inference in the qualitative empirical chapter (section 4.2).

This supports the goal of this research phase; which was to uncover a better understanding of how and why low consumption lifestyles might be supported and/or resisted by the public, in order to assess their public acceptability, and to evaluate the effectiveness of different strategies of influence upon public acceptability of low consumption lifestyles, and their associated behaviours. Rather than gearing towards direct, realist readings of participant produced data, this phase acknowledged and categorised these realist readings and formulated understanding about what sort of generative mechanism was exacting a causal influence upon these factors.

3.3 Quantitative research phase

The quantitative research design took the form of an experimental paradigm that manipulated various communication frames in order to test the psychological mechanisms relevant to the research findings from the qualitative research phase. Specifically, some key areas of psychological insight that emerged from the qualitative stage were explored again in the quantitative stage. For example, we know from existing literature on behavior change that social norms are a relevant psychological concept, and if they emerged as a significant theme in the qualitative analysis, the quantitative research might test the effects of a social norms framing upon the public acceptance of policy and the intention to reduce consumption behaviours. As discussed, CR is well suited to mixed methods research, and a commonly employed technique for this is to try and operationalise constructs that help to understand generative mechanisms.

With reference to the uncovering of generative mechanisms in CR research, the quantitative research phase proved useful for offering a different empirical contribution

to the exploration of the public acceptability of low consumption. The aim was to extract a useful research finding and provide a rationale for how it might increase our knowledge and understanding of the public acceptability of low consumption.

Empirical statistics will allow for a sample of participants to aid the statistical exploration of research questions that are more suited to quantitative exploration. The goal of which would be to better understand how to increase the public acceptability of low consumption lifestyles, and measure the effectiveness of various frames in doing so. The contribution of the quantitative phase was to provide a rigorous and novel understanding of how to increase public acceptability of the low consumption lifestyles that is required as a part of wider strategy to avoid climate crisis.

Procedural details and specific forms of statistical analysis will be discussed alongside the empirical research in chapter 5.

3.4 Integration of research phases

In mixed methods research it is important to discuss how the phases will be integrated. The qualitative empirical phase of this thesis strongly informed the quantitative phase. As has been previously explained, this was not part of an exclusive sequential exploratory approach that prioritised the latter, rather a practical process of discovery and exploration of the research topic. In this sense, and from this perspective only, we can view the qualitative phase as preliminary research that can help to “capture all the domains that need to be measured in the survey, determine the dimensions that make up each of these domains [and] provide item wordings that effectively convey the researcher’s intent to the survey respondent” (Morgan, 1997, p. 25) made up a strong case for this intended use. However, this thesis, and its critical realist (CR) framework recognized the inherent worth and unique insight that qualitative research can bring, and any novel and interesting findings will be presented in their own right. Furthermore, we have spoken of and thoroughly examined the value of mixed methods research, where the combination of methods can help more sufficiently and comprehensively generate useful knowledge around a topic.

This study attempted to uncover generative mechanisms that might emerge from qualitative focus group data, where reflections upon individual experience (including the sense of agency) and wider society (including its structural contents) will be encouraged. The quantitative data from experimental framing experiments also explored both of these

realms, focusing on individual behavioural intentions and support for policy that represents structural changes to society. This research was interested in uncovering the conditions under which low consumption lifestyles might become publicly acceptable, primarily concerning issues of support for public policy and behavioural intentions, and the contribution of qualitative and quantitative enquiry will both be useful to this. CR here, allowed for the interpretation of experience of living in a consumerist society, and an examination of the obstructing and/or facilitating features of a society which seeks to reduce consumption. Furthermore, an experimental paradigm sought to explore observable and quantifiable individual responses to framing. Taken together, the research project delivered an empirically grounded conclusion about how and why consumption is experienced, the effects of communication strategies and framed messages might directly influence the public acceptability of policy, as well as behavioural intentions to consume.

Furthermore, an ability to conceptualise a generative mechanism that can be understood to exert a causal influence upon the public acceptability of low consumption lifestyles, as part of a complex and interconnected web of structure and agency, there is the possibility of recognising useful and less useful ways of approaching social policy and associated behavior change in the future. The tools for the conceptualisation of a generative mechanism are realised through a process called retroduction, which is an oft-defining feature of a CR research methods (Price and Martin, 2018). The process allows researchers to go beyond the inductive, deductive and abductive reasoning in the data analysis, and use retroductive reasoning to explain and hypothesise about the conditions which might be necessary for the empirical events to be understood, helping to hypothesize about the generative mechanism(s) which are not necessarily observable or measurable themselves. In practice this means finding “a theoretical redescription by using a sufficiently potent theory in relation to the studied phenomenon” (Blom and Morén, 2011). This is a key process in the development and recognition of ‘generative mechanisms’ and will take the form of a general discussion where the research will be geared towards the reconsideration of the empirical findings from all phases of data collection and the examination of factors, or social conditions, that must exist in order for low consumption lifestyles to become publicly acceptable.

Chapter 4: Phase 1 - Qualitative Research Study

The examination of research and theory reviewed thus far has informed the development of a critical realist mixed methods design, with a primary stage of exploratory qualitative data collection. The initial literature review developed the overarching research questions for the main thesis but was also the significant body of literature used to inform the design of the research materials in this phase of data collection. This chapter consists of; a brief reiteration of the rationale for this qualitative research phase, a development of the exploratory research questions specific to this phase, a detailed account of the methods for data collection and analysis, and the presentation of analysis, ending with a discussion and conclusion of Phase 1 findings.

4.1 Rationale and research questions

We have illustrated the links between economic growth at the macro level and individual consumption at the micro level, and hoped to further understand the relationship between these in the everyday. More specifically, this research phase sought to explore the possibilities of a range of future imaginaries that address climate mitigation and human flourishing. Exploring how people might consume less is becoming more urgent as we seek to redress the imbalance in how much material and energy consumption we use compared to how much the earth can sustainably provide, whilst improving the mental health, well-being and life-satisfaction of society's people.

This research phase had a number of exploratory research questions which fed into the broader research questions of the thesis, as well as helping to inform a subsequent quantitative research phase:

- How does consumption play a role in well-being, life-satisfaction and provision of basic human needs?
- What are public perceptions of their ability to engage in low consumption behaviours?
- Who does the public see as accountable and/or responsible for their consumption practices and those of others?
- Which aspects of alternative lifestyle pathways could contribute to a desirable low consumption future? And which are less desirable?

4.2 Methods

4.2.1 Participants

4.2.1.1 Sampling and recruitment

The number of participants in each group, the number of groups, and the diversity of each group are all important issues to consider when recruiting for participants. This research aimed to recruit eight participants for each group, as per recommendations for between 4-8 per group (Kitzinger, 1995), allowing for no-shows. Although group sizes varied from 4-7 (due to attrition and difficulty in recruiting for the higher income and older age groups), the smaller group sizes did not suffer from the main challenges that this poses, namely stilted discussion and/or less than optimum dynamics (see reflexive accounts of group interaction and dynamics in Section 4.3). It was decided that 4 groups would be best to offer a range of groups and the rule of thumb that between 3 and 5 groups should be sufficient to reach “saturation”. This is the term defined by Glaser and Strauss (Pidgeon and Henwood, 2004) as when more groups would not yield more insight into the topic (Zeller, 1993).

Having some homogeneity in the groups of participants will appropriately suit the examination of group behaviour and opinion, especially when the research is concerned with consumption and policy acceptance, which relates to socio-demographic factors such as income and politics (Fern, 2001). The focus groups were segmented by age and income in line with research that illustrates these two factors as being conducive to open and comfortable discourse between participants and most predictive of carbon footprint (van Geffen et al., 2016; Druckman & Jackson, 2009). This type of purposive and theoretical sampling is recommended by Silverman (2017), who stated that it can increase the level of generalisability of qualitative research findings. In contrast to this, Fern (2001) stated that heterogeneity can be beneficial for the generation of potential instruments for survey development. Therefore the focus groups aimed to have within group homogeneity for socio-demographic variables such as age and income, but display evidence of heterogeneity across groups in order to ensure that any analysis and findings explored a range of perspectives. With more direct relevance to deliberative methods, we can note that McCrum et al. (2009) supported the creation of groups of people who had a sense of shared experience in their research looking at climate change adaptation through deliberative social learning. Collins and Ison (2009) extended this notion of

exploring within-group networks by suggesting a simultaneous engagement with a wider policy context, and in doing so allow for insight around collective behavior change. Therefore, this matching of heterogeneous participant sampling and a deliberative engagement in the wider policy context specific content is justified.

Participants were recruited in public spaces, in busy parts of central Bristol, U.K. where members of the public were approached by the researcher and explained procedural details about the opportunity to be involved in a research project. Details about the topic were kept disclosed, in order to avoid any framing, and all participants were told that the research team was “...interested in people’s perspectives on current topics and ideas about the future.”. Potential participants were also given details about payment, location and times.

4.2.1.2 Pre-screening and selection

In order to try and avoid any unwanted bias in the sample, and to invite a homogenous sample (based on age and income, as previously discussed), people were asked to fill out a short screening survey (see appendix 1). Between seven and nine interested parties were emailed in advance of the focus group, based on income and/or age. This resulted in the recruitment of four groups; (1) low income (younger), (2) medium to high income (mixed age), (3) high income (older), and (4) Older (low to medium income). The first three groups were recruited due to their personal income band, however, comparably few participants over 55 had been recruited in these groups that it was decided to recruit for a mixed income and older sample. Due to a high attrition rate for most of the focus groups, other demographics were not balanced as well as was intended through invitations.

4.2.1.3 Socio-demographics

Table 1 illustrates the socio-demographics of each focus group, and the overall distribution of participants across all groups for gender, age, income and political orientation.

Table 1. Socio-demographic information for focus group participants

	All	Group 1 (n = 6)	Group 2 (n = 7)	Group 3 (n = 4)	Group 4 (n = 5)
<i>Gender</i>					
Male	9	2	4	2	1
Female	13	4	3	2	4
<i>Age</i>					
18-24	3	2	1	-	-
25-34	7	4	2	1	-
35-44	3	-	3	-	-
45-54	4	-	1	3	-
55-64	4	-	-	-	4
65+	1	-	-	-	1
<i>Personal Annual Income (£)</i>					
Up to 15,599	8	6			2
15,600 to 26,599	2	-	-	-	2
26,600 to 36,399	9	-	7	-	1
36,400 and above	3	-	-	3	-
<i>Political Orientation</i>					
Left	6	3	1	-	3
Centre	13	2	4	4	2
Right	3	1	2	-	-

The groups were slightly skewed towards being female, and there were more participants in the lower half of the age ranges. Income distribution was very slightly weighted towards the higher wage brackets. Political orientation was weighted to the left, but predominantly centrist; notably, groups 3 and 4 had no self-identifying politically right leaning participants.

4.2.1.4 Social psychology construct variables

In addition to the recruitment screening, there was another quantitative data collection process within this phase of the research. All participants completed a short questionnaire at the start of the focus group, with questions designed to operationalise constructs related to the research topics, but carefully chosen so as not to influence any subsequent discussion, which is a risk associated with this approach (Morgan, 1997). This was used to supplement the socio-demographic variables to establish the levels of attitudinal diversity within each group. The constructs measured prior to the focus groups were post-materialism (Abramson & Inglehart, 1995), basic needs satisfaction (Johnston & Finney, 2010), and Values (PVQ-10) (Schwartz, 1992, 1996) (See appendix 2).

For the Basic Human Needs scale used in this study, the items were derived from Basic Needs Satisfaction in General Scale (BNSG-S) (Deci & Ryan, accessed 2018). The scale was reduced to a 6-item scale using findings from Johnston & Finney (2010) to select the most reliable items. Participants were asked to rate how true the statement was to their life, on a scale of one (*Not at all true*) to a scale of seven (*Very true*). Scores were averaged across both items of the subscale meaning that each dimension has a score out of a maximum of 7.

Post-materialism was measured by a scale taken from previous research (Carlisle & Smith, 2005), which has been used in previous research on consumption (Whitmarsh et al., 2017). The scale is a one item question, asking the following: “Which of the following do you think should be the UK’s highest priority, the most important thing it should do? Which do you think should be the UK’s next highest priority, the second most important thing it should do?”; with four response options: (1) ‘Maintain order and stability in the country’; (2) ‘Give people more say in government decisions’; (3) ‘Fight rising prices’; and (4) ‘Protect freedom of speech’. Options 2 and 4 are considered post-materialist, and participants who chose these options were given 2 points per preference. Options one and three are considered materialist, with participants choosing these options being awarded one point per preference. The score is calculated by adding the two preference scores together. A respondent who prioritised both post-materialist goals would score 4 overall. A respondent prioritising first post-materialist and second materialist goals would score 3. A respondent prioritising a materialist goal first and then a post-materialist would score 2. Finally, a respondent prioritising both materialist goals would score 1 overall.

The Schwartz value scale is a well-renowned and reliable measure of human values, for the purposes of brevity, and knowing that the sample size would not be large enough for quantitative inferential statistical analysis, a PVQ-10 version was used (Schwartz, 1992, 1996). This is a 10-item version, with one question per value dimension: “How important are the following in your life” with responses coded from 1 (*Not at all important*), to 7 (*Extremely important*). Each item has a list of words relevant to the value dimension.

Table 2. Psychological construct measurements overall and by group

	All		Gro up 1		Gro up 2		Gro up 3		Gro up 4	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Basic Human Needs (BHN) (1 – 7)										
Competence (2)	4.79	0.79	4.41	1.20	4.83	0.41	4.87	0.25	4.90	0.82
Autonomy (2)	5.36	1.11	5.66	0.81	4.66	1.63	5.25	0.86	5.80	0.44
Relatedness (2)	5.34	1.07	5.66	1.40	5.00	1.30	5.25	0.86	5.66	0.81
Post-materialism (1-4)										
Post-materialism	2.55	0.80	2.50	0.55	2.33	0.52	2.75	1.50	2.80	0.84
Schwartz Values (1-7)										
Self Direction	6.00	0.93	6.50	0.70	5.66	0.67	5.50	1.67	6.20	0.70
Stimulation	4.82	1.40	5.50	1.52	5.17	1.17	4.25	0.96	4.00	1.73
Hedonism	6.41	0.67	6.83	0.41	6.00	0.63	6.75	0.50	6.20	0.84
Achievement	4.27	1.52	5.00	1.79	4.50	1.38	3.75	1.26	3.40	1.52
Power	2.64	1.00	2.33	1.21	3.17	0.41	2.00	0.82	2.80	1.30
Security	4.95	1.46	4.67	1.37	4.50	1.22	5.75	1.25	4.80	1.92
Conformity	4.52	1.57	5.00	1.41	4.00	1.90	4.00	1.41	5.00	1.58
Tradition	3.59	1.79	4.17	1.83	2.50	0.84	2.25	1.50	4.80	1.64
Benevolence	6.05	1.09	6.83	0.41	5.33	0.82	6.00	0.82	5.80	1.64
Universalism	6.36	1.09	6.66	0.52	5.66	1.75	6.25	0.96	6.8	0.44

With such small sample sizes, it was not deemed appropriate to conduct any inferential tests with the data. However, the descriptives in the table above helped us ascertain the homogeneity and heterogeneity both across, and within groups.

Statistics from the BHN scale showed means across all groups were similar to the overall group mean. Participants across all groups, both individually and aggregated, displayed highest scores (very important/extremely important) for values related to self-direction (66.7%), hedonism (90.5%), benevolence (76%) and universalism (85.7%). This displays the prevalence of an openness to change and self-transcendence. With regards to the post-materialism scale, 47.6% of participants were ‘rather-materialist’ and 33.3% were ‘rather-post materialist’. Groups 3 and 4 were higher in post-materialism. Standard

deviations were relatively small across most items and were comparable to the overall mean.

4.2.1.5 Voluntary simplicity behaviours and PEBs

The focus group had another quantitative element, which served primarily as a conversation aid. Participants were asked to complete a checklist and rate how likely they were to engage in the PEBs related to voluntary simplicity from four categories: 'Food', 'Buying, repairing, making', 'Energy and transport, and 'Work and social life'. See appendix 3 for full list. These behaviours were extracted from a range of research papers on voluntary simplicity and environmental behaviour (Ballantine & Creery, 2009; Elgin & Mitchell, 1977; Etzioni, 1998; Huneke, 2005; Leonard-Barton, 1981; Shaw & Newholm, 2002).

Mean scores were devised from the items where 1 = already do, 2 = would like to, 3 = would not do. Percentage scores show number of scores of 3 where the participant noted they would not do. This provides an outline of the most and least popular behaviours from the list, including the differences across the four groups, and allows us to cross-reference qualitative findings and reflexive accounts.

Please refer to appendix 4 for means and percentages regarding these. No analysis was performed with regards to them, but they are referred to in the reflexivity section (Section 4.3)

4.2.2 Procedure

4.2.2.1 Informed consent and ethical guidelines

All participants completed consent forms after being given the information about the extent of the expectations for participating in the research. They were told about their right to leave, the respect for their choice not to answer any questions they don't want to, and how the data would be handled and stored. An ethical consideration that needs to be considered with focus groups is that of confidentiality between participants, which might not be a usual concern for other types of qualitative research (Morgan, 1997). This was overcome by informing participants of codes of respect for each other and the opinions that have been shared within the research setting.

We have already discussed the benefit of homogeneity in recruiting participants for a given focus group in terms of research agendas and methodology, however this is also an

ethical issue. Expressly, homogeneity in the socio-demographics of a focus group will put participants at ease to discuss their attitudes and lifestyles, where differences in social class, income and age might prove troublesome and stilt conversation or, in the worst cases, cause conflict or discomfort.

4.2.2.2 Location, timings, and payment

Participants were invited to attend the focus group at a community events space owned by a local Bristol charity. This location was at a city centre location with good transport links. The focus groups were all held in the evening, from 6pm until 9pm (with a short refreshment break mid-way through). An additional researcher supported the lead researcher. Participants were paid £50 via cheque or cash for their time.

4.2.2.3 Recording

The focus groups were recorded using two Zoom H1 recorders per session. Recording began after the participants had all been informed of ethical guidelines and ground rules for the discussion. Recordings were stored on a password-protected computer.

4.2.2.4 Transcription and coding

Recordings were fully transcribed using orthographic transcription. Transcripts were loaded into NVivo 11 in order to store codes and quotes for analysis. Participant quotes are represented with a code letter and number in the text, where SM denotes a male participant and SF denotes a female participant, with a textual reference to the number focus group they were part of.

4.2.3 Schedule

4.2.3.1 Dynamics and schedule development

A semi-structured schedule was used; designed to be guided by the moderator as per convention (Morgan, 1997). This achieves more comparability across groups and ensures that all topics deemed relevant to the focus of the research are posed to the group for deliberation, whilst allowing for digressions to be naturally emergent, before returning to a schedule (Bloor, 2001). With regards to the provision of content and structuring of prompts throughout the deliberative focus group schedule, we can take note from Fishkin and Luskin (2005) who set forth principles for increasing the quality of data collection in deliberative discussions. These principles include information provision with adequate support to understand the content, balanced account of pros and cons, and sufficiently

comprehensive details, which should all be engaged with voluntarily. Furthermore, some examples of non-content orientated prompts included, paraphrasing, summarizing responses, clarifying, and reflecting (Fern, 2001). These also allow for participants to further explain their thoughts if necessary, or can allow for other participants to express their own take on someone else's point of view. Another technique that was incorporated into the study design was the use of writing breaks, reading time and tasks. These help to overcome issues of 'free-riding' where individuals can rely on others to express their views and helps to redress any imbalance in the power dynamics if there happens to be dominant speakers. Participants were given time to think about some of the questions followed by time to individually feedback to the group encourages everyone to share their experience from the thought processes involved in these private tasks (Fern, 2001). The introduction at the beginning of the schedule aimed to inform participants of any practical issues, establish confidentiality and mutual respect across group members, and ensure that people were not expected to have specialist knowledge in order to answer any questions (See appendix 5). This helps to obtain good quality data in an inclusive environment. Researchers were introduced to participants upon arrival and at the start of the main body of the schedule.

4.2.3.2 Main schedule

The focus group was organised into three main sections: (1) participants' understanding of their well-being and current consumption, (2) their responses to a set of low consumption practices, and (3) an exploration of consumption behaviours within alternative future scenarios (see Table 3). The table below shows a summary of the interview schedule (see appendix 6 for full schedule and prompts)

Table 3. Summary of interview schedule with key questions

	Key Questions
Section 1.1 <i>Happiness, well-being and life-satisfaction</i>	<ul style="list-style-type: none"> • What makes you happy? • What could you not live without? (leave open...then ask; physical items <i>and</i> 'relational' goods) • What do you aim towards / life goals?
Section 1.2 <i>Role of consumption and materialism</i>	<ul style="list-style-type: none"> • What things do you spend your money on? • How does shopping and buying things make you feel? • What about buying things makes you happy / or not happy?
Section 1.3 <i>Needs and luxuries</i>	<ul style="list-style-type: none"> • What are the five last luxury goods / services you bought? Last five times you have treated yourself to? • How do you define them? What makes them a 'luxury'? • What luxuries could you do without (or find the easiest)? • Any that you couldn't live without (or find the hardest)? • Does anything about buying things make you unhappy? • How do you overcome this?
BREAK FOR REFRESHMENTS	
Section 2 <i>Voluntary Simplicity Behaviours</i>	<ul style="list-style-type: none"> • Complete tick sheet • Are you doing these already? Take each block at a time <ul style="list-style-type: none"> ○ Who is doing it and why? ○ Would there be any benefit of doing these things? If so, to whom/what? (Prompts: other people, environment, self) ○ Norms? Can you imagine them being normal? What if everyone does them? ○ Do you think doing them would make you any happier or less happy? ○ From the ones you wouldn't do – how might you change your mind? What incentives might you need? • What about each sub section?
Section 3 <i>Vignettes</i>	<ul style="list-style-type: none"> • Introduce and read participants own future scenarios • Read the three research driven future scenarios <ul style="list-style-type: none"> ○ Which was your favourite? ○ What aspects would work well? ○ What aspects seem unlikely to work? ○ Compare their own with the ones they've just read • Who do you think is responsible for bringing about these changes in society? • What do you think could stop these changes taking place?
Close	<ul style="list-style-type: none"> • Chance to discuss anything else • Feedback

The three stages (Section 1, 2, and 3) aimed to investigate what makes people happy in their lives which might (or equally as interesting, might not) evoke discussion around: material and/or experiential consumption, their relationship with product-, service- and experience- based consumption practices, and the boundaries they set for definitions of needs and luxuries. These initial discussion points were not framed by any discussion of the wider context of this research in order to extract unframed insight into the lifestyles of the participants prior to the deliberation of researcher-provided materials.

A checklist of voluntary simplicity and pro-environmental behaviours was then presented (Section 2. See appendix 3) where the range of behaviours were discussed, exploring their feasibility and attractiveness.

Prior to being presented with the three scenarios (Section 3), participants were asked to present their own vision of the future, in order to elicit their spontaneous visions before they might be framed by the content in the vignettes (discussed below). Subsequent discussion of the vignettes (See appendix 7) investigated the feasibility of individual level behaviour change, responsibility for governance, and how policy might be best produced and introduced to build public support for progressive change.

4.2.3.3 Development of vignettes

Participants were first given the chance to think about and develop their own vignettes of a low consumption lifestyle set in the future. This approach is coherent with suggestions that data being used for a thematic analysis should aim to allow research participants to map their own understandings of the research focus (Joffe, 2012). By freely associating aspects of their own lives towards a research topic area themselves, rather than being directly questioned on theory and practice, we can facilitate a more naturalistic engagement with the research focus (Willig, 2013). Prompts towards the topical focus were noted in the relevant section of the full schedule (appendix 6), in order to ensure points of interest were fully explored (Shoenberg and Ravdal, 2000).

The finer details of the vignettes were substantively devised through a review of pre-existing literature and research, (Cheek and Jones, 2003; McKeganey et al., 1995) as well as the professional and personal experiences of the researcher (Sprat, 2001; Wilson and While, 1998), an approach that increases the internal validity of each vignette (Hughes and Huby, 2004). By using this inductive approach to materials production, relevant concepts relating to economic and social make-up of new visions of society could be communicated to the participant in the form of a relatable short story. Often vignettes are used to depict actions of a central protagonist in a given situation, and gauge participant responses regarding their interpretation of the protagonist's position (Jenkins et al., 2010). The vignettes used in the research study sought to place the individual as the protagonist in this projection; designed for participants to explore the social world of the protagonist in the future scenarios, with a view to exploring the acceptability and desirability of the lifestyle implications illustrated within them (Jenkins et al., 2010; Parker et al., 2001). These scenarios were set in the future, in order to illustrate circumstances that are not evident in today's society; they were however, written in the present tense further increasing the sense of realism and projecting the participant into

the imaginary. The necessity of this approach was discussed at more length in chapter 3 and was justified in order to increase the quality of emergent data (Hughes and Huby, 2004).

This study will not only use vignettes of imaginal future lifestyles, but also include imaginal futures that discuss the policy landscape in which they would be manifest. The issues of consumption, free time and sharing economies were incorporated into daily life and expressed in relation to governance structures and issues pertaining to a macro-economy that might help to frame the changes that led to the changes in society at the individual lifestyle level.

Degrowth has many practical models for the organization of society in the future and associated forms of action (DeMaria, et al., 2015), and was therefore well suited to the generation of vignettes for use in deliberative workshops designed to assess feasibility of future scenarios. The vignettes illustrated a varying range of shifts in social life at the individual and cultural levels, varying across a number of dimensional framings (see Table 4). Three scenarios in particular were presented exploring alternative pathways for climate mitigation and decreased consumption: degrowth through decreased working hours and increased community initiatives and strongly regulated markets ('Degrowth'), incremental fiscal regulation through incorporation of environmental damage in costs and taxation ('Incremental'), and a techno-centric increase in efficiency for sustainable growth in western society ('Business as usual').

Table 4. Vignettes and associated dimensional variation

	Cost to current lifestyle (convenience)	Socio-ecological harmony (SEH)	Governance strategy	Positive valence framing
1. Degrowth – 'Working less...living more'	High cost	High SEH	Community and Regulated markets	Well-being & life satisfaction
2. Incremental – 'Cutting the cost of being green'	Medium cost	Medium SEH	Fiscal policy	Financial accessibility and savings
3. Business as usual – 'Science can save (some of) us!'	Low cost	Low SEH	Market freedom	Technological progress

The degrowth scenario, 'Working less...living more' best represents more major lifestyle implications and radical changes to society that were extracted from a literature review of degrowth and voluntary simplicity, and aims towards achieving high SEH. Behaviours and policy suggestions were taken from across the body of literature, in particular Demaria et al., (2015) and Cosme, Santos, & O'Neill (2017) for degrowth lifestyles, with

the latter being an analysis of degrowth policy from a meta-review paper. There is a proposed radical shift to the metrics for life-satisfaction and success, and our engagement with consumption of natural resources is more connected to the processes and origins, and related to human labour and community cooperation. Policy and/or lifestyle shifts were kept focussed on consumption and carbon emission related domains in order to align consistently with the theses main aims and research questions. More structural concepts such as shorter working hours (Kallis, 2011), flatter pay structures (Cosme, Santos, & O'Neill, 2017) and reduced advertising (Schneider et al., 2010) were included alongside an increased in conviviality (Illich, 1973) and a focus on life satisfaction and increased meaning in life (Sekulova, 2014) There is also significant reference to the work of Alexander (2012; 2015) where there are key links made between degrowth and voluntary simplicity, with practical suggestions of lifestyle changes and behavioural adoptions that would represent degrowth society.

The next vignette represents a progressive but incremental move towards a medium level of SEH by 'Cutting the cost of being green' which makes it cheaper and easier to be environmentally friendly, but does not represent total systemic societal shifts. Content for the incremental scenario comes from the 12 proposals from Randers and Maxton (2016), where significant changes are suggested to society, without the proposal of a radical paradigm shift where values, norms and consumption patterns remain intact, and their environmental damage is minimised. It represents a market-based approach to internalising the costs of environmental harm and resource use, with widespread use of carbon taxes and financialisation of nature capital. For sake of comparison and balance, the research included a 'Business as Usual' vignette detailing a higher level of consumption, with little sacrifice to lifestyles but rather relying upon technological advances and the benefits of economic growth through a free market economy, whilst risking rising inequality and overshooting of climate targets (and therefore low SEH). This is most aligned with a perspective of ecological modernisation and puts faith in technological fixes to climate change and resource scarcity, despite the associated risks with overshooting climate targets and unresolved challenges in decoupling GDP and carbon emissions. The consumption pathways from Gough (2017) which were explored in the literature review are also presented and incorporated in the incremental and business as usual scenarios, where consumption practices are made more efficient rather than reduced or transformed.

These vignettes represent several pathways towards reducing consumption through lifestyle change and therefore provide context for participants to be able to explore the public acceptability of the range of features across these lifestyles. This helped to address the research question concerned with locating desirable and undesirable aspects of future lifestyles.

4.2.4 Analysis

4.2.4.1 Thematic analysis

The analysis for this phase of research utilised a thematic analysis approach, as introduced in chapter 3. This is defined as a form of qualitative analysis that seeks patterns and themes that emerge from the data with relevance to the phenomena being researched (Fereday and Muir-Cochrane, 2006). The initial coding begins by identifying specific instances of meaning or topics of discussion, then these can be categorised into groups, and finally higher order *themes* can be established (Willig, 2003). The themes, therefore, represent categorised groups of meaning that offer commonality in their perspective, relative to the research question (Braun and Clarke, 2006). They are the products of salient insights that have emerged from the analytic process, grouped together around a shared meaning and contribution to understanding (Joffe, 2012).

4.2.4.2 Coding and development of themes

The creation of codes and themes can be approached differently depending on the researcher, and the epistemological positioning of the research project, as discussed in the methodology, from chapter 3. Codes and themes can be manifest or latent, where the former explores a directly observable meaning from the talk, and the latter explores implicit meaning and interpretation from the researcher about the talk (Joffe, 2012). The analysis here used both manifest and latent codes and themes to examine the direct experience of the participant as well as producing an interpretation of the wider context of participant-held views. Whilst the manifest themes were clearly grounded in the participant's speech, and are therefore inductive, the latent themes were produced in reference to, and awareness of, theory and empirical literature (chapter 2), and are therefore deductive. It has been acknowledged that transparent use of these different types of coding can be used in the same analytic process, in a combined approach (Fereday & Muir-Cochrane, 2006).

The most relevant framework, in conjunction with the integration of the critical realist framework, was the six-step process detailed by Braun and Clarke (2006, 2012). In phase 6 of the framework, there was sufficient opportunity for abductive theme building, where literature and theory were re-examined in the context of the emergent codes and themes, as per the guidelines for critical realist methods discussed in the methodology chapter. These amendments to theme building and analytic process are discussed in the following subsection.

Table 5. Phases of thematic analysis (Braun & Clarke, 2006)

1. **Familiarizing yourself with your data:** Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. **Generating initial codes:** Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. **Searching for themes:** Collating codes into potential themes, gathering all data relevant to each potential theme.
4. **Reviewing themes:** Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2)
5. **Defining and naming themes:** Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. **Producing the report:** The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

This research will also implement the use of abductive reasoning to generate theme content. This is the redescription and theoretical reinterpretation of codes and themes from the initial manifest empirical data analysis (Blom and Morén, 2011). This is a slightly advanced form of reasoning and analysis encouraged by critical realism and means there is no requirement to build a framework for deductive themes a priori but allows for the application of relevant theory to help understand participant data that might only have emerged part way through the research process.

As well as the typical thematic process of code building using an inductive approach, the forthcoming analysis also uses manifest codes for the abductive themes. Where the analysis and observation of insights generated in the analytic process helped to further conceptualise the codes are directly referenced from the text, and coalescing into themes and sub-themes. This process of abduction, allowed for a reflective and contextual interpretation of participant data that recognises the influence of, and makes transparent, the analytic process and generation of knowledge (Meyer & Lunnay, 2012). The type of coding and theme development will be noted explicitly within the text for each theme.

The thematic analysis presented here was coded first using manifest coding in order to categorise and give order to the topics under discussion, following this stage, latent coding allowed for researcher interpretation of how the participants were talking about a given topic. These manifest and latent codes were then organised into inductive themes, meaning that the quotes, extracts and codes were taken directly explicitly and implicitly from speech and texts, and any manifest or latent codes that emerged from them. As the analysis progressed, an abductive theme emerged, where the researcher was able to recognise that many of the extracts and codes could be thematically organised and understood through prior knowledge and theoretical understandings.

4.3 Reflexive account of focus groups

Traditional qualitative research assumed that interpretation of data is objective and free from bias when guidelines for analytical methods are followed (Gergen & Gergen, 1991). Reflexivity is a direct challenge to these ideals, proposing that the researcher, the researched, and therefore any consequent findings will always be inextricably linked and subjectively dependent upon one another. Through the application of reflexivity, we can attempt to reach a higher level of transparency in our interpretations of data (Halling, 1999; Finlay, 2002).

The thesis presents a reflexive account of the focus group schedule and of each group of participants. This can be cross-examined with the results of the preliminary survey, helping to give a qualitative and quantitative feel for the group make-up and dynamic.

4.3.1 Schedule

Overall, the schedule and guide were very well suited to the group discussion and the topics being investigated. More often than not, each main sub-question would be explored naturally, and flow towards the next sub-question without prompting. Many of the topics that were due to be discussed in the latter half of the schedule, where content had been extracted from a substantive literature review, was discussed in the first half of the schedule where there was no framing of the topic beyond that of well-being, consumption of materials and services, and luxuries and needs (in that respective order).

4.3.2 Focus group characteristics and dynamics

4.3.2.1 Group 1 – Low-income, low age.

The participants in the group were from a seemingly diverse range of social groups; a student, a graduate, a part-time mother, a benefits claimant, an opera singer and a labourer. I was concerned that most of the group were quite left leaning in terms of political orientation; although attempts were made to balance the group as much as possible, two of the participants who self-identified as being on the right of the political spectrum did not attend. Despite this, there was a spread of opinion across the group on most issues, and people were keen to contest opinion in a respectful manner. The only parent in the group often gave different insight into topics where she felt her point of view was markedly different to the others. There was a general consensus around wanting to protect the environment, but it wasn't everyone's top priority. There was also a somewhat dismissive sentiment around materialism and consumption, however this could be expected with a group that has below average 'purchasing power'. Their score was slightly lower on competence in the BHN scale measurement (See table 2), which fits with at least one of the participants disclosing that they were on disability allowances and welfare support.

4.3.2.2 Group 2 – Mid-Income, low-mid age

This group felt more homogenous than others, something that the group themselves commented on during the tea break. They assumed they had all been recruited from the same place, which wasn't the case. There was a friendliness amongst the group, and they certainly got on very well, with very engaging discussions, with little need for extra prompting. However, the forthcoming analysis of this group's transcript yielded more differences than they themselves might have expected. Whilst they were respectful and heard out each other's opinion, they often debated topics before reaching consensus or agreed upon a disagreement. They were keen to examine their own opinions on the issues we talked about and offered good insight into their thought processes. Again, a slight left-leaning political belief bias was evident, and although socially conscious opinions were held around equality and environment, there was a general sentiment of not being able to act according to their beliefs and attitudes, which will be an interesting avenue for analysis to explore. There was a relatively high level of importance placed on materialism

and consumption, perhaps facilitated by a higher level of income, but interestingly it wasn't divulged fully when asked explicitly, but emerged more naturally.

This group was also the most 'post-materialistic' from the survey conducted prior to the focus group (Table 2 / Appendix 2). It was also highest in Power and lowest in Universalism and Benevolence on the Schwartz Value Scale. This fits with this reflexive account of the group where a stronger drive for materialism was noticed. This was somewhat nuanced with a tendency for materialism to facilitate, or be linked in some way to experiences, rather than the material objects themselves

4.3.2.3 Group 3 – High Income – mid-older-age

With a turnout of only four participants from an invited pool of seven I felt this group suffered a little bit; however, the assisting facilitator thought the group to be engaged and willing to participate in discussions. Perhaps this was due to my comparisons to the other groups, and that I wouldn't have thought there to be a problem had I not been privy to the dynamics of other groups, which felt smoother. The main issue was that the group were somewhat less forthcoming and needed prompting slightly more than others – which is to be expected with fewer group members guiding discussion. There was some silence after questions, but this could have been due to wanting to think about answers. The group was noted as being quite homogenous in terms of being open to green agendas and supportive of environmental goals. The group felt quite guarded about their materialistic tendencies, and tend to see them as unimportant, if not absent. Perhaps due to a higher level of financial security the participants didn't place a value on their consumption, as it wasn't financially challenging. In contrast to this, there was a general sentiment across the group to value frugality in their life decisions and discuss their finances as limited and something to be carefully managed carefully.

4.3.2.4 Group 4 – Mixed Income – Older age

I think the sampling dimension of income was least relevant in this group, despite aiming to recruit lower income, older people for this group. Personal income was measured, rather than household income and one participant was evidently wealthier than others, and income level varied a lot across the participants in the group. As such I think it would be inappropriate to make any assumption based on group characteristics around income levels. The dynamic of this group was a little different and there was more time afforded to each individual to discuss their own perspectives, rather than a flowing discourse

moving back and forth between participants. However, a positive feature of this group's discussion was a keenness to involve each other in the discussion. The elderly male participant was rather quiet and confessed afterwards that much of the content 'went over his head' – he was 86 and was more prone to wanting to tell stories about his personal history. Regarding content and themes, this group was more concerned with talking about family and legacy than others, which is perhaps to be expected due to their older age. Interestingly, the issue was raised very late in the focus group that religion had been overlooked entirely, something that was true of all group discussions – and worthy of mention due to non-appearance across all focus groups. The vignette task was a little rushed with this group, due to time constraints and there was less time to have participant led discussion around these. One participant found the vignette task difficult to engage with, refusing to suspend disbelief, which led to interesting discussion of barriers they felt were evident, although it was not possible to gain their perspective on the attractiveness of the scenarios. I didn't feel this had a negative impact on the rest of the group's ability to engage.

4.4 Analysis

This section reports on the thematic analysis on discussion of current lifestyles and the role of consumption, the public acceptability of pro-environmental behaviours and reactions to the future scenarios. The themes represented analytical insight into how, and why, consumption behaviours are practised in society, and how this related to their well-being, as well as barriers or facilitators to social change towards increased environmental protection and social justice.

Table 6. Structure of qualitative data presentation and thematic analysis

<ol style="list-style-type: none"> 1. Culture of convenience and expediency <ol style="list-style-type: none"> 1.1. Convenience and expediency 1.2. Disconnection from negative consequences of high-level consumption 1.3. Guilt and Hypocrisy 1.4. Reluctance to self-identify as materialistic and associated hypocrisy 2. Understandings of equality and fairness <ol style="list-style-type: none"> 2.1. Earned Consumption 2.2. Social Justice & Inequality 2.3. Money & Financial Security 2.4. Social norms: fairness and acceptability 3. Self-interestedness as a driver for pro-social change <ol style="list-style-type: none"> 3.1. Self-interestedness 3.2. Self-interested engagement in prosocial behaviours 3.3. Individual and societal drivers of pro-social behaviour 3.4. Co-benefits <ol style="list-style-type: none"> 3.4.1. Health 4. 'Good consumption': experiential, utilitarian, durable and fulfilling <ol style="list-style-type: none"> 4.1. Durable products 4.2. Utilitarian consumption 4.3. Experiential Consumption <ol style="list-style-type: none"> 4.3.1. Experiences 4.3.2. Material consumption for experiences 5. Limitations of neoliberalism <ol style="list-style-type: none"> 5.1. Neoliberalism, consumption, and the individual: modes of influence <ol style="list-style-type: none"> 5.1.1. Autonomy and Freedom 5.1.2. Development 5.1.3. Techno-optimism 5.2. Agency and responsibility for change <ol style="list-style-type: none"> 5.2.1. Business 5.2.2. Government responsibility 5.2.3. Individual Agency 5.3. The Neoliberal self
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The first four major themes; culture of convenience and expediency, understanding equality and fairness, 'Self-interestedness as a driver for pro-social change', and 'good consumption' were inductively derived from the coding of transcripts, and remained in these distinct categories for the presentation of results. Upon this coding, it became apparent that some of the inductive codes could be viewed through an application of understandings of neoliberalism. These themes themselves, and how they were expressed in the data, represented different facets of neoliberalism and its effect upon the individual. A further coding of the data alongside the abductive reasoning yielded many examples that could be observed and categorised under the abductive theme 'limitations to neoliberalism'.

A 'culture of convenience and expediency' was seen to limit and restrict the ability of participants to consider more environmentally friendly consumption options. Section 4.4.1 categorises and collates examples where participants expressed a tendency to choose the most convenient option, or where they felt that what they wished to do was often not what they ended up doing, with regards to consumption of products or lifestyle choices related to sustainability.

'Understandings of fairness and equality' were often raised by the participants at the level of the individual and that of society. Section 4.4.2 offers numerous examples of where participants talked about their consumption being fair and legitimised by their hard work and labour, or visions of a society in the future that ensures fair and equal access (or lack of) to consumption. This often restricted engagement in low consumption behaviours as a sense of entitlement had been earned to consume was seen to be fair, or a feeling of disadvantaging oneself by choosing to consume less than others who were not adhering to low consumption lifestyles which reduced equality.

'Self-interestedness as a driver for prosocial behaviour' in section 4.4.3 explores participant accounts of behaviours commonly labelled as 'environmental' (walking, cycling) and 'altruistic' (volunteering, community work) and explores them as self-interested. They make links between self-interested motivations for good physical and mental health and prosocial behaviours with a view to reducing consumption. This theme also encompasses some of the discussion around the role of reducing work hours, in both reducing consumption and increasing well-being, as a way to understand attractiveness of radical lifestyle change compared to incremental change.

'Good consumption' was labelled such as a way of thematically categorising participants' accounts of consumption that they believed to be strongly valued, environmentally-friendly, or otherwise beneficial to themselves and/or society. Section 4.4.4 presented possible routes towards low consumption lifestyles and offered solutions to a propensity for consumption amongst participants which could be engaged with, without a negative impact on the planet and resources.

Finally, the abductive theme of 'Limitations of neoliberalism' formed as an overarching and higher order theme that helped to make sense of the 4 previous inductive themes, presented here in section 4.4.5. Taken as a separate abductive theme, it was possible to categorise participant quotes around the central ideological understandings of neoliberalism and notice examples of where neoliberalism was evident in their accounts of their lifestyles and consumption behaviours. Taken as its own distinct theme and serving to support the interpretations of the inductive themes with extracts and examples of participants implicitly (and sometimes explicitly) referring to aspects of neoliberalism. The analysis from this theme illustrated a variety of perspectives on where the responsibility for change lies, progress indicators in society and values, and a latent

concept of the 'neoliberal self'. Participants explored the roles of government, business, and individual decision making, and how values such as freedom and autonomy as well as progress indicators such as development and technological advancement. Finally, the analysis explores how a 'neoliberal sense of self' might be prevalent amongst the focus groups, where not only the social and cultural context of governance and policy is governed by a neoliberal agenda, but also our personal lives and sense of identity.

4.4.1 Culture of convenience and expediency

Expediency and convenience emerged as prevalent characteristics of the consumption behaviours and lifestyle choices from participants across the focus groups, and therefore will be detailed here as point of thematic convergence. This expedience was often driven by individual self-interest, hedonism, a preference for immediate gratification, and time pressured lifestyles. This was often despite some awareness or presence of associated drawbacks and negative consequences of living this way. It was often facilitated by convenience, and in some cases results in feelings of guilt and justification surrounding past and future decision-making. Key subthemes related to financial cost-effectiveness and efficient use of time. People talked explicitly about the various facets of what constitutes convenience to them. Therefore, this theme was inductively formed through the development of a manifest code network directly rooted in the extracts.

4.4.1.1 Convenience and expediency

Convenience was recognised as a strong factor in guiding people's behaviour and lifestyle choices. There are numerous examples offered by participants that allow us greater insight into the relevance of a convenience factor.

SF4 Things are very cheap to replace, so I think that's a big reason people don't do it.

SF3 Yeah there's a really throwaway culture where when its broke I'll just buy a new one, rather than...like if you think back to what our grandparents did then keep things for decades and keep repairing it – Group 1

One factor in convenience concerns cost; often the cheapest option is to purchase a new product than to repair an existing one. This has developed over time and has not always been the case, as this S3 points out with reference to their grandparents. With the impact of globalization on markets, cheap overseas labour and increased use of cheap plastics has led to a shift in society that has afforded much convenience to the consumer (Mason,

2015; Andradý, 2017). ‘Throwaway culture’ infers that there it is a norm to dispose of unwanted or broken goods, and buy newer upgrades, or replacements that are cheaper than repairing. This notion was also conceptualised as “disposable society” by S4 in Group 3. To throw away and dispose of unwanted or broken items is more convenient and doesn’t require the time, or skills, needed to repair.

Whilst finance obviously plays a role in this desire to replace rather than re-use, there is an additional concern of time that compounds this course of action.

SF3 A lot of this is about convenience and ease because obviously time is such a valuable thing, (...) And repairing existing stuff, you can spend like 4 hours repairing something, you just lose that 4 hours sat there, whereas if you just buy one, take like 2 minutes. – Group 1

Convenience here is also expressed in relation to the amount of time that people have to engage in these lower consumption behaviours when buying new can save people a lot of time and effort, which was echoed by other participants in other extracts. S3 talks about the hypothetical time spent repairing as ‘lost’, indicating a sense of waste and unfulfillment associated with the activity. Time is a precious resource to people and could infer that current lifestyles do not afford people enough time to engage in more environmentally friendly practices of repair and restoration. This aspect of time and workplace labour is touched upon later in the analysis but could emerge as a more latent coding and higher order theme here as something that helps motivate convenience-focussed solutions and practices.

SM3 it’s not just easier, it’s cheaper as well. My father-in-law, he will buy the cheapest anything, whatever it is he’s buying, he will buy the cheapest one, toaster kettle, whatever, and his argument is, if it breaks after a while then I’ll just buy another one, genuinely doesn’t care about that. - Group 3

This type of behaviour was recognised across many participants, and echoes sentiments in examples above from SM3 in Group 1, encouraging a throwaway culture, as two major drivers support it: cost-effectiveness and time-efficiency. This example expands the concept of convenience to one of expediency, where there is an acknowledgement of potential drawbacks of the chosen actions, in this case the consumer “genuinely doesn’t care”, suggesting that there is something less than desirable about this behaviour that is not considered, or that it is less important than convenience and satisfaction.

One of the most carbon intensive behaviours at the per passenger level is associated with air travel (ICCT, 2020), and it seems that this has a lot of convenience attached to it.

SM6 for example even rail and planes, I fly up to Glasgow from time to time and it's just nothing. [...] it costs about a quarter of the price, and it's quicker. You can be up there in an hour and a half, rather than paying hundreds of pounds to get a train that takes you hours. – Group 2

Air travel is cheaper, quicker and easier, and these reasons form the main motivation for take-up in this behaviour. The vignette that prompted this discussion explained some of the environmental impacts and pollution concerns of flying, yet the behaviour was justified due to the lack of convenience and financial costliness of the alternatives on offer. In the absence of alternatives that can compete on these financial and convenience factors, it is hard to see how flying can become less popular. This was also discussed with regards to more local, short-distance travel behaviour and medium-distance intercity travel.

SF5 I never drive around Bristol but for long distances...I would, I love the train, I would rather get that, but then its money. Like this weekend we went to London, and we went to book the train and it was £120 return, and I thought, and I my husband was like, well let's just drive, it's cost £20 in petrol. And I hated that, it was so annoyed that that was the cheaper option, but we did, and I did feel guilty, but there's no way I'm gonna spend 120 on a train. [...] I'd rather, than driving round Bristol, I cycle everywhere, I cycle to work, I'd rather cycle, sometimes I get the train.

SM3 yeh I'm the same, I cycle to work every day and but I don't think there's ever a time, even when its hammering down with rain, that I wish I was in a car. We do own a car, but we use it for weekends and to go on holiday, I cycle everywhere.

SF5 and people on bikes just zoom straight past them anyway – Group 3

There are a lot of reasons for choice of travel behaviour but the extract above illustrates that convenience plays a strong role. It's cheaper and more convenient to drive medium to long distances, whereas it's more convenient to cycle or use public transport for travelling short distances in the city. Again, this example shows the expediency of this behaviour, which is illustrated where people decide to cycle despite rain, because it is still more convenient to do so. SF5 expresses her feelings of guilt, saying that she specifically "felt bad" and "still feels bad" about her decision to take a different (and notably less-environmentally friendly) of transport, but that she had to justify it due to factors related to cost and time. Very similar ideas were expressed in Group 1, who also reported that longer journeys were cheaper and more convenient to travel by car, but inner-city travel wasn't preferable. These two groups were low-income and high-income, and both of them mentioned cost as a barrier, but convenience seemed to drive the decision most.

There are numerous examples in the transcripts where participants feel like a lack of time inhibits engagement in low consumption practices.

SF3 I think it's yeh a lot of this is about convenience and ease because obviously time is such a valuable thing, like growing your own organic food obviously takes a lot of time, whereas you could just go to Tesco and buy a pack of peppers. - Group 1

Discussion of food raises the concern about having enough time to cook from scratch and/or grow food at home. Consumerism is a driving force behind this expedience and convenience, where there are marketplaces that offer solutions to our needs and wants more readily than more traditional methods of making, repairing, and growing.

These issues were also prevalent when discussing the vignettes, where some of the alternative lifestyles afforded less convenience to the individual. Having to sacrifice these aspects of one's life is not portrayed attractively. These two quotes are in reference to vignette 2 and discuss the inconvenience in vignette 1.

SM6 it's just convenience again, on this one, there's lots of benefits, but the only downside to it is just convenience of the alternatives, as with the last one [vignette]. - Group 2

SF6 erm and then would this line, "there was little to no information about the impact of things" er like say from now, I think we know what's good for our environment, and there is information out there that shows what's good and what's not, but as people we just take a car cos its more convenient, and der da der- Group 1

Furthermore, this participant opens up the definition of expediency that prioritises gainfulness over moral or ethical superiority. She suggests that there is widespread knowledge around what behaviours are more aligned with environmental friendliness, but these are trumped by convenience. Overall, this subsection strongly supports and reproduces findings from Shove (2012), where in addition to comfort, convenience is recognised as one of the most strongly obstructing barriers to reducing consumption.

When discussing the negative aspects of the degrowth and incremental vignettes, a lack of convenience was identified as a common major downside. The severity of impact this issue would have was believed to be very significant and difficult to overcome.

SF5 I think it's the idea of sacrificing pleasures it would be very hard to you know, like laundering your clothes, it's got easier and easier and easier, and I don't understand how people would kind of be happy to say oh yeh now it's less easy, why would you want anything to be less pleasurable and less convenient than it

is? I know the reasons behind it, but you would have to do a hell of a lot of you know making sure everyone was educated and everyone felt like that way, and not just the people producing the legislation that makes people behave in that way – Group 2

Not only is convenience sacrificed by choosing the more ecological options, but also the pleasure associated with the time that it affords oneself, something that will be revisited later in the context of the time for pleasure and relaxation people feel they have. There is a sense that the participant cannot imagine any possible factor that might be more of a priority than pleasure and convenience, illustrating dominance of these concerns to them. This quote also invokes a discussion of democracy, and its role in legislation and regulation, highlighting how public acceptance of policy might be very important to the success of any attempts to reduce consumption. This approach would require an increase in knowledge and awareness around the need to reduce consumption, and necessarily agreeing upon an accepted strategy to achieve this.

One participant felt that information campaigns could be useful for trying to overcome this problematic concern when trying to promote lifestyles that were going to be less convenient. This offers a different perspective to S6's that suggested most people are already aware of these problems with their own behaviour but opt for the most expedient options.

SF4 I can see problems like that coming up cos like yeh, some people don't, some people miss how it was and find it less convenient and if anyone had an upper hand they would take it in order to like make it so they didn't have to do those things so they didn't have to live like everyone else and then that would cause problems – Group 1

The above quote implies that there was a possibility for people to be more accepting of a less convenient lifestyle if this was evenly distributed across society equally and fairly as a social norm, without an elite who would forgo any sacrifice. This issue of equality and fairness is examined as a separate theme, but it is useful to note at this point its relevance to overcoming strong drives towards the most expedient lifestyle choices.

4.4.1.2 Disconnection from negative consequences of high-level consumption

A sense of disconnection has been explored by the participants in a multitude of ways. This disconnection could be seen to encourage the attractiveness of living an expedient life by concealing many aspects of consumerism and carbon intensive lifestyle choices. Many participants talked explicitly about their disconnection to the supply chains (and

what they entail) of their consumption, and how this made it difficult for them to consider the implications of their choices as well as reducing their willingness and drive to consider alternatives.

With regards to food production and consumption there are many references to disconnection that participants felt obstructed their understanding of the environmental impact or animal rights issues of dietary choices.

SM2: It's easy to get disconnected with what happens with meat and dairy. When you go into a supermarket or shop and it's all packaged, you don't really think about it being a cow. – Group 1

SF7 If I had to slaughter what I was going to eat – I would be a vegetarian. I'm quite a hypocritical meat eater actually, cos as long as it doesn't look like what it originally was, I'll eat it – Group 4

SF3 You could just eat the vegetables rather than feeding the vegetables to the cow then eating the cow. – Group 4

One participant suggests that there is a level of hypocrisy present in their consumption choices. This hypocrisy is believed to be assuaged by a sense of disconnection between the slaughter of animals and what they are buying to eat. Hypocrisy and guilt emerge in other examples which will be explored next.

These quotes most immediately raise an issue of information provision; that people should know about the processes that govern the route from farm to plate. The disconnection that people have regarding this issue appears to be served by a lack of information detailing the production process. Participants draw upon examples such as farming methods and end of the line product packaging from supermarkets to illustrate their disconnections.

4.4.1.3 Guilt and hypocrisy

A subtheme related to expediency is the psychological eliciting of guilt that participants explained. This guilt can be traced back to a number of different concerns, and may represent a cost that is incurred due to the expedient behavioural choice being less rewarding in other ways. An appearance of guilt throughout many aspects of people's discussion around their consumption further illustrates how many participants continue to act in their own (limited sense of) self-interest, seeking immediate gratification, as opposed to in accordance with their moral values or ethical codes.

We saw in the former sections about disconnection how this hypocrisy and guilt emerges from eating meat or travel choices, here we can see this emerge from another consumption domain.

SM3 yep and when you've got a baby, you have that kind of moral dilemma of disposable nappies vs. washing them, and disposable nappies are just so easy, we went disposable nappies all the way, and I don't think there was a day when I didn't feel slightly guilty about it – Group 3

Non-reusable products are a huge problem for resource efficiency and associated concerns with over consumption and climate change. Despite presence of guilt, the convenience of the wasteful behaviour facilitates the quickest and easiest route to carrying out this specific task related to a satisfactory resolve. We can notice just how strong this preference for expediency can be, even when the participant confronts themselves regularly with the feelings of guilt associated with his over-consumption it is not enough to forsake the convenience in order to alleviate such symptoms.

4.4.1.4 Reluctance to self-identify as materialistic and associated hypocrisy

When participants broached the issue of materialism, explicitly or implicitly, there was a tendency to be reluctant to use it as an identifying characteristic they possessed themselves. Hansson (2018) has also recognised this trend for 'anti-consumption' identity formation. In this dataset, people set up a distance between themselves and their consumption of material goods, averting self-identification as materialistic, and this was often contradicted elsewhere in the discussion where they discuss their enjoyment of material consumption. This contradiction is further evidence of people's preference for expediency, this time illustrated through inconsistency and their propensity to act in self-interested and gratifying ways that are not always coherent with the values and morals they wish to portray themselves as holding. A number of quotes from one participant in Group 3 exemplify this clearly, see one typical example below.

SM3 Honestly, I don't really spend my money on anything other than just food and in terms of luxuries if you like, going out for a meal something like that. I don't buy stuff. [...] I think there's an exception to mine, I don't think there's ever a time when I wouldn't want to spend money on a new bike [laughter] [...] We bought a dishwasher for the first time and that makes me happy. [laughter] Yeh it really does. We recently sold and then bought a house and erm, so we moved house and as part of buying the new house, we bought lots of new things [...] and some of those things do genuinely make you feel happy, when I just walk in and think wow I'm really glad we bought that [...] But we didn't buy anything, you know we

weren't buying gadgets, like a bigger telly or anything like that. It was all stuff that was aesthetic. – Group 3

Despite claiming that they don't "buy stuff", there are numerous examples from elsewhere in the transcript that have been collated in the above extract where the participant talks fondly and supportively of previous purchases. This is not to suggest that there is a complete incoherence between someone disliking 'stuff' and spending one's money on it, but it shows that there are more complex categorisations of what comes into definitions of materialism and/or consumerism. These complexities might concern how habitual and repeated the behaviour of purchasing is (buying a new bike or furnishing a house are both irregular) and how much the purchase impacts your life, and how it contributes to one's well-being (the dishwasher, which would be used regularly). The participant notes that these purchases weren't "gadgets, like a bigger telly or anything like that", which stratifies these as somewhat lowly forms of consumption, in comparison to "aesthetic" purchases, which are not as problematic to them. It could be interpreted that people are unwilling to self-identify as materialistic because it isn't coherent with their moral values or ethical codes that they would prefer to self-identify with. However, the self-gratification afforded by materialism means it is more expedient.

SF5 I hate spending money on actual physical things, I don't like, I don't think it brings happiness, or very limited happiness. [...] Actually, we splashed out on a nice mattress this year, and I sort of justified it cos it'll be good for my back and you know sleeping is good for your health, it's essential, that's how I justified it and it is almost every night I'm like oh this is comfy. [...] I did buy myself a new raincoat recently and I liked that, I liked researching what one to buy, and when I wear it like walking, I do love it. – Group 3

This participant was keen to emphasise how non-materialistic they were, yet mentioned purchases that she had made that made her feel good, and even used these purchases as character defining. One hypothesis for this could be that it is influenced by virtue signalling, where the participant wants to display their ethical and moral stance on issues (Levy, 2020). This would support an argument that people believe environmentalism and 'non-materialism' and therefore low consumption to be socially desirable. Despite the 'hatred' for buying things, and the 'limited happiness' they bring, the participant goes on to express justification for a new mattress surrounding comfort and health reasons, and even further, to say that they have 'love' for a new raincoat. The quote shows us that she holds inconsistent, conflicting and hypocritical stances on what she would like to do and what she does, illustrating that there is a complexity in people's motivated behaviour that

should be explored further. These two types of product might indicate a different type of consumption, one that is more utilitarian, and will be explored later.

Interestingly both of these examples of inconsistencies emerged from the same group, which was comprised of higher earners. They likely had higher levels of expendable income and could afford to buy things when they desired them. This pattern would fit with research that has shown how socio-economic status is predictive of carbon footprints, with income levels that facilitate consumption and travel being large contributing factors (Druckman & Jackson, 2009).

More inconsistencies around self-gratification can be evidenced in the extract below, this time with reference to environmental values. One attempt to redress this imbalance was to introduce an environmental tax that takes into account the numerous impacts those different products and services might have upon the environment, resources, and climate, which was presented in the second vignette. This would also increase the convenience of less environmentally damaging behaviours as they would be cheaper and more widely available than more environmentally impactful behaviours or lifestyle options.

SM4 I've gotta admit I read this, and I care passionately about the environment, or at least I think I do, but I read this [referring to incremental vignette] and it felt austere to me, I like air travel, I get a buzz out of it, I like bacon sandwiches, I think the other, the previous one [refers to degrowth vignette] was an environmentally responsible future and for some reason it read better to me than this did. Cos I read this, and there is something of a hedonist in me, and I read it and I thought I could be miserable with this. – Group 2

Once again, we can see how the self-interested drive in current behavioural decision-making is geared towards the expedient option that is more immediately gratifying, which could be why the environmental tax doesn't seem to be appealing. However, when confronted with degrowth vignette there does appear to be support for more meaningful gratification (the negative response from this participant was pronounced, and identified as less appealing than the degrowth scenario). The focus on lower consumption in this scenario was framed in a way that sacrifice would be rewarded with fiscal savings, being environmentally responsible and giving up some of the behaviours we enjoy (here we can see this is air travel and meat consumption) would be a cheaper way of living. The framing of the degrowth scenario allowed these sacrifices to be made in light of personal growth

and community development, which could have helped this participant to view it more favourably.

4.4.2. Understandings of equality and fairness

Notions of equality and fairness were useful in determining what mattered to the participants, how they motivated their own decision-making, and what underpinned their views on what is and isn't acceptable in society. When considering their own consumption, it is seen as *fair*, to buy products and use services to contribute to one's happiness when it is earned through employment. This is not just earned in the financial sense but is related to the amount of time being spent as an employee, which can be converted back into benefits to the self. When imagining low consumption lifestyles, we can notice that some participants felt the fairest way for them to proliferate was if they were established through social norms, and that these might be preceded with regulation. Issues concerning consumption and social justice, or global equality were psychologically distant and actively compartmentalised in order to avoid guilt. This theme is directly emergent from the participants' talk, with manifest coding providing categories to drive an inductive higher order latent theme development.

4.4.2.1 Earned consumption

A notion of "earned consumption" was prevalent in all of the focus groups and is a major theme for helping to understand the interplay of work and consumption. The fact that people had earned the money, through work and use of their time, meant that it was fair for people to spend it however they wanted.

SM4 When you buy the luxury items or experiences or whatever, you're not doing it just for the sake of it, you're perhaps doing it as a reward for an achievement or something – Group 3

SF3 My dad's very materialistic. You know he quite likes having the brand new Landrover, I came home the other day and he's bought a hot tub, what are you doing. I got home and there was two hot tubs, and I was like why is there two? You couldn't have dealt with one? He's very into having the latest TV and stuff which like is fine cos he works really hard and he can do it. – Group 1

The second example above illustrates how the participant views her father's materialism; she is critical of his seemingly excessive consumption and value placed on material goods, but she justifies this to herself as being a result of his working really hard. This consumption is seen as a form of compensation for the labour. It is worth noting here that

consumption and materialism is portrayed as a negative characteristic, which is why there needs to be a form of justification for it.

SM7 and it's the little excuses you tell yourself, "You work really hard, go ahead its fine, you work really hard, you deserve this, or you've had a really bad day... - Group 2

SM7 mentions explicitly justifying purchases to themselves, showing the earned consumption of luxuries, not just in terms of earning money to facilitate activities, going further to suggest that consumption is compensatory to the negative effects that working life might have on individual well-being. When work is difficult and challenging, luxury consumption is seen as negating these less-desirable aspects of work. Consumption of luxuries is expressed as compensatory practice, which fits into a higher order theme of equality and fairness. This fairness is manifest at the level of the individual and concerns the amount of time and effort they have to put into their work and employment, which is compensated for in order to redress a balance.

Researcher: Can we live without these luxuries? Kind of mentioning that it's great to have these small luxuries, or working towards spending a lot of money on something or something less regular, you know how...could you live without them, how would it feel if you didn't live without them?

SM4 I don't think you can divorce the question from the society we're living in, the advertisement industry and the bombardment we get erm I think I could live without the luxuries, but I'd probably want some help a) from the advertising industry, advertising less and b) probably from my employer actually because my employer demands more from me than he used to I would say, he wants me to do more for less and, it's the common slogan...luxury is more along the lines of compensation for that competitive ethos in which I operate, so erm. – Group 2

Here we have a participant who identifies reduced consumption as being obstructed by advertising and employer demands. These two issues he sees as something that compounds engagement in compensatory consumption practices. Compensation is granted in the instance of unfairness and seeks to redistribute a sort of personal justice. These findings are also related to, and consistent with, Schor's (1998) 'work-spend cycle', where working to earn, and earning to spend are self-perpetuating due to the time constraints made by working, as well as placing workers at the behest of the employer (Arnold, 2021).

Below is another response to the same question from the researcher to another participant.

SF9 I'd feel anxious to be honest, mine aren't so much item-based, but I feel anxious because that's my kind of offload almost, and I think if I frame those potential treats as sort of a way to just get through the daily crap as it were really, of just stressful job or just daily boring existence really. I know I could, and I know part of me thinks if you take it away, ultimately live with it, and you might actually find a deeper level of happiness, but the fear overrides me wanting to do that at the moment and carry on with a bit of luxury to a certain degree, albeit with greater guilt. – Group 2

Further discussion of luxury consumption here illustrates how they are perceived as “treats as sort of a way to get through daily crap” in reference to a stressful job or boredom in one's life. Once again, guilt permeates participant understandings of their consumption practices, highlighting a relationship with consumption that is not in line with people's views. Another key insight we gain from the above quote is from how the participant constructs a lower-consumption lifestyle centered on a lack of luxury possibly resulting in a “deeper level of happiness”.

SF9 the way my current life is geared up is there is a level of investment in instant gratification which I don't necessarily like, but it is there, so after work, I'm feeling stressed, I'll go and do whatever, and that is not geared towards this wholesome level and it does involve spending money. So, I think its progression and you'd learn it but I think there's elements that would, you know people would have to deal with their emotions a lot more and actually the relationships and communication skills, which are you know potentially lacking. – Group 2

Work and the need to de-stress from it encourage spending and consumption. This behaviour is acknowledged by the participant as something that is not “wholesome” but is still seen as a useful behaviour to ameliorate negative states of mind. This quote was taken from the vignette research where alternative lifestyles were suggested. Illustrating that engaging in a lower consumption lifestyle with less material luxury might have benefits to emotional health and interpersonal relationships is coherent with previous research findings (Kasser et al., 2014).

SM5 I don't really see how flying 3 times a year can be as polluting as using a car every day. You know, I walk everywhere so, I fly sometimes and going on holiday so yeh. – Group 1

An extension of this compensatory behaviour can be observed here with reference to another type of behaviour, namely air travel. In response to the vignette that puts air travel as a high emitter of CO₂, we observe a psychological tactic called moral licensing, which has been looked at in relation to PEB a number of times (Blanken et al., 2015). This is different to the previously discussed examples from this analysis because it is not

related to work or employment, so rather than 'earning consumption' through labour, this participant 'earns' it, or licenses it, through his environmental (or lack of carbon-intensive) behaviour at other times. Because he walks everywhere, rather than using personal transport, it seems fair to him to be able to fly to go on holiday. This emphasises the transactional and compensatory mechanism that we have observed throughout this sub-theme, which can occur across domains.

4.4.2.2 *Social justice & inequality*

When asked to think about a future where there are wage increases in line with living costs one participant here discusses income inequality in society.

SF3 Yeh wages increase in relation to living costs, however it could go the complete opposite way and the rich get really richer and the poor get poorer, which is probably a possibility, in reality. Erm because consumerist society is gonna stay, cos it's just gonna stay. It's always been like that throughout human history, we just want more things. – Group 1

This comment on income disparity discusses the growing gap between the wealth of the richest and poorest in society and acknowledges the role consumerism plays in establishing the hierarchy. The participant is convinced by the staying power of consumerism, despite the inequality that it brings.

SF4 I dunno it also seems like people, everyone has become more equal in this cos I can't, some people miss spending their money on new gadgets and going shopping, so they might kind of begrudge what was going on and not want, I dunno, not want anyone to be equal, I still think there would be a drive for some people to want to have more than others, they would begrudge it. – Group 1

This extract also takes into account the drive towards dominance that some people have, their desire to establish themselves as higher up in the hierarchy of society and class, often achieved through consumption. This issue highlights a problem that could be an issue for the future scenarios that strive for more equality; there is a risk that those who are better off now would feel like they are getting a worse deal – or as we saw in CAUK (2020) that people prefer to be able to at the very least *aim* to achieve more than others.

Another participant is reticent to accept some of the sacrifices that are suggested in the name of equality, from the incremental vignette. The example used here is air travel, and the perception that its access is more equally distributed at present, compared to a society that increases aviation taxes.

SM5 I'm happy to think about going on holiday cos of cheap flights, whereas a decade ago flights were just for the rich. [...] Yeh I think that's the thing, I love going to places like America, and it should be for the masses not just the rich. – Group 1

One interpretation of this could be that more equality has been reached by cheapening air travel and making it available to more people in our society, however figures from the Department for Transport suggest that the majority of flights are taken by only a small percentage of people (cited in Banister, 2018). Proponents of capitalism and economic growth employ an argument against degrowth: that progress and development of technology has led to cheaper access to lots of services and products that were previously only available to the rich. Despite these claims, evidence show that access to air travel is still a privilege afforded to people in more developed countries, or the wealthier amongst developing states (Banister, 2018). When we consider a global society that includes developing countries, it is still only attainable by the elite – a point echoed in the quote below.

SM4 I suppose on the world scale, most of what we have in our lives is luxury. And probably as a society we could cut down on more stuff. – Group 3

This is confronted by a wealthier participant, and again from the same focus group below. The fact that these people are more affluent in society might make him more aware of global inequalities, as well as those of their own society.

SF5 yeh I didn't really like it, I didn't like the way it, there's a lot of it is affordable to people who can afford it but not to people who are less well off. – Group 3

In addition to this concern, the inequality that was present in the BAU scenario was also viewed unfavourably. The above extract is referring to the inequalities that might be the result of new technology becoming available to those that could afford it.

These three previous examples all highlight aspirations for equality from the participants both at home and globally. However, there is a difference of opinion about whether this is a case of increasing access to luxury for all or placing a limit on luxury to facilitate a levelling of living standards across the world.

There was a sentiment across the lower income group that the incremental future scenario with environmental taxation would lead to further inequality and lifestyle disparity between the richer people and the rest of society, with rich people still being able to afford all the environmentally damaging products and services.

SF6: For people that didn't have lots of money, that would be not beneficial for them, but for someone that can afford to have a car or fly on a plane, it would be again the people that actually work quite hard in this country that would miss out on those opportunities.

SF3 I think there would be a lot of resentment if only rich people could fly in aeroplanes, only rich people could drive their cars there'd just be a lot of resentment people would be angry. – Group 1

This concern that the low-income group had about equal access and fair distribution of opportunity is evidenced again in the above, showing how unfair and unequal access to forms of consumption could struggle to gain support, and could even provoke outrage.

The second group, which was mid-income bracket, also expressed concerns about environmental taxation and the implications it would have for less affluent people. There could be implications for rural communities, and people with extra needs that might be unfairly disadvantaged.

SF5 People who have less money are going to be less able, I know it says there would be tax on services that are harmful to the environment but, you know if you're living somewhere out in the sticks then you're gonna need transport, or if you have some disability or needs that require certain medicine, so I don't think it's a one size fits all, whereas this I can see more people getting something out of it. – Group 2

This extract above is especially useful in illustrating the psychological processes of confronting oneself with social justice disparity and global inequality that is affected by one's consumption and lifestyle, which could be explained by psychological distancing in construal level theory (Eyal & Liberman, 2012). Justification for consumption here is also explored in reference to social inequality, not just environmental damage or necessity.

SF5 well you know I was thinking, oh this would be terrible I would just feel so bad that the luxuries that I have are at the expense of somebody else, but actually that's already a thing, and the thing that made me, oh no that was the other one, but I'm always very aware that because of my privilege that some people are suffering and that doesn't sit well with me, but if it's easy for me to put out of my mind on a daily basis which I probably do, I wonder how quickly people will be able to justify this, cos I think people are very good at justifying terrible things. – Group 2

Another example is given above where we can examine how the expediency of justifying these inequalities is the easiest route to happiness in the short term, despite a deeper sense of knowing that it isn't the right thing to do. This is a link with the other higher order theme related to expedience, as well as a comparable aspect of cognitive dissonance and hypocrisy due to moral inconsistency.

SM3 and again, not proud of it but when you talked about the impacts of climate change and impacts on other people around the world, in the same way you segregate at the moment the fact that there are hundreds of people dying in earthquakes and hurricanes and all that kind of stuff on the other side of the world, cos it's not directly affecting you, it feels like you know these sorts of things, we're used to segmenting it in our brain and looking at the rest of it and patting ourselves on the back and saying oh great. So, I'm not saying it's the best world but it's the one that feels most comfortable to me. Now I feel like a horrible person. – Group 3

When considering the vignettes, the issue of disconnection became relevant when participants were discussing these social inequalities. Most participants expressed a concern for any social inequality that might be the result of over-production and consumption in developed countries, but were mindful of their disconnection from them, which they said played a role in accepting these inequalities, implicitly or otherwise.

SM3 we all know we do things that are bad for the environment, but we do them anyway, maybe not as much as we used to, and maybe not as much as some people do but we do, and we all look after ourselves more that we look after our communities and we all segment off the fact that people are dying in floods or whatever it may be at that particular time. And I think that's just human nature, you just compartmentalise things, yeh you are kind of having your cake and eating it – Group 3

This acknowledgement of acquiescence social inequality is explained as 'human nature' where self-interestedness is an innate characteristic of humanity. Of course, there are many common expressions of our human nature, of which elements of self-interestedness are a feature – however, it is the dominance of this view to be hailed as *the* defining characteristic of humanity that is problematic for overcoming social inequality. Human nature itself has been discussed as hard-wired towards aspects of capitalism, and that its profligacy is inevitable (Rose & Rose, 2016; Moore, 2015; Soper, 2020). However, one should recognise in other accounts collated here that whilst humans have the potential to organize around and adhere to capitalism and its principles, this does not mean it is biologically determined, fixed, and absolute (Hornborg, 2018). There are many other aspects that have allowed human society to flourish and grow, which could be called upon as expression of 'human nature', namely; capacity for compassion, community, collaboration, dignity, to name but a few – some of which are examined later. This form of self-interestedness is said to be aided by compartmentalisation for the participant, a strategy recognised as facilitating moral-inconsistency and hypocrisy in sustainable action (Mees, 2015).

Another issue that brought about guilt was the inequality that one participant was faced with regarding their consumption practices and access to luxury that others are not able to afford.

SF4 and that's the thing about living in town, living in Clifton I should say, now I see a lot of people begging, and you know I'm, I have a real problem going into Waitrose, and going in and being able to choose whatever I want to have cos I can afford it, and I come out and walk past these people who are so needy, so I might feel happy buying the bottle of wine at the counter, but it sort of gets wiped away when you walk past these people that you just think I can't change your life for you, you know, and I do have a very strong social conscience and I find that very, very hard. – Group 4

Here we can see that consumption can make people feel uncomfortable when presented with the reality that not everyone can live according to the participant's lifestyle. It's noteworthy to recognise that the participant refers to people afflicted by homelessness, driven to begging, but there is a sense from her account that it is the negation of positive affect from her consumption activity that is at least partially contributing to her discontent. The participant is concerned with her inability to help these people whom she shows concern for, which is highlighted by consumption.

We can see that there is a sense of responsibility to reduce inequality across the world. Inequality does not sit well with participants, despite their continued engagement in a society that places them in positions of privilege, yet there is a lacking sense of agency to make a difference. Much of the sentiment around inequality is nicely summed up in the following quote, which was a response to the BAU scenario.

SF7 I don't like the bit about "well we've managed it ok so the rest of them in the rest of the world" cos I think we're part of the world and we do have some responsibility. – Group 4

4.4.2.3 Money & financial security

Poverty is a strong indicator of many individual and societal ailments and its elimination, or at the very least reduction, is one of many goals for many governments across the world. To seek an equal and fair society for all we must look to alleviate poverty for those afflicted by it. More specifically within the remit of this, we should understand how money and financial stability are relevant to well-being, and its subsequent interrelatedness to consumption. Notably, only Groups 1 and 4 discussed this explicitly, which could be due to the fact that they have more direct experience of a lack of money and poor financial stability.

SF3 Financial stability. I think that's...like obviously if you're like struggling for money then you're not happy. Well, you can be, but I think on the whole, financial stability is something that makes you feel quite content

SM5 Poverty is a problem. – Group 1

Because a lack of money, especially to the degree of poverty, has such unpleasant consequences, being financially stable can play a role in how happy people are, and contribute to well-being. This participant quote above shows that financial stability can add to feelings of contentment in one's life, however it doesn't fully constitute happiness. This is inferred by the acknowledgement that "you can be [happy]" without money, but it was brought up as something in this person's life that added to their sense of life-satisfaction.

SF4 Yeh what do you do without money?

SF6 Live a restricted life. – Group 4

Put very simply in this extract, money affords one more experiences and access to resources, and without this capital one must live within the imposed boundaries of what they can afford. The assumption is that without money one must restrict their actions and lifestyles, but we know from other parts of this analysis around well-being and what we spend our money on, and the role it plays in determining our happiness that money is not fully constitutive of boundless joy in life either. This offers some corroboration with research that has found ceiling effects in the levels of subjective well-being that rises in correlation with income, at a certain point there is no relationship (Kahneman & Deaton, 2010; Kaiser & Vendrick, 2019). The examples here also reveal that meeting this threshold is still an important part of life-satisfaction.

Researcher: This notion of working less, and the sort of knock-on effect of that, but having less money, that element of the lifestyle, is that your opinion, or how do you think society might react?

SF3 I think that's fine if you actually are earning 26,000 a year but if you're losing 10% of 16,000 a year then that would be pretty tough

SF6 that's critical isn't it – Group 4

In the context of the policy suggestions within the future scenarios, changes concerning money and financial stability were most notable in the degrowth scenario. Less money was one of the major trade-offs people would make in order to have more time for their personal life, whilst this was well received by many, there was a significant caveat mentioned with relation to one's financial stability. If the reduction in money is so much

that people would be inconvenienced significantly, and their quality of life reduced to the extent that they were in poverty, the potential benefits of more time would be outweighed.

4.4.2.4 Social norms: fairness and acceptability

Social norms are a well-explored area of social psychology, and their impact on behaviour change have been investigated a number of times as a way to influence behaviour change at policy level (Dolan et al., 2012). It is testament to their influence on behaviour that discussion around social norms and related issues emerged in the focus group discussion as a facilitator for change. This section will explore how social norms might play a role in changing consumption practices. Much of this discussion is useful to show how when established social norms come into existence, the perception of what is fair and acceptable can follow them, allowing previously fringe perspectives to become more mainstream. This sub theme is directly extracted from manifest codes in the data set, illustrating an inductive approach.

How to achieve lower levels of consumption has been approached from a variety of perspectives, ranging from the personal level to a global level. One participant below talks about the viability of a culture shift, through personal behaviour change related to meat and dairy consumption.

SF4 I dunno, I think there has been a big culture shift, I think veganism isn't seen as something that's really extreme or like weird anymore whereas not that long ago it was a bit like, like even as a vegetarian I used to think veganism was a bit weird, but I don't think that anymore. I think people are changing, its changing people's mind-sets gradually and how people think about it, how important they think it is and people just not necessarily having to commit to being fully vegetarian or vegan, but just cutting down, more people have the understanding that it's important. – Group 1

This example gives an account of how veganism was viewed in the past and shows how social norms and views of the behaviour have shifted due to increased prevalence of the practice. This illustrates the changes in perception around fringe behaviours becoming more mainstream, showing an increased level of public acceptability of the practice, due to shifting social norms.

SM3 People will look back and the 20th and early 21st century and think oh my god we used to dig coal up out of the ground and burn it, how crazy is that. And it will become as weird as you know smoking indoors is now. – Group 3

Another example around behaviour change was introduced by a participant, with reference to the Smoking Ban in the UK in 2007. The reportedly rapid change of social norms and attitudes surrounding a policy regulation that was quickly supported in the mainstream after implementation illustrates how social norms change over time. Attitudes to fossil fuels are expressed as a perspective that will become outdated in the future. Another extract below explores the example of dietary choices.

SM4 but I think that's because err if I think back to not that long ago, people smoked everywhere, and now there's a complete smoking ban and its accepted by everyone and its such a massive change. At the moment we can't project forward and see a world without meat but, you know it's not a million miles away from a world without smoking. - Group 2

This extract is from a conversation about meat-based diets and how unlikely widespread abnegation of this lifestyle choice might currently seem. This is compared to smoking in public places, previously commonplace and accepted, where a strong cultural shift occurred towards the support for non-smoking regulations. This quote details an awareness from participants that public perceptions can shift quickly in some circumstances and emphasises the role that public policy and regulation might have to play in this dynamic.

More examples are given related to fuel usage, and the introduction of a proposed ban on diesel engines in the future.

SM4 yeh yeh in the same way that we have done with cigarette smoking I mean we've we've took a view that cigarette smokers that are actively damaging non-smokers health and it's not acceptable.

SF5 like petrol cars. Diesel cars.

SM7 yeh slow change, the change could be quicker, ideally it would be. – Group 2
Views about smoking in public spaces, in the presence of non-smokers, changed and is now seen as unfair. Comparison is made to pollution caused by diesel cars, and how this should also be unacceptable, making a case for regulation and suggesting that it can interact with social perceptions and public acceptability.

SF4 I think people get used to living within their means though, like, yeh, I dunno, I think it would actually be ok once you got used to it, it would just be like a different lifestyle.

SF3 Yeh if it was the same across the board. I think you can kind of see what things other people have and you kind of want what they have [...] Yeh so if nobody had any luxuries, I think we'd all actually be very happy.

– Group 1

When confronted with some of the sacrifices associated with lower consumption, or fewer luxuries (more specifically material ones), social norms were seen to play a role in the levels of acceptability of these differences in lifestyle. These participants discuss how these new ways of living would become normal, and one would get used to any inconvenience associated with them. Their discussion also brings about the issue of inequality. S3 was of the view that if there was a situation whereby some people in society had more access to these luxuries then this would lead to lower well-being of those who miss out; in other words, this would be unfair. This is indicative of the sort of culture we have now, where the financially under-privileged are unable to obtain the levels of luxury that society promotes as socially desirable, which is shown in the extract below.

SM2 Yeh well I see it as exactly the same as what's happening now, [...] you just see these things the way we see luxuries and other people have it, other people want it, there's rivalry. – Group 1

The issue of inequality and unfairness with regards to consumption is given concrete examples, when discussing the vignettes and with numerous examples quoting air travel, as this was in the vignette, and one participant mentions the example of coffee.

SM3 yeh I think coffee as an example, if you, if you're the only one who can't get a coffee, you can't treat yourself, but if everybody, if coffee like vanished from the table from the entire UK, you wouldn't feel quite as bad at not being able to get it as a luxury cos it would become, the value of it would shoot up if you could get it at all, and I guess that applies to other things as well, that would tie into advertising as well cos like a mass group, you're trying to push it to everyone. – Group 2

This example calls upon social norms to dictate what is fair, where a social norm of fair and equal access seems to be a moderating factor that should be brought into consideration when designing policy aiming to reduce consumption.

4.4.3. Self-interestedness as a driver for pro-social change

Through the examination of happiness, well-being, and life-satisfaction, the emergence of self-interestedness as a tool for pro-social change was recognised. This theme was another inductively formulated theme, with manifest coding driving an empirically rooted categorization of participant quotes. By locating participants' perspectives on how they value mental and physical health, work-life balance, money and financial security, and personal use of time, it was possible to categorise many of these as being driven by

self-interestedness. Much of the discussion that resulted in the recognition of self-interested motivation was around pro-social outcomes such as the protection of the environment through use of alternative transport or volunteering for charity work and helping one's community. This has implications for message framing and policy communication.

4.4.3.1 Self-interestedness

This sub-section will first offer examples where a self-interestedness has been observed and expressed by the participant(s), building a case for its importance in motivating consumption behaviour, then further examples will be discussed where this is also a motivating factor for pro-social behaviour.

SF7 Yeh I'd agree with that, I think you'd always be fighting the individual's desires in society, that'd be the real reason things wouldn't change.

– Group 1

The counterargument to promoting behaviour through self-interested individualism is that it is often seen as a problem in our society. As we can see expressed in the quote above, much of our self-interested behaviour doesn't work towards the greater good of society. However, self-interestedness contributes to our individual well-being through hedonistic use of leisure time.

SM4 Leisure. Leisure for me is an important source of happiness, I wouldn't want that taken away from me. – Group 2

SF9 Yeh I guess leisure, for me, music and festivals and things like that, which probably links into that freedom thing, that little pocket of 4 days, you are free to do whatever you want. – Group 2

This desire to act in accordance with one's will and pleasure is undoubtedly an important contributor to happiness and well-being, and is something we have become very used to pursuing in our society. Leisure time is associated with freedom, from the view of this participant we can see that it is related to getting away from usual responsibilities and following one's hedonistic desires to "do whatever you want". These examples refer to experiences, rather than material goods, which we will examine in great depth in a later sub-section.

Material wealth and consumption can lead to the elicitation of positive feeling, a consumer society is focused on this very fact, and we know it helped capitalism to prosper (Biswas-Diener, 2008). Such consumption is often linked to hedonism, and the pursuit of

pleasure through the accumulation of goods and use of services. We can look at how participants discuss hedonistic consumption patterns and how they try and gain further understanding of the role self-interest plays in their lives.

SF3 I dunno, like the thrill it gives you, cos I don't really get a thrill when I'm buying loo roll. Errm haha, but if I'm buying some fancy trainers, I'm like yeh! – Group 1

There is a distinction here between utilitarian consumption and hedonic consumption highlighting how different products elicit different levels of interest and excitement. This thrill factor is something that the participant seems to be chasing with their purchasing, which is satisfied by footwear in the example that they give. This is coherent with other research on materialism that examines how products that cultivate self-image are often drivers of high-consumption lifestyles (Basar, Turk & Unal, 2015).

SF9 and it was also a treat that was based on hedonistic kind of things, as opposed to something perhaps more deeper, fulfilling, it was kind of just a splurge just to please ourselves, and you justify it cos it's the full year anniversary of something, but ultimately it is only about you having fun.

– Group 2

This participant even refers to her spending as hedonistic and contrasts this type of behaviour as something less fulfilling than alternatives. Consumption behaviour of this type appears to need justifying in some way, even if this just fills a superficial purpose.

Further evidence to suggest the dominance self-interestedness is dominant can be found in the quote below.

SM4 I'm getting very cynical now, but another question that we haven't discussed, environmentalists talk about a tipping point, now if it's possible that they've underestimated the damage we've done to the planet, its more serious than they say and the tipping point has already been reached, in other words all the bad things are going to happen, if that's the case then an argument can be made for going down this route which keeps everybody alive and safe in the UK.

SF8 wow yeh that is cynical. – Group 2

Despite the considerable setback illustrated in the BAU 'Science can save (some of) us', one participant notes how protecting one's own community, at the expense of other parts of global society would be preferred in the event of a crisis. This shows how important it is to tackle the issue of climate change now, as tribalism and self-interestedness is likely to prevail to bleak conclusions once crisis sets in. If behaviours that are good for the majority of people in the world support the preservation of the environment, then appealing to this self-interestedness could be effective in influencing their uptake. This is

somewhat of a stark warning that should be taken into account; self-interest is clearly a strong motivator of behaviour and should be steered more readily towards pro-social goals.

4.4.3.2 Self-interested engagement in prosocial behaviours

This subsection takes forward the previous sub-section where participants highlighted their tendency to be self-interested and notices direct application of this driver to what is usually considered altruistic.

SF5 From a slightly selfish point of view like you'll feel really good about yourself, like if you did some volunteering, you're helping other people and it's not completely selfless cos you come away feeling really good about yourself, I don't think that should be the motive, but... - Group 2

One participant here explicitly divulges their self-proclaimed selfish motivations to be involved in community work and volunteering, despite reticence to attribute priority to this reasoning it's clear that there is an element of self-interestedness at play.

SM7 so when I was younger, I got quite involved in a church group and we used to do quite a few community groups and there was, it did feel good and it did feel nice, of that altruism of going to help weed someone's garden or this person do this thing they can't do erm and it did genuinely feel great, a lovely feeling and bonding with the people you're doing it with and then there's this sense of yeh I've done the right thing. But I don't know how much of that is just "well done me you're great! Right on" and is that helpful thing I don't know, is that self-congratulatory? And yeh I haven't done that in many, many, many years. But I kind of look back on that period and now just see smugness. - Group 2

This participant discusses how he was motivated by a sense of altruism to help in his local community, but in hindsight believes there was a self-interested goal within this practice too, and a sense of congratulatory self-righteousness and smugness may have been the overriding result of his actions.

SF8 I was gonna say, I do a lot of volunteer work but for one specific charity and I don't do it for any kind of social good, I do it cos I enjoy it and that's the only reason.

SM4 yeh I think you're right - I think you've got to have an interest to volunteer, your heart has got to be in it, from the point of view of getting something out of it. There's gotta be an element of interest in it, I think that's a very good point.

SF8 yeh I love it, I just look forward to it so much and its just, it doesn't do anybody any good, well I guess it helps the people I'm volunteering with but that's yeh, its really very selfish. - Group 2

The extract of conversation from above goes further to exemplify how a drive for self-interested behaviour is a motivator for volunteering and community-based work. This is

not to say that the fact people are helping others isn't part of this, in fact helpfulness seems to form a large part of why people find it fulfilling, therefore it is not fair to say it's completely selfless or selfish behaviour.

4.4.3.3 Individual and societal drivers of pro-social behaviour

In order for the analysis of self-interestedness to help us understand public acceptability of low consumption lifestyle this sub-theme explores the range of drivers for prosocial and environmental outcomes. Some of the extracts below suggest that much of our pro-social behaviour could actually be driven by self-interestedness, whilst for some of us they are motivated by a more common good.

SF2 In some respects things will change but I think unfortunately, as S4 said, most people are not motivated by the good of society in general, they're motivated by what they want. [...] I can't see how you can affect the way that people generally behave enough to make the kind of fundamental changes that would be needed. – Group 3

The above extract illustrates self-interested motivation; the participant has difficulty in imagining how people might be motivated towards actions that are for the “good of society”.

Researcher: How it might benefit you or your friends as an individual, signing petitions, taking part in protest?

SF3 It makes you feel part of something bigger, like you're making a change, like I do a lot of signing petitions, especially about like animal cruelty and yeh a lot of amnesty stuff, and it's really nice it makes you feel really kind of fulfilled kind of you feel like you're helping to achieve something.

SM5 taking part in protests is a sort of good for fighting for things like workers' rights and the welfare state and other things like that. Human rights, fighting against poverty, fighting for public services. – Group 1

Public sphere pro-environmental behaviours might have different benefits for one person to the next, and as such motivations might vary depending on if the person is more of a self-interested individualist or a pro-social communitarian. In the above extract the participants are talking about the same behaviours but have a different rooted drive towards the behaviour and how they either internalise or externalise the benefit. S3 mentions that it “makes [her] feel really kind of fulfilled”, whereas S5 is driven by “fighting for human rights”.

As this topic emerged, some groups were directly questioned on these issues to try and further explore motivations for actions.

Researcher: so there's this issue of time difficulties, but what would be the benefit of doing these? Community projects for example?

SM4: Yeh bringing people together. Cos we live in our little boxes and you know, ignore our neighbours, not cos you don't like them, but you don't make the time for each other, but yeh community projects bring people together, [...]

SF2: Yeh and being part of a community or feeling part of a community is really important for your well-being, mental health, that tends to basically take a back seat sometimes. – Group 3

Again, we can observe competing drivers of the same behaviour, this time the example of community projects is the focus of discussion amongst all the members of the group. When S3 talks about their drive to be engaged in these community projects they state a preference for more immediately self-gratifying and self-interested use of his time. This notion of self-interested community involvement could be a viable way to shift towards social change that currently might seem unlikely.

SM3 if I was thinking, you know I've got that in the 'would like to do' as well, but looking at competing time pressures and stuff, unfortunately it's not as high up the list as I would like to think it would be, if I had more time, I'd like to spend more time with family and doing personal hobbies, but it's always difficult isn't it to balance it. – Group 2

Furthermore, following on from this time pressures are noted as being a barrier to this engagement with community, or helping others. This ties in with the degrowth vignette (which was yet to be presented at this point) where people would be afforded more time, due to working less, to be able to spend time with friends, family and the wider community.

Researcher: ah that's really nice. Any other ideas about wider societal sort of goal of society, what people prioritise?

SF5 I always like to think of the environment, and energy efficiency, like recently I've got an allotment, and that makes me happy cos I feel like I'm reducing air miles of various fruits and vegetables and sort of contributing to the environment in some sort of way. I love like seeing solar panels cos I think that's really good for the world, it sounds so silly but yeh. Being energy efficient, because ultimately that is going to have an effect on everybody on the planet. – Group 3

When discussing what makes people happy, the researcher pressed to investigate any other goals people might have for society. This was prior to any discussion of environmentalism, climate change or problematic consumption and the group discussion flowed naturally, alluding towards these issues. This shows how the environment and its protection are connected to individual behaviours and individual well-being, as co-benefits to the personal and the societal are mentioned. This discussion shows how social

benefits can make individuals feel better about their lives and blurs the line between what could be considered a self-interested or communitarian goal.

4.4.3.4 Co-benefits of pro-environmental low consumption behaviours

4.4.3.4.1 Health

The associated health benefits from engaging in low consumption behaviours emerged from discussions across the focus group schedule.

Researcher: What's the benefit of these [*Energy and Transport items from Voluntary Simplicity Questionnaire*]? To individuals, to society.

SM4 I really think the benefit is to society here, rather than to the individual, because there are clear communal benefits that are clear-cut.

SM6 a bit of both. Cos you don't do it for society do you, you do it to make yourself feel better about what you are doing.

SF8 and you get fitter, that's the big one. – Group 2

When discussing alternative energy and green transport we can see in the above extract that whilst the clear benefits are to society as we have previously examined, but there is still a perspective that these behaviours might work to the advantage of the individual. There are health benefits to walking and cycling, which also happen to be better for the environment. The following sections illustrate where these co-benefits can promote engagement in more ethical consumption.

SF5 I've had 4/5 friends who have had various health problems and cancer diagnoses so yeh I'm feeling like that kind of age, I'm glad I've got my health. – Group 2

SM5 I suppose health comes more into it at my age, you want good physical and mental health, but I don't think you can buy that. – Group 4

More generally, when discussing how we value different aspects of our lives, many participants discussed how important physical and mental health was to them (see above discussion). Health could be a very important framing strategy, as it can incorporate both individual and societal level benefits. Many of the topics discussed in the focus groups had societal impacts in terms of reducing fossil fuel and resource consumption, but also have significant individual health benefits.

SF5 yeh I find that, like if everyone cycled or walked places instead of a car, like I think that's the way to, it can improve so many things, it can improve people's well-being, they'd probably meet the physical activity guidelines, carbon footprint will

be down, it would help just so many things, its madness that it's not a priority. -
Group 3

These this extract illustrates how low consumption and environmentally friendly behaviour in the future scenarios have been linked by the participants to physical and mental health benefits, which could be framed as self-interested.

4.4.3.4.2 Work

A key component of the degrowth scenario was, to quote the title 'Working Less...Living more' which is also something of a strapline for voluntary simplicity. We can notice various benefits to the individual that work might have, and how it might interact with consumption behaviours. The two extracts below show responses to the degrowth vignette and focus on the role of work.

SF2 I just think the first one for me, because it involves having more time and working less. I think that would actually make things better in terms of people fitness and mental health.

SF5 I agree with you I think 1. I think from a more holistic point of view it will make people happier and have a better effect on the environment.

- Group 3

SF4 well-being I think erm I think it's having a good life balance and I know that's quite a broad term, but, I don't work fortunately erm and erm I've been retired for about 3 years and I can say I've spent 10 years or more, 15 years working and I wasn't happy and I wasn't erm...I, my balance of life and work and everything was all over the place and I spent many years being unhappy erm and I think you have to work hard at your well-be...you know being happy. - Group 4

Something analogous to the voluntary simplicity ethic of working less and living more that is referenced by SF2 in group 3 from the degrowth vignette in the first quote above is that of 'work-life' balance, mentioned by SF4 from group 4. This notion has gained much focus and popularity over recent years where people have started to notice negative effects of too much work and not enough time being devoted to our personal lives (Jones, Burke & Westerman, 2013). Having a better work-life balance will be a strong motivator to this aspect of degrowth policy suggestions that could be framed as self-interested goals with pro-social benefits.

SF7 I already did this last year, not working full time. It was a choice, and it's fabulous - I think its great. - Group 4

This participant is talking about having already made the transition that was illustrated in the degrowth vignette, whereby she chose to work fewer hours, and take the

consequential cut in pay. For her, we can see that she has had a very positive experience of this.

Our relationship with work can impact our well-being in lots of different ways, and when our work-life balance is being brought into question as part of a policy to work less, we need to appropriately understand the role it plays in our lifestyle and how much we value it.

SF6 See in a way I agree with that but I disagree also because, I like going to work, it's not my dream job but I have an identity that is [refers to their name], I'm not mum, I'm not partner, so when I go to work although its only part time I think I'm doing something for myself, but providing for my family as well, when I do the work I really wanna go into, which is sort of drug and alcohol and stuff like that erm I get satisfaction, I feel happy and get satisfaction cos I've made a difference. When I'm doing my job on an evening, it's just factory based, I'm happy because I've got that little job, that makes sense.

– Group 1

This quote portrays SF6's relationship with work is positive one and she has aspirations to work in a role where her job can help those in need, and this would be preferable to her current employment in a factory. However, this unskilled labour is still seen as occupying a positive role in her life as it gives her independence and increased a sense of self-worth to be able to maintain her own identity outside of her role as a mother, and also provide for her family financially. We can notice this satisfaction is multifaceted as it reinforces individual goals and that of her family, benefitting them both in different ways. In the event that we are encouraging people to work less in a degrowth scenario, we want to be sure not to take away the benefits people gain from being employed, such as feelings of competence and autonomy, or working in a cause they believe in which is associated with pro-social goals in society.

SF3 Working is a bit of a catch 22, cos you don't really wanna do it but then you kind of need to do it for money and liveability. – Group 1

SF3 didn't recognize these inherent benefits as explicitly as S6, and instead sees a job as a means to gain finance to 'live'. There is perhaps a distinction to be made between jobs that are more fulfilling and rewarding than others, with research on Graeber's notion of bullshit jobs (2019), helping us to understand how unfulfilling jobs are psychologically harmful. We can see again below, the types of motivation that people have for working in employment they enjoy.

SF7 I would work more, but then I have the luxury of having a job that I've always wanted to do. So doing a show for three months, 12 hours a day is great. And then not doing it, is not. So yeh, I would definitely not wanna work fewer hours.

SM2 it's cos you're being creative though, cos you're stimulating something that you're passionate about – Group 1

As evidenced in the above quote the most overwhelming support for work, where some participants would choose to work more rather than give up their hours for more free time, was when people gained a lot of enjoyment or fulfilment from their roles.

4.4.4. 'Good consumption': experiential, utilitarian, durable and fulfilling

There were many coded extracts from the focus groups that were thematically consistent as facilitators for low consumption lifestyles including cultural shifts towards experiential consumption, high praise for products that display longevity and durability, and a sense of deeper enjoyment in the non-materialistic. We can notice across this time that consumption is rewarding to people in some ways, and a desirable practice. Therefore, understanding how it might best be directed towards a lower level of use of resources will be a helpful and pragmatic part of a solution.

4.4.4.1 Durable products

Some participants were much more supportive and defensive about what one participant termed "a good purchase". This was seen as something that was good quality, had longevity for usage, usually expensive, and a source of enjoyment from the experience it facilitates.

SF8 but also buying good quality stuff lasts longer, so it's not actually as big an expense as you think it is cos you have to buy them less often – I've got erm, I don't wear makeup but when I do buy cosmetics it's always Neal's Yard so I guess I buy tiny amounts of it, but Neal's Yard is expensive

– Group 2

The participant in the above extract defines the quality product by describing how long a product lasts for, and the value associated with that, compared to cheaper products that don't last as long and need to be repurchased. Due to their expense, they are purchased less often and therefore used more sparingly. This puts an interesting environmental benefit onto 'good purchasing' where fewer resources are used.

SF5 I can see how that [*buying second hand*] would make me happy, like when we moved into our house we had like no money, so we had to buy, we sort of took

ages to make sure, even if we bought second hand we bought good quality things and that makes me happy cos we, I hate that kind of throwaway culture – Group 3

This participant also acknowledges that purchasing quality items is a way to avoid ‘throwaway culture’, due to them lasting a longer time. This is expounded when discussing second hand items, which are likely to have survived longer and been more durable. The participant stresses that quality is important, and that it is the durability and avoidance of waste that makes them happy in their consumption practice.

4.4.4.2 Utilitarian consumption

A concept of utilitarian consumption was emergent in this theme, representing a functional form of consumption that is centered around meeting needs for material goods that aid sustenance and the satisfaction of other basic human needs.

SF9 I think there is a difference between, need to exist, and need to exist on a sort of meaningful content level, cos yeh food, accommodation to actually exist, but to actually exist with a sense of security and some some sense of well-being then yeh good accommodation, human connection, a feeling of belonging, for me some level of purpose even if its little. – Group 2

When this was discussed by participants there was accord that some luxury purchases could also be considered needs if they contribute to your well-being and happiness, however these were not always material. The concept of ‘meaningful’ is approached, which is a distinction in the theory of human needs, that looks beyond mere survival and looks at how there is a need for life-satisfaction and meaning creation (Doyal & Gough, 1991; Gough, 2015). When we look at interpretations of material utilitarian consumption, it could still lead to an increase in happiness or fulfilment, despite the products being used to satisfy basic day-to-day activities.

SM4 I spend a fair amount of money on erm the basics, I’m not a tee-totaller, you know I like wine. Alcohol is expensive and I tend to spend a fair amount of money on clothes and footwear, I don’t, I’m not a bargain buyer on those things – Group 2

The participant in the quote above posits a perspective that situates hedonistic purchasing as acquisition of “the basics” and goes on to state that this includes high levels of spending on clothes, footwear and alcohol. This expands the boundaries of what types of utilitarian consumption can contribute to pleasure and well-being by drawing example upon high-consumption practices as “the basics”. These items are not seen as luxury to the participant, which could be seen to represent a new establish norm of high consumption to the extent that somewhat excessive consumption is utilitarian.

SF4 [I] try and be minimal and keep the things I buy to a minimum, I buy things if I need it or really, really like it. – Group 1

The quote above exemplifies a purchasing practice that prioritises utility. An expressed intent to minimize consumption without need is made here, which is sometimes overcome when there is something that is exceptionally desirable.

Researcher: What about, I guess if we're thinking about monthly outgoings, there'll be a portion of that that goes on like rent, or more sort of functional uses, how does that sort of money play.

SF5 I hate spending money on things that aren't fun. I hate spending money on my car, or the house, or something that you have to do, the dentist! Argh. – Group 2

When questioned further on this notion of utilitarian consumption by the researcher, this participant in the quote above talked about a lack of enjoyment surrounding this type of spending. However, this participant mentions services or repayments, rather than consumption of goods specifically, this could be down to a lack of attention placed on the consumer experience for these types of purchases. Supermarkets, for example, are primarily for the provision of utility, to provide food and sustenance, but they have evolved to cater to different consumer experiences, and use marketing strategies like diversification of stock, or special offers which can increase consumers' enjoyment of the experience.

The concept of 'utilitarian consumption' is a part of a voluntary simplicity lifestyle, and participants discussed some of the enjoyment that they gained from consumption practices that were necessary to their 'survival' or that satisfied factors related to their basic human needs (Shaw & Newholm, 2002).

SM4 I've been obsessing with my electricity meter recently and the fact that I've shaved bits off and that does actually bring me personal joy! Or going round the supermarket and picking up the bargains, and that I've saved £25 this week on food but then I'll get annoyed at myself cos I've just loaded up a load of plastic in the house from all the packaging that comes with it, and you think ok now I need to change that. So I might take a trip to the greengrocers and buy all my fruit and veg from there instead, and get a different sense of joy that way, so yeh environmental things perhaps.

– Group 2

Here we can see that when money saving is introduced to utilitarian consumption there can be a sense of satisfaction and enjoyment from it. This could support aspects of the second vignette that looks to introduce an environmental tax that would reward consumption that is less damaging to the environment by lowering its expense. This

would therefore not restrict consumers from shopping but would mean that it was either environmentally produced goods, or at a premium cost that would offset the damage to the environment.

SM2 I think that's kind of survival cos when you've got all the things that make your body work properly then your body's happy, thus you are happy aren't you, so if you've got all the nutrients and things you need then. The number one cause of depression is like dehydration and people not getting the right amount of nutrients they need, so it makes sense I guess...you go to the shop and you're like NUTRIENTS [Laughter] now I can survive better and happy.

Researcher: Well, that's interesting cos one of the things I've got here, is, do we buy them cos er they're we're seeking that happiness or they are performing a utility and a function

SM2 I think both of them come together and mix like that's what makes you really want things. Whether you can survive and how much it's aesthetically appealing to you. – Group 1

Here we can see a combination of well-being and consumption working together to initiate positive responses from the consumer. This satisfaction of two motivating forces has a constitutive effect of driving the behaviour; this is similar to experiential consumption that has seen to reinforce social and material desires (Guevarra & Howell, 2014).

4.4.4.3 Experiential consumption

4.4.4.3.1 Experiences

Aside from a notion of a 'good purchase' being utilitarian, experiential consumption and functional spending was relevant to one's happiness and well-being, and sometimes contrasted against other types of materialistic consumption.

SF3 I spend a lot of money on like experiences, like festivals, going to gigs and stuff. Holidays. Just erm, generally things that are good fun and that I'll get memories with

SF4 Yeh, and having things to look forward to then, if you know you've got things coming up then it makes you happy too. – Group 1

These responses in the above extract were given when participants were being questioned about what they spend their money on. Experiences were often prioritised above material goods and were explicitly related to well-being. They were constitutive of a positive state of mind in the run-up to the actual event, meaning that there is some longevity to the experience beyond immediate gratification.

SF5 I hate spending money on actual physical things, I don't like, I don't think it brings happiness, or very limited happiness. Erm I think the more experiences make me happy, like you say weekends away, experiences, makes me a lot happier. But I'm like I would much rather spend my money on things like that. – Group 3

This is coherent with many theories around happiness and consumption that discuss the level of material satisfaction that is necessary for human basic needs, and beyond that there is little benefit to the further accumulation of goods (Inglehart, 1977).

Participants in the focus groups also discussed lifestyle changes that were initiated through being away from home and appropriating new behaviours that happened to increase their well-being. This challenged their daily routines that habituated their reliance upon materialistic objects as sources of enjoyment and well-being, clothes and belongings, and ushered them towards experiential living. This helped them to realise benefits associated with low consumption lifestyles that had been initially obstructed by daily routines or entrenched ways of living.

SF9 I think it forces you to be in the moment when you're doing that, cos like when you're just in the daily, sludge of life or not sludge, but it forces you out of your habits which are ultimately a bit negative for you and it forces you to be a bit, well I find it a bit fresher, go back to yourself, a bit more spirited, and I don't know about everyone else but I find as the years go on I find it harder to be like that every day. In a different environment it's easier. – Group 2

The above quotation touches on aspects of well-being and a denouncement of daily life. Travelling and being away from home here seems to ignite some kind of internal and psychological fulfilment related to a mindful state of "go(ing) back to yourself" and being "more spirited". An extension of this notion of travel and experiential living contributing to well-being was also discussed as being explicitly relevant to material objects and belongings.

SF4 I think just having too much stuff in general, like I find it overwhelming. There's been times when I've been away travelling and I've had one bag with me for months and felt so much lighter and better and then when I dunno, having too much stuff around you. Or moving stuff around and stuff getting lost, can kind of make you feel quite anxious, and if you can let it go it feels better, but it's not always easy to let go cos you do kind of get attached. – Group 1

We can learn from this that it is likely a combination of cultural and habitual factors that lead us to be so focused on material consumption, where our routines, practices and social norms support the engagement and re-engagement in consumer behaviour. This participant talked about being taken out of this context and feeling much better about her

life, noticing improvements on her mental health. The other participants agreed with her about this comment.

4.4.4.3.2 Material consumption for experiences

There was experiential consumption in the sense that participants talked about spending their money on experiences rather than products. However, interestingly, some material-based consumption was valued due to the experience it facilitates rather than the object itself. This distinction is worth making as the experience is expressed as the motivating factor behind a purchase, and it's the experience that is reinforcing and valuable.

S7 So I guess yes, but it's less of the thing itself and what it allows me to do. So I felt quite guilty spending money on it, and chatting through it with my dad, who is great with advice, but we were saying, actually you're not spending money on the thing, you're spending money on the time that you're doing the activity, and I suppose that's what I think is important, I'd spend a lot of money on a guitar for example, that's not cos I want a fancy guitar, its cos I spend a long time playing it, and I wanna enjoy it.

– Group 2

S4 got my new running shoes. £120 and I normally wouldn't spend that much, but they're comfortable, and they make me go better ha – Group 3

S4 Yeh or things in general that help you look after yourself, like I don't use a lot of make-up but nice products in general, like moisturisers or face wash, or a nice soap, something in a small moment that you can appreciate the smell of – Group 1

S9 if you say that a luxury is something that you frame in your mind that is gonna give you some level of satisfaction beyond its actual value, a bike is you know a few wheels and this that and the other – Group 2

This link between product and experience is interesting to note. Even the time spent considering the purchase is a valuable and social one. It means that the focus is on the experience that is afforded by the product and the continual over-use of resources may not be required to perpetuate the benefits of this type of consumption. However, it may not be easy to decouple the effects of the experience and the material acquisition. It has been shown in research that reducing work hours may facilitate higher consumption depending on the types of leisure activity that is taken up (Hanbury et al., 2019).

This sub-theme of experiential consumption is clearer to distinguish when looking at products that make life easy, and represent the absence of an unenjoyable task, rather than the facilitating an enjoyable one.

Researcher: errm just one other thing that might not be that appealing this sort of washing clothes, what do people think about that.

SM4 I hate dishwashers but I love washing machines.

SF5 but look at what washing clothes used to be, it was scrubbing and mangles and it was a whole day job and it was awful.

SF8 yeh that's not just like washing some pots and pans, which actually takes 5-10 minutes. – Group 2

There are distinctions being made about where the boundaries might be for which tasks are considered too laborious and what can be considered enjoyable. Washing machines are similarly seen as necessary by other research conducted on energy use and appliances (Walker & Day, 2016). This might point towards a tipping point where certain behaviours and tasks are prohibitively time-consuming and labour-intensive. Dishwashers were mentioned a lot in response to this vignette, another example can be found below.

SM3 yeh but it [dishwasher] de-clutters your kitchen, which is incredibly impressive, going back to the basics of what makes you happy, having a tidy house makes me happy. If you spend half a day tidying the house everything is open and you feel like you can breathe, and that makes such a difference, it feels like you're in a different place. – Group 3

Although one participant here speaks of the value of having a dishwasher, he is still happy to engage in tasks around the house in order to feel better about his environment.

4.4.5 Limitations of neoliberalism

This theme emerged by recognising that the preceding themes, (1-4) could all be understood through a lens of neoliberal ideology and influence. By recognising the fostering of convenience and expediency and a tendency to individualise conception of fairness and equality in the participants and their opinion, it was theorised that neoliberalism influenced how participants felt able or willing to engage in low consumption behaviours. In this sense, it was seen to limit the possibility for the participants to engage in low consumption lifestyles. By focussing on self-interestedness, which is also explored under its own theme, we can look towards reorienting a more balanced form of consumption that is publicly acceptable but is not as damaging to the

planet. 'Good consumption' offers examples for how promote low consumption in a neoliberal consumer-driven society.

It was noticed that the prevalence and dominance of neoliberalism in social, cultural and political landscapes helped to make sense of the four inductive themes emergent from the data set. This observation that the influence of neoliberalism on the availability of actions, attitudes, and beliefs of the individual can be examined as barriers and facilitators to low consumption lifestyles formed an important rationale to use neoliberalism as a way to understand the participant quotes. This idea was derived from existing theoretical research linking neoliberalism to self-identity and psychology of consumption (McDonald, Gough, Wearing & Deville, 2017). This forthcoming theme can be considered abductive, due to the thematic emergence of neoliberalism being informed by a theoretical reinterpretation of the existing data presented thus far. This theme was also useful for categorising specific quotes and extracts where the participants mentioned concepts that were key facets of neoliberal ideology; helping us to further understand participant perspectives in relation to consumption practices and a public acceptability of low consumption lifestyles. As explored in chapter 2, neoliberalism is a relevant concept to the thesis due to its affinity economic growth, which we have established is often oppositional to a transition towards low-consumption lifestyles. However, the application of the theme in this sub-section detailed how specific responses from participants can be interpreted to help us to advance understandings of how neoliberalism constrains, limits, or increases the ability of individuals to engage with low-consumption.

Whilst this theme was abductive and interpreted with the aid of theoretical understandings of neoliberalism, it will be clear from the forthcoming extracts and subsequent analysis that the participants talked explicitly about concepts related to economic model and governance, illustrating that there are many manifest codes and themes within the data. The references allude to a deeply entrenched neoliberal ideology that governs actions and understanding throughout a host of different examples and topic areas under discussion. In many of these examples the participants expressed their views with regards to the society and culture in which they live, and in doing so highlighted prototypical aspects of neoliberalism that illustrate its dominance. The analysis that follows therefore, served to provide empirical insights into how cultural and individual

values that emerge from forms of socio-political economic governance impact the viability of low-consumption lifestyles.

Firstly, this sub-section presents a selection of quotes that illustrated participants' propensity towards the support for cultural values that are coherent with ideological neoliberalism, such as individual liberty, freedom and development, whilst being critical of other elements such as technology fixes. Secondly, it explored participants' conception of responsibility and agency with regards to social change and transitions towards low-consumption lifestyles, which illuminates the role of business, government and the individual, in a neoliberal society. Finally, the analysis explored a concept of the 'neoliberal self', where we see examples of the key features of neoliberalism expressed through self-perception and self-identity.

4.4.5.1 Neoliberalism, consumption and the individual: modes of influence

In order to more fully understand how neoliberalism places limitations on action, behaviour, and lifestyle choices we can look at some of the modes through which it exerts its influence on the individual and the relevance of this to consumption practices. Once again, this theme represents an abductive process where we have viewed the manifest codes and themes through a theoretical deconstruction of neoliberalism and its influences on society and the individual. This allowed for a thematic analysis that illustrates where participants' expressed support or opposition for neoliberalism when considering low-consumption lifestyles.

4.4.5.1.1 Autonomy and freedom

Individual autonomy and freedom are intrinsic to the ideology of neoliberalism (Harvey, 2007), and this sub theme helps us to realise some of the challenges and opportunities these values pose for the public acceptability of low consumption lifestyles.

Researcher: So, I guess were gonna start off the discussion erm really broad today, and the first question I've got is that if you are thinking about your life, what makes you happy? Anyone wanna kind of offer any ideas.

SF8 Freedom, just having the freedom to make my own decisions.

– Group 2

Right at the beginning of the focus group discussion in Group 2, freedom was the first thing to be mentioned by one participant, illustrating how important it is to that person.

Freedom is portrayed as an ability to act as an independent agent and make decisions about one's lifestyle and choices.

SF9 Yeh I guess leisure, for me, music and festivals and things like that, which probably links into that freedom thing, that little pocket of 4 days, you are free to do whatever you want. – Group 2

This extract shows how freedom is an important part of the participant's life, but that it might be somewhat compartmentalized in her leisure time, and more specifically something that is facilitated at festivals. This escapist notion of freedom might be linked to a lack of freedom and/or autonomy over other areas of her life, for example in work, or day-to-day home life.

Researcher: Is there any key messages that are coming out as overwhelmingly positive sounding?

SM6 the control of your life. – Group 2

When presented with the 'business as usual' future scenario, freedom and control over aspects of one's life was presented as a positive characteristic within the given lifestyle. Having the freedom to control aspects of your own life is clearly a very important factor, with psychological theory around autonomy as a key component of self-determination theory and Basic Human Needs (Deci & Ryan, 2000; Johnson & Finney, 2010).

Researcher: OK, so are there any other things like this, that people are buying things or craving things and it doesn't actually make them happy. Does that ring true?

SF4 I think it's more about the freedom to attain it. Like you can have it if you want it, rather than, like no one really like being told you can't do something, so like if you have the money you can do that. – Group 1

Furthermore, access to free markets, and an ability to operate as a consumer within them brings a sense of freedom, rather than one of one of abstinence and austerity. This poses a difficult problem for legislation and regulation, as people have come to value freedom and individual liberty, sometimes regardless of negative impacts on wider society, or even negative reactions to things they buy in retrospect.

Researcher: Yeh I think that's interesting where you mention freedom and decisions, cos actually I think this is one where there is probably less sort of regulation or people are being told what to do less, people are opting into these.

SF2 I dunno, are they? To me this sounds more controlled in some ways because you know, I suppose you'll still have the freedom to buy things that you want [...] I just find this quite controlling to me if we're using devices to make decisions I dunno. – Group 3

This paradox that seems to emerge through the balancing of freedom and autonomy is illustrated in this discourse between two participants discussing the 'business as usual' scenario. A lack of regulation is seen to be more conducive towards freedom and individual liberty by one participant, who is challenged on this due to the lack of autonomy one would have with increased automation and technology.

Researcher: Yeh so I guess in this one, the previous one was an element of erm people choosing maybe, whereas this one is more, people would be eating less cheese cos its more expensive cos its damaging to the environment. Erm, so I don't know if that aspect of control or regulation surrounding these – do you see that as something that is acceptable as something that's political.

SF4 I think some people will not be controlled and they would fight, I don't think this will ever happen cos people will fight against it, they think it is against their freedom of choice. – Group 4

An explicit examination of the role that regulation might play in changing behaviours and lifestyle leads to the participant in the above extract being very sceptical about its efficacy. She believes that people will feel their freedom of choice is under threat and would actively take an offensive tactic to stop such change being introduced.

This sub-theme has shown how the neoliberal fostering of individualism and personal freedom could be an obstruction to implementing changes and regulation that could help to bring about progressive change in society towards socio-ecological harmony.

4.4.5.1.2 Development

Development and progress are key indicators of success in a neoliberal culture, they are drivers of economic growth and produce advancements in technology that are emblematic of a sense of prosperity and wealth. We can see from the reaction to the 'Business as usual' scenario how entrenched and comfortable some people feel accepting a neoliberal agenda.

SM6 I think it's quite controlling, realistic, unfair, but potentially the most sustainable? Obviously, there's a lot of negatives for a lot of types of people, but if you're looking at development, rather than taking steps backwards, that's the way it is at the moment, and that's the way it has been.

SF9 Development for who though?

SM6 well eventually, hopefully everyone, but if you look at the way it is across the world at the moment [...]

SF5 yeh I think for me, hopefully is just not good enough. But I think you're right because actually that's kind of where we are.

SM6 if it's gonna be top down then it starts at the top, and hopefully it can be pushed down.

SM3 trickle down?

SM6 yeh that's what it is. There's a lot of negatives in there, I'm not putting that aside. [...] it's the only one that doesn't involve sacrifice, whereas the other two definitely do.

SF8 but it does for all of the...!?

SF9 non-Europeans..

SM6 but moving forwards...

SF8 but it also says they haven't reduced their emissions in line with climate change, so it's not, it doesn't sound as if the good effects of it are gonna trickle down, cos we haven't done it yet. – Group 2

This quote is emblematic of the stance that neoliberal thought takes regarding the prospects for development and economic growth. The participants inadvertently begin to describe the notion of trickle-down economics, which has been a feature of neoliberal economic policy, which has been widely questioned and subjected to critique (Aghion & Bolton, 1997). S6 notes that it is “controlling”, “unfair” and that there are “a lot of negatives for a lot of types of people” yet maintains that it is “realistic” and “potentially the most sustainable”. He states that development should be prioritised over anything that could be seen as “taking steps backward”. It is more readily accepted by S6 that we can continue with an approach that will lead to further inequality if it means less sacrifice for himself and the more privileged in his society. There is hope from them that this will help everyone, but he wishes to prioritise his own status quo. The extract above is especially interesting due to the social interaction of a conversation between many of the group members. Those who do not take such an individualistic stance on the issue, are critical of the lack of social cohesion and equality present within the business as usual, but S6, who prioritises development and ‘progress’, reinforces the tropes of neoliberalism to justify the inequality. Neoliberalism has prioritised development to the degree that it has *limited* his scope for compassion and ability to accept the failings that this scenario presents, even when confronted with them by the other participants. This is consistent with research that shows those high in neoliberal values are more accepting of social inequality (Bettache et al., 2020).

The following extract is part of a discussion around the first vignette which illustrates a degrowth scenario and will help to further highlight the centrality of development in our cultural world view.

SM3 what I struggle with on this one, and the other one to some extent was the idea that this would happen independently of technological advancement, that these sorts of advancements describing what seems to be a world disconnected from the one we're in at the moment, [...] But this is all, backwards, that's what I struggle with. Everything is slightly regressing in this one, and I'm not saying it's for bad reasons, a lot of it is positive, but as a society and as a culture we want to encourage you know invent things and find solutions to things, and who is to say that those inventions won't lead to you know fantastic new ways that don't impact the planet, flying that doesn't have environmental consequences and you know cures for illnesses we didn't have before. – Group 3

Immediately apparent is the difficulty the participant has envisioning a future without the development of technology playing a large role. This can be linked to the theory of capitalist realism as well as the agenda of a degrowth movement to 'decolonise the imaginary' where the ability to imagine other ways of living outside of capitalism and growth are suppressed (Fisher 2009; Latouche, 2015; Liegey & Nelson, 2020). Despite the acknowledgement of some of the positive benefits to society, there is hesitance to forgo the unknown potential of innovation and development, which is to say that the negatives are the associated and acceptable cost in maintaining the status quo. When referring to the environmental crisis the participant discusses the potential of technology and development to find new ways to bypass negative environmental consequences, without any sacrifice to lifestyle. Whilst there is the acknowledgement that this way of life is not driven by "bad reasons", there is little thought given to what could be gained by the new ways of living, personally, socially, and to the environment, with a preference for maintaining a worldview that puts technological advancements at the forefront of progress.

SF4 sorry the whole attitude of, looking after elders and children, making and repairing things we need, which is a lot more rewarding – I agree it's a lot more rewarding but I think it's a regression really [...] yes I suppose I was reading it and as it flowed to me it felt like going back in time, going back a generation, perhaps more than a generation. – Group 4

We have another example of a participant discussing the benefits of a more rewarding lifestyle in the degrowth scenario, yet there appears to be pervasive support of development that limits its acceptability. Notions of personal development are not treated equally when compared to other forms of development in society and are viewed here as "regression". In fact, the notion of personal growth itself has been linked to neoliberal framing of the self, where identity is project of development (Adams et al., 2019), which we return to in section 4.4.5.3.

This is useful to understand with regard to the aims of this thesis, and any framings that appear to slow development or appear regressive should be used with caution, as they are likely to elicit negative responses and a lack of support.

4.4.5.1.3 Techno-optimism

The role of technology in producing social change is discussed at length by many of the participants, and both techno-optimism and techno-scepticism are represented in this subtheme. Technologically driven social change is related to development and the role that progress has to play in society, and is a defining feature of neoliberal era (Kiely, 2016; Reynolds & Szerszynski, 2012). Technology is a large sector in today's world economy and drives a lot of economic growth in our societies, though it is acknowledged the benefits of this technological advancement and economic growth is not evenly distributed across populations (Caliskan, 2015).

The presentation of technology as a fix-all solution that often falls short was evident across the groups, with a sense of licensing that the promise of a techno-fix facilitates, enabling the status quo to remain dominant and avoid change we might otherwise want to seek.

SM4 I'm sceptical about technological fixes, erm, I feel that more than anything else they kind of create the idea in peoples mind the idea that we can carry on behaving as we've always behaved and get away with it, erm, but very few technological fixes solve things completely, they just alleviate. – Group 2

The extract above acknowledges technological fixes to be a type of justification for certain practices and create a reliance on technological advancement to solve the problems later down the line. There were numerous other quotes that echoed this sentiment of technology and development progressing to solve problems but often coming too late or providing only partial solutions.

SM4 technology is terrifying, but exciting at the same time, the possibilities are amazing but they have to be used in the right way – Group 3

There is an element of benign neutrality in technology, which depends on how it is used and for what goals; participants did not see it as inherently bad or good, but there were benefits and risk associated with the different ways it can be used. Some positive examples of these are given in relation to health, well-being and environmental sustainability.

SF3 Technology will provide us with artificial organs and more bionic parts, erm and therefore we have longevity, they will have sorted out dementia and cancer (...) we know that we have the technology now to be much greener than we are, and we could sort of go into renewable energy

– Group 4

This discussion around technology was also discussed in relation to consumption practices, with smart-technology being able to play a role in reducing waste.

SF6 I think it could make you more aware of what you're purchasing, you know like food and stuff, cos admittedly sometimes I'll go food shopping and before you know it, a week's passed and you look in the fridge and you see that you didn't even use it and the dates gone so that means I've gotta throw it in the bin now. Erm, so yeh for me, if I had one of them fridges that's what I'd be thinking. – Group 1

SF5 I lost it at smart fridges, that's where it first went wrong, I don't need a smart fridge cos I can look and see and eat the things that are ok, and I can manage my fridge and then I got a bit at this example at the bottom because its not fair, its only the rich people that are benefiting and that's not fair. – Group 2

Interestingly, only Group 1 (low-income) displayed any support for these smart-technologies, which somewhat perversely, was presented as something that people on lower incomes probably wouldn't be able to afford, so it might not have benefitted them at all. As illustrated in the second quote, above, we can see that the participant from the mid-income group (Group 2) didn't see this as fair.

Technology and automation also posed a threat of disconnection to the participants who imagined losing human connections in the future scenario that offered technological and digital solutions to over-consumption and waste.

SF6 I couldn't manage without shops though, interacting with people – we need that as human beings, and the technology is making us more and more mentally isolated and we've got to come up with things where we're getting enough mental interaction. [...] Because people need people.

– Group 4

Participant S6 goes as far to say this disconnection is a contributing factor to mental health problems. Understanding this quote as a response to the technological solutions that are offered through the market solutions provided by new technology and digital capacities can help us realise what potential problems might be associated with this approach, and the limits to this type of business-oriented approach.

4.4.5.2 Agency and responsibility for change

Revised definitions of neoliberal features in society from Dawes (2014) accept that free-markets and individualisation are key components, but specify that the relationship between state and market, and citizens and consumers, is the key to understanding the concept. This subsection explores how participants discuss the role of business, government, and individual in relation to their agency and responsibility for influencing and causing change in society, specifically towards the proliferation of low-consumption lifestyles.

4.4.5.2.1 Business

Participants in the focus groups talked about the role that businesses play in determining behaviour. They spoke about how they can influence and create demand for products and obstruct policy changes that might not serve their interest. Promoting a fertile business environment is key for neoliberalism, and it does so by minimizing regulations placed upon them, allowing for maximisation of profit. In this way neoliberalism pushes this responsibility towards private sector business and the consumer, and away from the state, allowing the market demand to dictate social change and progress.

SM3 So it [change] is coming, and it'll come from private sector, it won't be because of government, cos it'll be, people realise they can make loads and loads of money out of it and the government will jump on the bandwagon and make it compulsory when they realise they can tax it. – Group 3

One participant dismisses the ability of government to influence change, disclosing his own belief that private sector advancement will play the largest role in pushing forward social change, evidenced in the extract above. This could provide a good solution to problems we face with regards to energy security and climate change, and is an example of capitalism's ability to provide market solutions to social demand, offers hope for change. Interestingly, both of the actors here (business and government) are presented as being driven by the accumulation of finance; business will earn it through the sale of goods or services, and the government will tax the businesses.

SM3 I think we will pull back from the brink. The driver from that will still be business, still be companies, but it will be companies that will be able to say, look at this it's amazing, look at what you can do with it, look how much it can improve your life. And I'm looking at people like Elon Musk and some of the people in the technology industry are gonna create incredible new things out of the necessity of having to get rid of things new ways of doing things will come forward. But I don't think it'll happen through protest and I don't think it'll happen through government reform. – Group 3

Business is also seen as a facilitator to positive change in society, due to pioneering new technology that could solve a potential energy crisis. Businesses are seen to precede governmental policy, driven by the goal to make lots of money out of new products. This is also presented to be the goal of governments, who see the opportunity to tax the newly successful product or service. This illustrates how economic growth is perceived to be a very strong motivator, even in this case of environmentally focused projects. This extract also exemplifies the techno-optimists' perspective that technology will provide solutions to the climate crisis.

Researcher: So, I guess one of the themes of this is that there are business sectors helping with green industry erm – how is that?

SF7 well I think they're finding its going to be profitable, the cost of wind and solar has dropped now, when its profitable they'll go into it – Group 4

The role for business in creating a low consumption society that uses fewer resources and develops greener technologies was put to the group for discussion. Financial motivation as a driver for this social change was deemed the most appropriate, suggesting that economic growth and capital gains were the dominant motivating force. This is in keeping with a neoliberal organization of markets and social change. However, not all participants were so optimistic about the role business would play in supporting an environmentally supportive future.

SF6 it's about business and the way it has interfered in everything, and that's what were up against, it's about the corporate power and interference...

SF4 the free market

SF6 ...in politics.

SF4 the lobbyists.

SF6 it's not the lobbying for good – it's about business thing

SF7 profit

SF4 power and profit.

– Group 4

Business in the above quote is referred to as being intertwined with politics and government, and the exclusivity of these actors is challenged. Through lobbying practices, pressure is exerted on governments, and they are encouraged to relax policy, regulation, and taxes to suit corporate interest. Corporate business agenda is discussed as being contrary to the 'good' of society, making the case that free market economics and the influence of power and profit into government is "what we're up against". This supports a competing notion that neoliberalism is ill-suited to the achievement of certain goals, particularly those that might not be as profitable.

SM2 Well I guess cos they've invested so much in making normal people's lives more organised and whatever with the technology and the fridges and what have you, that with all this technology surely they're gonna come to a problem with resources to keep creating it, especially for other countries, like third world countries – Group 1

This participant notes how problems might arise when so much demand is created for new technologies that resources will become depleted. Furthermore, not only is it suggested that resource scarcity will be problematic, there will likely be an imbalance in how this affects different parts of our global society. Globalisation has been a huge driver within neoliberalism and has created freedom across trade boundaries with mixed results concerning quality of life and inequality (Greig, Hulme & Turner, 2007; Soper, 2020).

When presented with the third vignette, the neoliberal 'business as usual', a focus on development in society as a priority is discussed by the participants. Beneficial to some and damaging to others, development is still a priority for some.

SM6 I think it's quite controlling, realistic, unfair, but potentially the most sustainable? Obviously, there are a lot of negatives for a lot of types of people, but if you're looking at development, rather than taking steps backwards, that's the way it is at the moment, and that's the way it has been.

SF9 Development for who though?

SM6 well eventually, hopefully everyone, but if you look at the way it is across the world at the moment – Group 2

The participant notes that it is "controlling", "unfair" and that there are "a lot of negatives for a lot of types of people" yet maintains that it is "realistic" and "potentially the most sustainable". He states that development should be prioritised over anything that could be seen as "taking steps backward". The dominance of economic growth and development in political policy making has resulted in SM6 prioritizing these issues in

their own view and is constraining visions of how we can improve society. This is useful for understanding perspectives on degrowth in society and the type of responses that might be elicited when development and/or technology are not at the forefront of public policy.

4.4.5.2.2 Government responsibility

At numerous points throughout the focus group schedule, participants were prompted to focus discussion on who the responsible actors for the change should be, though they were not led to specifically focus on a given agent. An emergent sub-theme therefore was 'Government responsibility', with participants discussing how government had a responsibility (or not) to enact regulation and legislate to guide behaviour and lifestyle change. This is somewhat contrary, and even in opposition, to the prevailing dominance of free-market deregulation and approach of neoliberalism in areas of public policy. However, using the abductive theme of neoliberalism in the analysis and thematic categorising of these quotes, there are many examples where the participants themselves bring about discussion of key facets such as economic growth and market-finance as directly influential upon, and influenced by government.

SF4 there's a lot of talk about how we don't use a lot of renewable energy [...]

Researcher: Who could help that?

SF3 Government.

SF4 yeh, yeh, they don't really push it

SF3 they should have schemes and

SF4 incentives [...]

SF3 I think there should be some sort of legislation now, especially in the current climate, that the government pushes for a certain percentage, even if it was just in government buildings and public transport and stuff, to make it renewable.

SM2 They don't want to though, [...] cos it's less money. - Group 1

The above quote shows how participants felt there should be greater responsibility for the government to play a role in moving towards renewable energy. This should be enacted through regulation and government intervention, such as 'schemes' and incentives, and could play a role in reducing fossil fuel consumption. A subsequent retort from another participant states that the government has a vested interest in making money out of the current situation, illustrating a belief for the entrenchment of neoliberalism at the government level. The extract presents a need for government to

incentivise and encourage sustainability, which is obstructed by its unwillingness to sacrifice economic growth to do so. An example of how this is happening in governance would be to look at how recent conservative governments in the UK have stripped back schemes and financial incentives for green energy, including the scrapping of subsidies for solar, biomass and wind energy (Carter & Clements, 2015), or how the new strategies for climate mitigation and consumption reduction are dominated by notions of 'Green Growth' (Hickel & Kallis, 2020).

Participants further explored responsibility and investigated the role legislation and regulation could play in socio-ecologically progressive change.

SF3 No it has to be made to happen by government, if you just let business take the lead on all of this it'll happen too slowly, and then it'll be too late. If it's not done politically through some element of coercion if that's what you wanna call it, then it won't happen. And the politician's challenge is to explain why it isn't against people's freedom of choice. – Group 4

When directly asked who could support change in society, this participant from the quote above questions the time-efficiency of business, whilst the government is presented as a quicker route to change. There is a reference to coercion, which could mean stricter regulation or influence, from the government as a pre-requisite to changing behaviour and opinion.

SM4 I think the responsibility lies at the top, cos I think that the top er are the people who've put themselves out to sort out the world's problems and they've gotta do something, they've gotta get a grip and gotta realise that they can do things to help us and encourage us to change our ways, I think we need more of a lead from the politicians on this. And I think they need to behave more responsibly and they need to be less obsessed with economic growth as they currently are. And if they become less obsessed with it, we'll become less obsessed with it too. So I do think massive responsibility lies with them. – Group 2

Part of understanding the role of business and politics in society is recognizing the force of economic growth in society, which was picked out by one participant in the extract above. We can see that responsibility (and some blame) is placed on the government and its officials, with a direct link being made between government and public opinion that stresses the importance of help and encouragement for citizens from the government in changing behaviour. The participant in this quote above believes that a government obsession with economic growth is a limiting factor on the ability to combat the climate-crisis, and in turn is dictating public opinion on this matter. This supports observations that a feature of neoliberalism is not only recasting the citizen as a consumer, but also

government as a body that facilitates market freedom and consumer choice (Clegg & Lansdall-Welfare, 2020).

SF2 I guess the question is can government change the mind-set of people who are electing a government that is not doing anything about this, you know.

SM4 ah yeh that's interesting.

SF5 yeh

SF2 so unless you can change people's attitude about a lot of these things then a government that treats things as a priority is not going to be elected – Group 3

The role of government is also drawn into question by one participant in the extract above, who picks up on a cyclical paradox of an electorate voting in a government that represents the views of sustainable futures. This explores the role of democracy in society, and how there is an interaction between government and citizens.

SM6 the responsibility lies with the bottom, but the responsibility to implement and encourage the change lies at the top. – Group 2

This point brings together the joint role of individual mindset change that can result in the increased acceptability of political narratives around change, authorizing a government to enact decisive policy and regulation, indicative of the governance trap theorised by Pidgeon (2012).

The quotes around government responsibility here illustrate a complex and symbiotic nature to political and societal change, asking questions about how change should be mandated within a democracy, by following the will of the people, or conversely (yet perhaps concurrently), the need for government to influence people's views in order to change behaviour.

4.4.5.2.3 Individual agency

The role of the individual in enacting and supporting social change was considered by the participants when discussing responsibility. We notice that a neoliberal understanding of the role of the individual can help us to understand how limitations are placed on the availability of certain perspectives and cultural norms related to behaviours and lifestyles. The psychology of neoliberalism shows that there is a tendency for those with neoliberal worldviews to place blame and responsibility for failures on individuals, rather than society and its organisation (Bettache & Chiu, 2019; Bettache et al., 2020). The concept of consumer sovereignty is paramount to understanding how neoliberalism is affecting an individual sense of agency and limiting self-efficacy to influence social

change. Consumer sovereignty is the power of the consumer to influence supply and demand and form markets, therefore influence social change (Penz, 2008). By extension of this definition, we can assume that if a business or product was unethical or immoral, then there would be no demand for it, and a market would not exist.

As part of the research materials a list of voluntary simplicity behaviours was provided for deliberation. The items were relevant to low consumption and majority of the list concerned individual level behaviour change, as opposed to any structural change to society. This served to provoke discussion around what sense of agency we have as individuals.

SF7 cos this sort of thing is what we can do on an individual level, there's not much we can do on a global or even a countrywide level.

SF4 well unless we vote green or something like that. If there was a party that represented all our views like this

SF3 yeh but as an individual consumer, they're all things that are inside your control aren't they

SF7 but you can actually do something small all you can do to make things change is look after your own little bit and make that change.

SF6 I don't think that. – Group 4

This places voting behaviour as one of the most effective pro-environmental pursuits, and suggests a sense of futility in some of the lower impact individual level behaviour changes and lifestyle choices that can be made. The notion expressed by S7 above is indicative of mainstream environmental agenda – where lots of small changes lead to a bigger change, yet this was met with suspicion from another participant. Neoliberalism and consumerism have supported a culture where people's sense of agency is acted out by their consumption, and yet this isn't perceived to have much effect on global or national policy. Indeed, neoliberal society is said to be characterised by prioritising consumption above citizenship (Bauman, 2000; Dawes, 2014). As a response to this perceived lack of agency some participants felt that influencing structural change by supporting a government willing to act on the major issues of concern was more powerful than their consumer power. However, we can see below that there is also the view that this ability to influence business is evident.

SF7 Supermarkets will listen to whatever wants to make them money, so enough of their customers are saying actually I want to buy this in your supermarket then eventually, they do start to get the message.

SF3 yeh and if we all started to unpacking all our goods and leaving all our plastic there, they would do something about it. It's a hard thing to get going but... - Group 4

Not only was this link between citizenship and government made, this was extended to corporations too. Whilst this invokes a high level of efficacy to individual behaviours to influence change, it shows how it is limited to the consumerist mode of agency, in that only in our purchasing decisions can we hope to exert influence over the actions of industry. This is an example of where people have faith in enacting their consumer sovereignty.

SF3 yeh I was just gonna say that erm – cos I decided, cos you sort of feel like you can drown with all the things that are going on in the world one of the things I decided I could do is change who I get my gas and electric from.

– Group 4

A participant in the extract above mentions feeling overcome by a lack of agency around influencing positive change in the world, however, her consumer decision to change her electricity provider helped to reinforce her individual responsibility. This lack of control around personal agency to influence social change is metaphorically referred to as “drown[ing]” and changing energy providers is discussed as being a positive facilitator towards social change.

SM4 yes absolutely, but I don't, I think it's just awful, we don't have the power other than you actually personally not doing it and not buying, other than that I don't think there's an outlet for us. – Group 3

Whilst we have observed data that show this sense of individual responsibility and consumer action is the way people can try and influence wider society, it is recognised as one of a very limited set of options. The observation that neoliberalism pushes for this kind of individual agency, yet the experiences we have collected here illustrate how people's agency at a consumer is severely limited and dictated by corporations means that it is not appropriate as a proxy for citizenship. Consumption is defined as something that is pushed onto consumers from the businesses, where there is a market created by companies, designed to create desire for the goods and services on offer.

SM4 I think there's a kind of war going on here between suppliers and consumers, they're constantly trying to get us to buy things and part with our money and slowly but surely we're playing catch up and trying to cotton on to what they're doing to us

SF5 then they'll come up with something new, they already have. – Group 2

This extract shows how there is a distinction made between suppliers and consumers that suggests there is friction between the two actors, with suppliers trying to lure in sales and consumers trying not to fall victim in a war. This is a powerful metaphor that illustrates a serious concern of these participants. There is also an acknowledgement that suppliers and businesses are one step ahead of the consumer in this sense and are always developing new ways to market their products to appeal to new and expanding markets, despite the inferred reluctance of the consumer. Overall, this suggests a lack of control on the part of the consumer to act according to their principles, should they be in conflict with the goals of the suppliers.

SM4 I think the problem with today's society is that we're beholden to the global supermarkets, so we have no choice about where things come from, or what's in them, so for me, it's not so much about growing it myself but perhaps if it were more on a more localised scale, a smaller scale. I can't control what packaging stuff comes in, I can't control what's in it, or where it comes from. Why do I wanna buy jacket potatoes in a plastic tray, with a plastic bag around them? Whereas yes in the old days we used to grow things ourselves, to some extent, but if we didn't grow them ourselves we would get them from a greengrocers and they were paper bags, and you got things separately. So that's where I think id like to be back to and yeh I think we're we struggle with these big supermarket chains. – Group 3

Another lack of control here is given a more specific context with regards to consumption behaviours in supermarkets. This participant suggests that people are “beholden” to these multi-nationals, and “have no choice” but to use these services. This places limits on how much influence consumer sovereignty can have, as the dearth of alternative options means that people are locked into the practice. A potential alternative is discussed in the form of localized, smaller scale establishments. More specifically, a lack of control around this form of consumption is centered on the amount of plastic used for packaging and the distance food has to travel when it is being imported.

SF7 well definitely - I think being a less consuming society has got to be better for the world, cos we're so wasteful

SF4 yes absolutely, but I don't, I think its just awful, we don't have the power other than you actually personally not doing it and not buying, other than that I don't think there's an outlet for us. - Group 4

This quote presents an interesting argument that highlights the lack of self-efficacy that the participant feels, with a lack of agency to influence change away from such wasteful consumption. The argument from market liberalism would suggest that by enacting one's consumer power to not purchase and boycott these products should mean they are not

commercially viable; however due to other complex factors including convenience and economic constraints there is often little effect. This brings about a sense that people only feel the agency as a consumer to make social change, and a lack of support behind other activist or regulatory influence that might have more results.

SF5 yeh I hate that. I think though with the phones it's made it easy to get a new phone a lot, cos your contracts are getting a new phone, it's sort of the next step that everyone seems to do.

SM4 technology is changing so rapidly isn't it, and that itself, the fact its changing and moving forward they're having to push it all to us, so they can fund the next progression in technology, so it's a never-ending rollercoaster I suppose isn't it. – Group 3

Another specific example that is proffered by a participant is related to developing technology, with a number of factors contributing to a lack of control over how often one is expected to get new phones, which evidences something referred to in the literature as regretted consumption (Roberts et al., 2017). There are structural reasons for this, supported by contracts that are now commonplace, encouraging people to upgrade to a new phone every two years regardless of the need for a newer model. This is reported by participant SM4 to be pushed by companies that need to fund new developments in technology. We can see here that development and technological progress can be seen as increasing levels of consumption.

This shows that a neoliberal sense of individual responsibility is prevalent amongst the participants, but that this is met with negative emotional valence and a lacking sense of agency geared towards influencing social change. The following section looks at a collection of extracts that further exemplify the influence of neoliberalism upon the participants' lived experience.

4.4.5.3 The neoliberal self

Beyond the provision of materials and services that are necessary for survival and the satisfaction of basic human needs, consumption plays a role in the identity of individuals and groups in society, with varying positive and negative influence (Hogg & Michell, 1996). Lots of participants identified links between how their consumption was cultivating their individuality and more specifically how it often played a role in their self-worth, self-perception or self-image. Adams et al. (2019) detail how the engagement with neoliberal systems can result in the adoption of its characteristics at the psychological level of values, attitudes and behaviours, with examples given that represent a tendency

to view the self as a process of development, individual fulfilment, and personal growth, driven by self-regulation. Persistent engagement in neoliberal consumption practices has led it to become a vehicle for the expression our self-identity (McDonald et al., 2017). Therefore, this thesis defines the neoliberal self as an individual's self-perception and self-identity that are expressed through individualism and market-activity that are prototypical in neoliberalism. By exploring our participants' consumption practices and how they relate to their sense of identity, we can learn how they might facilitate or obstruct public acceptability of low consumption lifestyles in the future.

At one extreme, consumption was expressed as a *raison d'être* in an 'unstable existence'.

SF7 I think it's a way of gaining control cos it's such an unstable existence like, even as a child you don't really know why you're alive, I think most people don't really, and they wanna like buy things, it's just a human reaction to not being able to control life. – Group 1

The control that consumption gives individuals over the materiality of their life is presented here as being a strategy for existential understanding. This illustrates just how deep the importance of consumption can be to the individual psyche and their worldview.

SF8 I deliberately buy second hand things because, well particularly furniture then I can customise it, so the things in my house aren't things from Ikea and it looks the same as everyone else's, it's stuff that I've bought and customised so it's...which probably makes me quite materialistic actually.

SF9 see I'm the same and I will take pride in second hand goods and stuff, for me I see that as more of a luxury than buying from Ikea cos you can make it somehow part of your identity. – Group 2

A lower consumption practice of buying second hand and talking about how it illustrates their identity could be seen as a way of expressing one's care and concern about wastage, over-consumption and mass production. It also shows how second hand goods can still perform this function, if it suits the person's desired self-image and identity. There is an acknowledgement from S8 that this might make them materialistic, but also that this doesn't have to have a negative impact on the environment. Perhaps people can still satisfy their desire to consume and self-identity with their purchases, without engaging in wasteful or environmentally damaging practices. This finding is consistent with research from Edbring et al. (2015), who explored alternative consumption models, finding that purchasing second hand furniture was favourable as a way to move away from high-consumption lifestyles, but that this is not necessarily transferrable to other

items. Just as the above extract illustrates, they found that this is often due to a desire for unique products that are identity-forming.

SF6 I can't bear that now we're turning good food into a middle class and above, luxurious commodity. You know I feel like we're in the 70's 80's I was a little hippy girl and I bought my lentils cos they were cheap.

SF4 well that seems to have kicked off doesn't it where being organic, well not organic, but wholefoods are becoming more expensive – Group 4

S4's identity as a 'little hippy girl' was represented by the purchasing of lentils because they were cheap, illustrating a cultural identity formation as well as an economic necessity. The food market was discussed as being particularly relevant for this notion of consumption playing a role in the reinforcement of social standing and prestige. We can notice how the commodification of environmental consumption has led to a market force that dictates higher cost to these items, showing a complexity in utilizing consumerism to help solve issues related to environmental concern. Of particular relevance here is analysis from Maxton Lee (2020), which explores the politicisation of eco-consumerism, which depoliticises citizenship, where complex socio-ecological problems are reduced to economic transactions in place of political action. Eco-consumption is understood and constructed by the participants as something that has been a practice of high financial cost, and therefore associated with luxury and wealth. Eco-consumerism is reported to be politically ineffective and disempowering, which we can also see in the following extract (Blühdorn, 2014).

SF2 so can I just ask question? Do we think buying locally (goods and produce) and buying environmentally friendly products etc., do you think there's an element of luxury to that? Because there's a cost associated with it.

SF5 mm yeh

SM4 yeh yeh and that's a shame

SM3 yeh I see what you mean

SF2 that's something I do when I can but sometimes I don't do because of cost, and I'd like to do more, but you know the things that often cost have premium attached to them, so in my mind its often a choice to do that lifestyle choice to do that and there are things that can stop you doing that as much as you would like, and to be able to. – Group 3

One participant (SF2) in the extract above questioned their group on this issue, as it felt pertinent to her, and acknowledged this lifestyle element to ethical shopping as obstructive to wider scale engagement due to increased costs. To consume ethically, defined here as locally and environmentally friendly, one must have the financial

capability to do so, which is not always viable. It is noteworthy to mention that this participant was a member of the higher income group, meaning that there is a likelihood of financial capability. This goes somewhat into examining why there could be an attitude-behaviour gap in ethical consumption, where people would like to engage more with environmentally friendly products and services, but they are being priced out of the market. Other participants from the focus groups also expressed this concern in the following extracts.

SF5 I think at the moment being environmentally friendly is quite an expensive thing to do and I wonder actually if people who have less money are going to be less able – Group 2

SF4 well that seems to have kicked off doesn't it where being organic, well not organic, but wholefoods are becoming more expensive because it's more niche, so you

SF6 it's horrible I think. – Group 4

The number of examples on this point of expensive low-impact consumption from a number of participants across three of the four focus groups (notably not the low-income group) illustrates how prevalent this concern was. In response to a related part of the second vignette, we can see in the extract below where two participants place the blame for this problem.

Researcher: there was point earlier when you mentioned erm your sort of displeasure about organic foods or health foods being so expensive so there's this bit at the end that sort of in that, local organic vegetables, eco-friendly washing products, independent clothes would be less damaging to the environment and there sort of they become cheaper and desirable and in demand

SF6 well it would be wonderful, I don't know how – it's about business and the way it has interfered in everything, and that's what we're up against, it's about the corporate power and interference...

SF4 the free market

SF6 ...in politics. – Group 4

Politics and the free market are drawn upon as ways to help understand the current financial barriers to ethical consumption. With market de-regulation businesses are free to engage in practices which are much cheaper, but less environmentally friendly. Regulation could influence these markets to ensure environmental damage is minimized and keep costs associated with the more environmental option as low as possible. This evidences how businesses that operate under neoliberalism can be seen to obstruct low

consumption by way of market liberties that facilitate “corporate power and interference in politics”.

4.5 Discussion and summary

Thematic analysis of the focus group data resulted in the identification of five main themes allowing for effective categorisation of how participants discussed issues pertaining to the acceptability of low consumption lifestyles in the future. These consist of: a culture of expediency and convenience, understanding equality and fairness, self-interested drivers of pro-social change, ‘good’ consumption, and the limitations of neoliberalism. We will further examine how these themes help us to understand the contributions these themes make in relation to the exploratory research questions. Throughout, there will be a discussion of convergences and differences across the groups and participants, highlighting how the demographic make-up of the group might represent or limit the research findings.

In exploring the research question around the ability of people to engage in low consumption behaviours the thematic analysis showed how the propensity for convenience and expedient² behaviour was obstructive and detrimental. This was recognised as being a result of personal preference and external social factors. Bringing together individual goal-orientated decision making and the influence of societal context helped explain why higher consumption lifestyles are often the most convenient courses of action, and that they are expedient in the sense that it is motivated towards immediate gratification over long term gains or moral preference. An individual’s choices and actions were reported to be regularly driven by expedience and convenience, even as behavioural intentions were oppositional. Opting for easiest route to the achievement of goals, through the quickest meeting of needs and the satisfaction of wants, despite the conflict with an individual’s morals or values that might be present, was recognised to be impacted by what the most available means of action were, highlighting infrastructural exogenous influence, bolstering environmental sociology research stating the primacy of convenience in consumer demand (Shove, 2012). This reluctance to opt for convenience and that which is expedient was not enough to navigate towards their moral imperative and ethical preference, which presents challenges for typical strategies within

² Expedience here implies that a convenient and immediately gratifying option is preferred in light of what could be considered moral or ethical (OED, 2015).

environmental policy for individual behaviour change, where rational choice models dominate. Many participants recognised a sense of guilt or lack of deeper fulfilment when thinking about their consumption practices, often evading opportunities to self-identify as materialistic or as someone who enjoys consumerism. Yet, they failed to seek accord with these attitudes due to the more immediate gratification that could be afforded by the most available courses of action, in comparison with low consumption alternatives. Whilst this goes some way to support rational choice models guided by self-interest, there are evidently negative consequences for the individual, which are not self-interested, challenging this interpretation. Additionally, there is a failure to recognise the influence of social context which is reported as a significant factor (Jackson, 2005).

Findings related to the theme of convenience and expedience are commensurate with work from Holbrook (1997), who theorised that consumption was best understood as a process of consummation that is to reach an end goal where one can achieve goals, meet needs, and satisfy wants. More recently, practice theory has explored this, where contemporary definitions of well-being incorporate a need for consumption that is convenient, in order to best facilitate current lifestyles (Shove, 2012). The recognition of this goal-oriented approach to consumption behaviour illustrates the propensity for people to make goal-oriented decisions, rather than more complex moral assessments. Even when there was explicit awareness around environmental and social harm of certain practices, priority was afforded to convenience, illustrating the theoretically problematic assumptions of behavioural models that treat decision making as maintaining rational and intentional consistency. This awareness of exogenous influence on preferential convenience and expedience were recognised as being related to employment hours and the financial remuneration for labour. Both of these issues relate to the potential for degrowth to overcome these barriers, where people would be encouraged to work and earn less, in order to have more time to live 'more simply' in a low consumption lifestyle (Alexander, 2015).

From the data presented in this chapter, there is evidently a display of self-interested goal-orientated decision making, but with a caveat placed upon how there is often a shortfall upon intentional action, and moral preferences are left unmet. The awareness of this discrepancy is expressed by observing the influence that society has on this, for example how various aspects of modern life such as the availability of time and financial

resources hinder the possibility of choosing low consumption alternatives within the society we live in, where environmental behaviours are more expensive and require more time. This supports research in consumer marketing that has employed a theory of consumption to explore what they term, a 'culturally plural consumer' (Sankaran & Demangeot, 2011). Findings here suggest that neither individual trait/disposition theory, nor cultural theory could fully account for complexity in consumption behaviour, and it can be best understood as plural. From this finding we can recognise the importance in providing convenient options for behaviours and practices that are lower in their consumption of resources, supporting widely cited environmental behaviour research from Stern (2002). Resultant guilt and hypocrisy from this mismatch are evident across many areas of the data set and represent dissatisfaction in people who are unable to appease their moral and ethical preferences.

The drive for convenience and expediency in our consumption practices are often the result of a disconnection between production, provision, and consumption – which was explicitly discussed in the data. This touches on historical sociological theory of consumption and disconnection (Miller, 1987; Whatmore, 1995) as well as theories around commodification inherent in neoliberal ideology (Harvey, 2007). The thematic analysis we have seen in this empirical data is commensurate with these theoretical models of consumption as well as Shove's (2012) research, and should bolster their claims with more empirical evidence, namely that our consumption is driven towards the convenient and expedient, despite known negative consequences that exist within supply chains, and disruptions to well-being, due to a disconnection and cultural norms. Furthermore, the obstacles which are recognised as such by the participant were often features of a consumerist and growth-oriented society that prioritises profit. Viewing convenience and expediency within consumption behaviour as representations of neoliberalism's dominance in society upon individual agency illustrate how the abductive analysis of neoliberal theme was arrived upon and implemented in the final theme.

'Understandings of equality and fairness' was another theme that emerged from the analysis, which helps answer the research question on how to increase acceptability of a low consumption lifestyles. Fairness was often discussed when talking about how it might affect the individual and was seen as an important factor in determining social norms that guided the participants' behaviour. Equality was more relevant to issues concerning

wider society, across the world. Research that has explored equality and fairness has found that people would prefer to be living in a fair society than an equal one (Starmans, Sheskin & Bloom, 2017). Fairness was often more important for guiding behaviour and views. This finding is also coherent with the CAUK (2020) findings that illustrate preferences for fairness over equality of outcome. Nuanced expression of what was 'fair' in this research helps us to support the notion that it was preferable that everyone could increase their consumption to meet aspirational targets. As was explored in the literature review, there is an imbalance in society towards the wealthy consuming disproportionate resources, and contributing to carbon emissions (Oxfam, 2019). However, these aspirations for material wealth and high-carbon lifestyles mean that there is more at stake than the actions of a small minority of high-intensive carbon lifestyle individuals; there is a need to reorient the vision of prosperity away from such luxury and excess if we are to truly increase the acceptability of low carbon lifestyles.

This reorientation, and associated fairness with such a transition was said to be considered most fair when applied equally across society. Responses to the incremental vignette elicited strongly negative responses around increased taxation for environmentally damaging goods and services, due to the *unfairness* that the wealthy would still benefit and be able to afford to engage in high-consumption lifestyles. Lower income group much more concerned about within society inequality, with wealthier groups more concerned about global inequality. Those on lower incomes who perhaps have more recently been able to afford luxuries previously unavailable to them are now able to benefit from cheap air travel and cheaply produced consumer goods. In contrast, higher income groups were more likely to take for granted access to goods and services. However, by means of a progressive pathway towards low consumption, the establishment of social norms as a means for increasing public acceptance was supported across the dataset. Although a self-interested sense of fairness dominated notions of equality in their expedient embrace of consumerism in the pursuit of happiness, a social norm around low consumption was viewed as transformative. The introduction of fair and equal application of lifestyle changes where regulation would support lower-consumption lifestyles facilitated the acceptance of these new social norms. This could help us to further understand how norm activation theory might be better understood, where social norms can be framed and prompted, therefore activated, and guide subsequent behaviour (Biel & Thøgersen, 2007). However, there is need to explore this

further to understand the dynamics around how social norms and policy acceptance, and the associated regulation might precede or succeed one another.

The tendency for people to feel they had earned the right to consume, and that their engagement in material pursuits afforded a short-term compensatory response to their work and employment also emphasised the structural influence of neoliberal society. This concept has been reviewed with reference to many psychological mechanisms, such as retail therapy, or comfort eating, among others, (Koles et al., 2018; Zheng & Peng, 2014). However, is recognised here as a consequence of time scarcity and life-dissatisfaction due to labour and employment commitments in a way that supports Schor's (1998) concept of the work-spend cycle. By spending so much time working, the self was being neglected, and without enough time in one's life to focus on individual well-being, these commodified short cuts became more attractive, bolstering Schor (1998) and Soper (2020) with more empirical evidence for the observation that our society is one that is over-worked, in order to make enough money to pay for the commodities and commodified experiences made necessary by time-scarcity. Without this, people felt it would be unfair not to forego these acts of material desire-fulfilment and self-interested consumption. Some thinkers have posited that this search for fulfilment in the accumulation of material goods is a way of reconciling our personal deprivation and alienation from ways of living that can offer more satisfaction and meaning to our existence (Baumann, 1988; Blackshaw, 2008; Clarke, 2003; Soper, 2020). This is especially relevant to degrowth theory, and its support for reduced working hours, which would not only support low consumption lifestyles through increased time to engage in some of the more time-consuming aspects, it could result in less desire to 'compensate' for their labour with financial access to consumerism and material wealth. We can notice that participants from the low-income group were not supportive of reducing work hours, and perhaps were unable to choose to work less due to financial constraints, which is worth caveating. They expressed a concern that those earning enough would be able to cope with less money, but they would not.

Outside of their convenient and expedient decision-making, and self-orientated conceptions of fairness and equality there are implications for understanding other pro-social behaviours to be learned from the analysis. Self-interestedness as a driver for pro-social behaviour was explored as a theme that re-emphasised the dominance of

neoliberalism in ways of viewing the self and society, with self-interestedness and individualism being central concepts to the neoliberal ideology (Harvey, 2007).

Participants discussed how self-interest can motivate their pro-social behaviours such as volunteering and sustainable transport. Research has found that self-interest is a good motivating factor for pro-environmental behaviour, so the findings here support this existing knowledge (Dominicis et al., 2017). A reticence to attribute their pro-social behaviour to self-interestedness, in a similar way to the rejection of identifications with materialistic consumerism that was also evident, illustrates a desire to not be perceived as self-interested, at least not without caveats or explanation. This makes the mechanism less clear and illustrates a more complex picture of behaviour and morality, strengthening the aforementioned limitations of goal-oriented behaviours that were discrepant with moral and ethical motivations. Whilst those enacting pro-social behaviours have nothing to be guilty about, and wouldn't have cause for dissonance, there is a sense of discomfort around recognising that the behaviour has been motivated by self-interested means. There is the suggestion that a tide may be turning on the precipice of changing norms, where time-lagged self-interestedness is still prevalent, but is treated critically even by those who succumb to it. The dominant modes of neoliberal action and motivation are permeating many areas of social and individual experience, and in some cases such as this one helps to illustrate, are not always inherently bad. This speaks to recent calls within the environmental movement to focus on self-oriented values such as health to facilitate pro-environmental behaviours, such as research on 'co-benefits' (Cohen & Kantanbacher, 2020; Haines, 2017). This also helps us to answer the research question about the role of consumption in well-being, where consumption serves as a conduit and resolution to our desire for self-interestedness, however this may not have to be highly consumptive in terms of material consumption, as we can notice in relation to co-benefits.

Co-benefits in this respect are considered beneficial to the environment, as well as to the individual, and can motivate behaviour using different focus to climate change mitigation. The IPCC defines the term as a policy or measure aimed at one objective that might have other objectives, and outcomes (IPCC, 2014b). The most prevalent co-benefits that were discussed were related to physical and mental health. In a review of existing literature around co-benefits there was a call for more trans-disciplinary work across economics,

politics and social sciences to examine this area of research, noting that existing sources of information exist in economics (Mayrhofer & Gupta, 2016). The emergence and importance of this subtheme from this empirical research reinforces this call.

Some of the low consumption behaviours that were discussed had elements of sacrifice associated with them, and this was generally not appealing to one's self-interest. In particular the responses to the degrowth vignette was received more favourably due to its focus on what is to be gained, as opposed to the incremental vignette which spoke of what may have to be lost. Aspects of the lower consumption lifestyles in the degrowth scenario were seen to have deeper levels of satisfaction and fulfilment associated with them, with increased levels of meaning and personal enjoyment. These findings will help to try and frame these types of co-benefits appropriately will be recommended for policy and future research. Recognising co-benefits and self-interestedness as important levers for behaviour change in a social and cultural environment governed by neoliberal ideology could be a crucial way to operationalise policy. This offers empirical support for the Lancet article from Haines (2017), who notes that the wider culture of corporate power and interest often denies climate action.

Further avenues for co-opting the neoliberal drive for consumption can also be observed, evident within the notion of 'good consumption' that was explored. This also helps to answer the research question around forms of consumption that have the possibility of increasing well-being, life-satisfaction and human needs. One aspect of this was a cultural shift towards experiential consumption which was supported in some of the discussion, where some participants valued spending their time and money on experiences more than on material goods, and has been noted by other research (Gilovich, Kumar & Jampol, 2014; Guevarra & Howell, 2014). There remains some complexity in this, as many participants enjoyed buying material goods that facilitated an experience, professing that the experience was the end, with materials consumption in this case being the justifiable means. If this is the case, then a sharing economy could prosper, where people do not have to buy their own products to benefit from the experience they are afforded by them (Mohlmann, 2015), and resource use could be reduced (Leismann et al., 2013). This wasn't prominent in the low-income group and emphasises their divergence from the common trend in the data, supporting the different experiences of consumption that those on lower incomes are likely to experience and the decision to group participants in

relation to their income. Likely paths towards uptake of this would be to consider the theme of prevalence of expediency and preference for convenience in the roll-out of such schemes, as well as an increased social norm around collaborative consumption in the sharing economy.

Additionally, the concept of utilitarian consumption was explored, in which hedonic needs were felt to be satisfied by consumption that was essential, rather than extraneous, to survival. If this could be further emphasised and encouraged then there would be less sacrifice involved with a low consumption lifestyle, if pleasure was still evoked from the purchasing of material goods that are necessary. Literature has often explored hedonic and utilitarian consumption as an exclusive dichotomy with distinct contributions to consumption practices (Babin et al., 1994). Cheng et al., (2017) found that hedonic shopping habits increased environmental involvement, whilst utilitarian shopping habits decreased environmental involvement. Examples from this current research can be shown to question this, and the lines between the two can be blurred. Participants experienced hedonic well-being through utilitarian shopping, which was commensurate with a reduction in excessive material consumption. More research that has attempted to disentangle this distinction (Liu et al., 2020) and our research supports their rejection of a simple dichotomy of hedonic vs utilitarian shopping. The middle-income group was the most self-identifying consumerist, in both qualitative data and the preliminary quantitative screening – and their responses were more prevalent in the theme of ‘good’ consumption. Their tendency to support low consumption measures here perhaps protects and preserves their desire to keep consuming by justifying it as being actualised through less-harmful practices. Furthermore, existing research has claimed that this type of utilitarian approach to behaviour is yet another representation of neoliberalism and seeks function in order to maximise utility (Teo, 2018). People exerted their agency in consumer market-oriented decisions by deriving meaning and identity from them, but that this limits the agency as a political citizen.

The limitations on participants’ sense of agency to influence change is a key contribution of this empirical research, notably the fact that there was a conscious awareness of this lack of agency. Much behavioural change policy is centred around models of behaviour change that seek to increase awareness and promote motivations for individuals to change their own behaviour through rational choice and decision making. In the UK for

example, Legget (2014) details the course from New Labour, to the then current conservative government's embracing of *Personal Responsibility and changing behaviour* (Halpern et al., 2004) and the development of *Behavioural Insights Team* (BIT) (BIT, 2011) which evidence the adoption of a neoliberal and individualistic approach to changing behaviour in the environmental domain. The findings here present challenges for the ability of these policy programmes to influence behaviour change through individual action. As such, there is an imperative to explore more deeply this model of behavioural change and explore the psychological mechanisms that might be relevant to it.

Perspectives were emblematic of consumer sovereignty and many participants believed that it was their main form of agency for influencing social change, whilst simultaneously doubting its effectiveness - this emphasises the limitations of neoliberalism. Unable to imagine forms of social action outside of the market illustrates the dominance of the neoliberalism, where pervasive market economies dominate and form a 'market society' where values and modes of action are sublimated (Sandel, 2015). The most effective way to influence change is to boycott products or buy others, was not always practical or possible; the awareness of which undermines the sense of agency. Participants felt 'consumer lock-in' (Sanne, 2001) leaving them feeling somewhat helpless to change their lifestyles in accordance with their personal goals for more sustainability and social justice. This echoes a critique of consumer sovereignty with relevance to pursuing environmental protection (Fellner & Spash, 2014). These doubts were raised through the discussion of the failure of ethical consumption in a free market economic system to provide affordable access to environmentally friendly consumer goods.

This frustration around agency and perceived failure of consumer sovereignty led most participants to be broadly supportive of more regulation and government intervention to address issues of socio-ecological concern. If the attitude-behaviour gap that reifies this discrepancy is understood as limiting in people's minds then they look elsewhere for agents of change; namely to government and business - this is contrary to the proposition from Carrington et al., (2015) who suggest that guilt is internalised as a personal failing. The responsibility for governments to introduce policy and regulation that would result in top-down behaviour change was evident and seen as a transformative pathway that could reduce neoliberal dominance of the economic systems, and therefore absolve the

individual of responsibility and associated hypocrisy. When considering the likelihood of governmental agency to assert power in this domain it was viewed as unlikely to be realised. The power of business and its contamination of government policy were expressed as obstructive barriers to a transition to low consumption lifestyles and increase their acceptability.

The research question about agency of change and responsibility is explored in this theme. Most consensus was around government being able to increase the speed of a social transformation, forcing business to adhere to regulations that were suited to environmental protection. However, business still had a strong role to play in this social transformation. This is perhaps unsurprising given that technological development is such a key feature of modern life at this time, and is widely supported by neoliberal free-markets, and therefore likely to be a product of preference in those from such a society. One area where a neoliberal free market was seen to be a force for positive change in society was in technology and development, with a distinction between large scale infrastructural technologies seen as a positive force for change, but individual consumer technology was derided as controlling and unnecessary. The exception to this was once again the lower-income group who were supportive of smart-technology solutions to high-consumption, yet there was an absence of any discussion surrounding infrastructural technologies and development. Many people were sceptical about the ability of government intervention to deliver technological advancements at the scale and speed capable within technology and digital business sectors. Areas of criticism around the degrowth scenario in the vignettes were that it was devoid of technology, and this is the most readily accepted form of social change the participants have experienced, and as such believe it should continue. This is relevant to a notion of 'structural lock-in' (Unruh, 2000, 2002), where technology has become so embedded in society and its institutions that it is difficult to imagine an alternative. Other participants, however, were ambivalent, some even distrusting, of the ability of technology to solve these problems; problems associated with decreased well-being and poorer mental health were cited as concerns. Although, it is important to recognise the need for realistic and feasible advancements in technological development towards green energy production *as well as* the reduction in consumption levels that are called for, this is the source of a recent debate (Kerschner et al., 2018).

It is notable that there were no observations in the analysis that showed an influence of gender on the varying perspectives of the participants. All themes were represented and built around quotes from participants of both genders.

4.6 Conclusion

The themes from the analysis offer many insights that contribute knowledge about the human experience of consumption in our society and lifestyles, offering a deep and rich insight into related existing theory, and the exploration of new ground. Convenience and expediency can be taken to bolster sociological theory on this topic, highlighting the importance of understanding structural barriers to behaviour change. However, this has also exposed the need to better understand the elicitation of negative states such as hypocrisy and guilt, and their roles in individual decision-making. More novel insights can be recognised when exploring public acceptability of low consumption policy that seeks fairness in its implementation, namely the recognition that social norms around consumption levels could help to redefine the status quo to a new normal for everyone. Another interesting contribution to existing research would be that of 'good-consumption', whereby individual level proclivity towards hedonic consumption may be able to be satisfied through experiential and/or utilitarian consumption practices.

Most significantly, this empirical research shows evidence for impacts of the deep entrenchment of neoliberal values that govern our economic traditions in much of the world and extends this into the realm of the individual psyche and illustrates the limitation it places on individual behaviour as well as social change. Noticing how these aforementioned themes of consumption; convenience and expediency, fairness and equality, co-benefits, and 'good consumption' can all be understood as products of the neoliberal-dominant structure helps us to understand how it relates to the obstruction of socio-ecological harmony. These insights, supported with empirical data into how a neoliberal sense of agency might hinder or facilitate the acceptability of certain strategies for low consumption lifestyles is a welcome contribution to the literature, and serve as a building block for more social psychological research in this area.

Chapter 5: Experimental effects of communication framing on policy acceptance and behavioural intentions

As per 11.1 of the Policy on the Submission and Presentation of Research Degree Thesis, this chapter is an adapted and amended version of the published journal article:

Thorman, D., Whitmarsh, L., & Demski, C. (2020). Policy acceptance of low consumption governance approaches: The effect of social norms and hypocrisy. Sustainability, 12(3), 1247.

In order to conform to the policy, the work here has been adapted to maintain a “single, cohesive narrative that is stylistically coherent and avoids repetition”. The chapter presented here has a new sub-section related to the sequential mixed methods research design, explaining how the research phase was developed in order to further examine findings from the preceding qualitative research phase. All other sections have been amended where necessary to maintain a clear narrative across the thesis, with the most significant changes being made to the literature review to increase context and avoid repetition. The published paper was multi-authored, but as the named author on the paper, I was responsible for the design, analysis and writing, and the input from the other authors, who are both supervisors of this thesis, was akin to the reading and suggested editing of my thesis chapters elsewhere in this research in order to support redrafting.

5.1 Research phase 2 introduction: from qualitative to quantitative phases

Taking forward key insights and findings from the qualitative phase of analysis, this phase of the research will operationalise the key psychological constructs that emerged from the thematic analysis of focus group transcripts. It will be useful to quantify aspects of the most prevalent and dominant findings, and situate their relevance in existing empirical psychological research, and integrate with public policy research on climate governance. First this chapter will reiterate and briefly state the findings of the qualitative phase that will be taken forward in this quantitative phase; then it will present a short literature review of existing research relevant to the concepts and methods applied during this phase.

Expressions of guilt were reported by many focus group participants, as part of an internal conflict around a desire to engage in more environmentally friendly forms of consumption, but a perceived inability or difficulty to realise these. One avenue of relevant research to explore in response to this finding is that of cognitive dissonance and hypocrisy. If there is a tendency to feel guilty about what can be termed the ‘attitude-behaviour’ gap, it is useful to experimentally test the relationship between hypocrisy and low consumption behaviours, which could raise the salience of self-consistency and reduction of cognitive dissonance in motivating behavioural change and support for policy. Hypocrisy is a specific form of cognitive dissonance, and the operationalised construct in experimental research has been shown to be effective at prompting people to adopt behaviours they agree with as a potential way to overcome the attitude-

behaviour gap (Priolo et al., 2019). Invoking hypocrisy has been useful for facilitating both attitude and behaviour change, and is therefore a useful construct to understanding how to increase public acceptability of low-consumption lifestyles.

Additionally, the notion that social norms were likely to impact widespread adoption of low consumption behaviour was strong across the participants. There was a sense that widely adopted behaviours, and the fair and equal application of restrictions and regulations to enforce these, increased levels of acceptability. Addressing the significant body of literature on social norms and testing their effects upon low consumption behaviours and policy will help to advance our understanding of the prevalence of this view across a wider population in the UK.

Another significant research finding was a theme related to the limitations of a neoliberalism, which manifested in many expressions of capability, or lack thereof, to enact change on an individual and social level. A key mechanism of neoliberalism, the free market, is reliant upon individual consumer sovereignty to regulate markets through influencing supply and demand, rather than regulations being imposed upon the market from government. Consumer sovereignty relies on consumers being given information and making informed decisions on what they want to support with their consumption choices, creating demand levels for a given market (Gintis, 1972). Ideologically, and theoretically, a society operating a liberalised free market economy should self-regulate its moral and ethical compass, through this process where autonomous agents (consumers) act with no discrepancy between their action and belief (Lerner, 1972). In short, if a product or service was bad for society, individuals would not want it (there would be no demand), and therefore business would not provide it (there would be no supply). Research findings from the qualitative phase found this not to be the case and illustrated how people sometimes felt trapped into consuming in ways they do not necessarily condone, yet are seen to be creating demand for the market to increase supply. As well as this, a sense of disconnection facilitated poor moral decision making, with intentionally obfuscated supply chains expounding the already psychologically distant consequences of high-consumption practices. This is consistent with observations that show consumers to be 'locked-in' to certain ways of doing (Jackson, 2005; Sanne, 2002). Participants expressed a desire for stronger governance and regulation in this area to facilitate low consumption behaviours, or even to eradicate options that were not

sustainable. However, there is also the possibility that an inducement of hypocrisy might help to facilitate the mechanism behind consumer sovereignty by reinforcing a moral imperative for behaviour change. Therefore, it will be important to measure both policy support as well as behavioural intentions as a response to social norms and hypocrisy.

Designing the policy measures with this concept in mind will be useful to assess public opinion on lifestyle level expressions of neoliberalism, in comparison to incremental policy change and more radical degrowth informed policy. These measures will be developed from the vignettes used in Phase 1. This chapter presents a short literature review of research relevant to social norms, hypocrisy and policy acceptance, and uses this to inform the design of the quantitative phase of data collection.

5.2 Literature review: hypocrisy, social norms and policy acceptance

From the environmental psychology literature, we know that social norms and hypocrisy have been found to encourage the uptake of some pro-environmental behaviours (PEB) such as recycling, plastic bag use, water conservation etc. (see (Farrow et al., 2017; Poskus, 2016) for meta-reviews on social norms; (Gamma et al., 2018; Priolo et al., 2019) for hypocrisy). However, these approaches have not been applied to material consumption choices or to policy preferences in relation to reduced consumption; hence, the current research represents a much-needed advance towards redirecting environmental psychology towards high-impact pro-environmental behaviours (Huddart Kennedy et al., 2015). This chapter thus aims to explore the framing effects of hypocrisy and social norms inducement upon support for low consumption policies representing different levels of governance, and a number of behaviours representing low consumption lifestyle choices.

5.2.1. Hypocrisy

Hypocrisy studies are grounded in cognitive dissonance theory (Festinger, 1957), which describes the mental state of holding two or more contradictory beliefs or values. The term is drawn from the literature but is not unproblematic. It does imply judgement and personal responsibility, or even failure; but for consistency with the published literature and established measures this term is used instead of possible alternatives which might have slightly different meanings (e.g., dissonance). Whereas cognitive dissonance often concerns attitudes, beliefs and values that are inconsistent with *each other*, hypocrisy is

specifically concerned with attitudes, beliefs or values that are inconsistent with *behaviour* (Cooper, 2019; Stone & Fernandez, 2008). Within the literature it has been established that the activation of hypocrisy by bringing about awareness of discrepant attitude and behaviours causes a state of cognitive dissonance (Aronson, 2019).

Specifically, this study makes a distinction between inter-personal hypocrisy and intra-personal hypocrisy. The former is concerned with the expectations of the self in relation to one's expectations of others (Polman & Ruttan, 2012), and the latter concerned with behaviour of the self in relation to expectations of oneself. This study will explore intra-personal hypocrisy, which explores the differences between what you think you should do and what you think you would actually do in a given situation (Monteith & Volis, 1998). Hypocrisy research has further explored how incoherence in one's self-identity and one's self-integrity often results in negative affect (Stone et al., 1997; Elliot & Devine, 1994). Being made aware of an inconsistency between one's values and one's action, i.e. hypocrisy, means the individual must either accept this inconsistency (along with any potential negative affect), or change their attitudes or behaviour in order to maintain more consistency in the future (and thus alleviate negative affect).

Previous research has utilized a hypocrisy paradigm in order to induce hypocrisy in participants, resulting in increased uptake of pro-environmental, ethical, and pro-social behaviours (Foad, 2016). The hypocrisy paradigm was pioneered by Aronson, Fried and Stone (1991) who designed an experiment that has since reliably induced hypocrisy and dissonance. Meta-analysis has found that the hypocrisy paradigm has been effective at influencing behavioural intentions and behaviour change (Priolo et al., 2019). Firstly, participants must advocate a pro-social (or in the case of this study pro-environmental) behaviour. Secondly, participants are asked to recall any past transgressions, the function of which is to increase the salience of any inconsistencies between past behaviour and the stance they have just advocated for. In previous experiments the first stage of hypocrisy inducement has taken various forms, including signing petitions, posters or flyers (Dickerson et al., 1992; Fointiat, 2004; Morrongiello & Mark, 2008; Rubens et al., 2015), writing a list of reasons or a paragraph to promote the target behaviour (Peterson et al., 2008; Senemaud et al., 2014; Stone & Fernandez 2011), or being filmed giving a speech in support of a behaviour (Aronson et al., 1991; Eitel & Friend, 1999; Hammons, 2010; Priolo et al., 2016; Peterson et al., 2008; Simmons et al., 2004; Stone et al., 1994;

Stone et al., 1997). Research has shown that alterations in the commitment stage can lead to different behavioural responses. Specifically, behaviour change is more likely where the advocacy is a public display of support, rather than a private disclosure of advocacy. This public commitment more reliably produces hypocrisy and subsequent effects on behaviour change and/or intentions (McConnell & Brown, 2010; Stone & Fernandez, 2008; Stone & Focella, 2011).

The second step, transgression recall, is less variable, and prompts the participant towards listing or rating the frequency of past behaviour. Whilst meta-analysis has shown that the first step detailed above is not always required, transgression recall is an essential component of inducing hypocrisy (Priolo et al., 2019). This serves to raise the awareness of a failure to adhere to one's own principles and is understood to increase the salience of hypocrisy in the respondent. This hypocrisy is unpleasant to the individual experiencing it, motivating them to reduce any associated psychological discomfort (Aronson et al., 1991; Stone & Fernandez 2008; Aronson, 1999), therefore in the current experiment we expect induced hypocrisy about high consumption to increase intentions to engage in low consumption behaviours.

This current research aims to increase the salience of hypocrisy and measure the impact it has on individual decision-making, specifically on policy support and behavioural intentions. Due to a lack of research on hypocrisy and policy support, our hypothesis will be more exploratory. If participants are made to feel hypocritical, they are being confronted by the inconsistency between what they want to do, and what they do. We predict higher support for policy measures that involve regulation and control and lower support for policy that rely upon individual freedom and decision-making. The hypocrisy is a result of their inability to match their autonomous decision-making with their ideal course of action, therefore there may be less willingness to be totally responsible for those decisions.

5.2.2. *Social norms*

Social norms have been explored with relevance to pro-environmental behaviour (PEB) (Farrow et al., 2017; Poskus, 2016), and support for environmental energy technologies (Hobman & Ashworth, 2013) but not with specific relevance to *reduced consumption* lifestyles. This research contributes to this gap in the literature. Social norms have long

been the subject of psychological enquiry, and more recent decades have yielded much research on their effect upon PEBs, most of which are rooted in theory of normative conduct pioneered by Cialdini and colleagues (Cialdini et al., 1991).

A meta-review of social norms and PEB has shown that descriptive norms are more effective than injunctive norms in eliciting behaviour change (Farrow et al., 2017). Descriptive norms illustrate what most people actually do, whereas injunctive norms illustrate what most people should or ought to do. Descriptive norms around low consumption are unlikely to be evident in today's consumerist society, which presents problems about how this experimental manipulation might be received plausibly by participants. Additionally, research has found hypocrisy studies to be most effective when the norms are well accepted (Aronson, 1999; Cialdini et al., 1991; Dornbach & Brown, 2008; McConnell & Brown, 2010; Stone & Fernandez, 2008; Stone & Focella, 2011). Relevant to this concern is the more recent research into *dynamic social norms*, which have been influential on emergent and less well-established norms (Lede, 2018; Sparkman & Walton, 2017). This manipulation presents a social norm that is emergent, illustrating that there is an uptake of the target behaviour or belief and that it is becoming a social norm. This specific type of norms framing has been effective for promoting water consumption in the home (Lede, 2018).

Social norms that are framed around relevant social groups are found to be more effective in provoking take-up of a behaviour, as opposed to framing a social norm around a group that one might feel little affiliation and identification with (Culiberg & Elgaied-Gambier, 2016; Stok et al., 2014). This study will emphasise a UK-specific dynamic descriptive norm in order to ensure that all respondents (recruited from the UK) are within a relevant social group. By framing the uptake of the desirable behaviour rather than drawing attention to transgressions of non-adopters we avoid inadvertently portraying high consumption lifestyles as normative. Social norms have been found to be most effective when they activate guilt within participants (Onwezen et al., 2014). If the respondents in the social norm condition are aware that others in their community (in this case, other UK citizens) are reducing their environmental impact, they could be motivated to make commitments to low consumption behaviours out of anticipated guilt or shame (van Dam & van Trijp, 2016). Therefore, activating social norms in conjunction

with inducing hypocrisy is likely to produce an interaction effect whereby social norms have a larger effect on decreasing consumption when hypocrisy has been induced.

It will be beneficial to consider how social norms can influence the public acceptance of policy measures, and whether or not they might affect the support for more radical social transformation that is being called upon to address climate breakdown. There is contradictory evidence around the interaction of social norms and public policy, with some studies supporting the notion that public policy change can bring about social norms (Kinzig et al., 2013; Luis & Palma-Olivera, 2016), and others vice versa, that social norms around an issue can provoke the creation of public policy (Perucci & Perucci, 2014). The latter is more in line with the research on PEB. Understanding this relationship better, by ascertaining effects of social norms upon policy acceptance and behavioural intention, can help inform effective policymaking.

5.2.3 Policies to reduce consumption

Without direct policy initiatives from the UK government to tackle over-consumption beyond waste management and technologically driven efficiency gains, there is an increasing likelihood that our consumption levels, and associated emissions (and other subsequent social and health impacts), are going to continue to grow. This chapter deals with the assessment of public acceptability of prospective policy that seeks to encourage low consumption lifestyles and assess behavioural intentions to live a lifestyle where one consumes less.

Some policy research has diagnosed climate change and associated sustainability problems (e.g., resource depletion) as global problems that require international commitments and collaboration (Biesbroek et al., 2010; Bodansky, 2016; Falkner 2016; Russel et al., 2018), where global agreement could result in top-down regulation and target-setting to cut emissions. This approach poses a huge challenge if there is not total cross-country agreement, prompting other researchers to advocate more devolved solutions (Cole, 2015; Jordan et al., 2015; Jordan et al., 2018), with a stronger focus on action at the sub-state level, including at community and household levels (Campos et al., 2018; Keskitalo et al., 2016). Therefore, there is a need to assess public acceptability of different consumption policies and associated lifestyle changes. Additionally, due to the prominence and drive for market deregulation in global politics, and the emphasis this

places on individual level self-regulation, policy based around this orientation of individual agency and policy will be explored. This paper examines support for policy approaches that exemplify governance strategies at individual, community, and national levels.

Environmental behaviour change programmes have tended to lean towards a light-handed approach, with the responsibility to act appropriately being placed upon the individual (Shove, 2010; 2011). This represents a type of '*personal governance*' where rational economic decision-making is the assumed dominant mechanism behind behaviour. This tendency is prominent when looking at the individual as a consumer, and models of behaviour and choice are seen as rational expressions of goal-orientated practice and moral decision making resulting in the regulation of markets through supply and demand chains. This is the aforementioned mechanism known as 'consumer sovereignty'. If people are unable to act in accordance with their morals, beliefs and values we must question the mechanisms of economic decision-making at the level of personal governance upon which markets are based.

This can be contrasted with '*national governance*' approaches to policy change which involve more top-down regulation and increased control on the production of goods available for consumption. With this more goal-orientated approach to policy, targets can be decided and regulated for, increasing the likelihood of widespread behaviour change. Some of this regulation has been the result of shifts in public opinion and pressure on government to act (Perucci & Perucci, 2014). A third form of governance can also be identified: '*community governance*' which seeks to address calls from Folke et al. (2020), who highlight a need to understand grassroots and local-level initiatives that could help pave the way to transformative change. Climate policy has surpassed its usual goal of maintaining 'system resilience' and an exploration of radical change is required in order to make changes that are commensurate with the challenges posed by the climate crisis (Ibid.).

These varying policy approaches draw upon both more conventional, incremental policy instruments like regulation, taxation and budgeting, and as well as instruments from literature on post-growth and sufficiency. The approaches we categorise and propose here exemplify different strategies that could be used to inform policy and government strategy. The categorisation of the policies will also be labelled in accordance with their

affinity to the vignettes from research phase 1, allowing for the findings to illustrate how relevant the policy acceptance is to degrowth, incremental, and business as usual policy pathways. They are not necessarily mutually exclusive, but it is useful to ascertain the support for them as distinct approaches to low consumption. This is to say that a combination of policy approaches might well be appropriate (especially across behavioural domains), but an understanding of public support for distinct elements is important to develop socially acceptable policies.

5.2. Research phase 2

5.2.1. Hypotheses

Study 1 experimentally examined how different manipulations of social norms and hypocrisy inducement can influence intentions for individual level behaviour change and acceptability of public policy at different levels of governance. Based on previous research our hypotheses are:

H1: The social norm framing will result in an increase in low consumption behavioural intentions and increase support for national governance of radical and transformative policy measures (regulation from government level, consumption budgets, local community sharing economy) and decrease support for policies that operate at a level of personal governance (environmental taxation, deregulating markets).

H2: The hypocrisy manipulation will decrease consumption behavioural intentions and increase support for national governance of radical and transformative policy measures (regulation from government level, consumption budgets, local community sharing economy) and decrease support for policies that operate at a level of personal governance (environmental taxation, deregulating markets).

H3: An interaction effect will occur where the social norm framing will increase the influence of the hypocrisy framing.

5.2.2. Method

5.2.2.1. Design

The current study employed a 2x3 between-participants experimental survey design that operationalised two independent variables: social norm framing (control, social norms) and induced hypocrisy (control, advocacy, and hypocrisy). The effect of these conditions was measured against the two sets of dependent variables: acceptability of policies to support low consumption lifestyles, and behavioural intentions to reduce one's own consumption.

Table 1. 2 x 3 experimental design with numbered condition groups

	Control	Advocacy	Hypocrisy
Control	1	3	5
Social Norms	2	4	6

5.2.2.2. Participants

Table 2. Socio-demographic characteristics of participants, by condition (study 1).

	All (n, 259)	1.Control (n, 58)	2.Control w/ Social Norms (n, 43)	3.Advocacy (n, 40)	4.Advocacy w/ Social Norms (n, 37)	5.Hypocrisy (n, 39)	6.Hypocrisy w/ Social Norms (n, 42)
Age							
18-25 (%)	18.9	19.0	16.3	22.5	27.0	15.4	14.3
25-34 (%)	35.9	36.2	39.5	35.0	32.4	33.3	38.1
35-44 (%)	17.8	19.0	23.3	20.0	8.1	17.9	16.7
45-54 (%)	15.8	17.2	14.0	12.5	21.6	12.8	16.7
55-64 (%)	10.0	6.9	7.0	10.0	10.8	17.9	9.5
65+ (%)	1.5	1.7	0	0	0	2.6	4.8
Gender							
Male (%)	48.6	56.9	67.4	42.5	35.1	33.3	50
Female (%)	51.4	43.1	32.6	57.5	64.9	66.7	50
Income							
Up to £15,599 (%)	39.4	36.2	39.5	35.0	35.1	51.3	40.5
Between £15,600 and up to £25,999 (%)	25.5	27.6	27.9	22.5	16.2	17.9	38.1
Between £26,000 and up to £36,399 (%)	18.1	20.7	11.6	20.0	24.3	20.5	11.9
£36,400 and above (%)	11.2	8.6	16.3	15.0	13.5	10.3	4.8
Prefer not to say (%)	5.8	6.9	4.7	7.5	10.8	0	4.8
Political Orientation							
Politics Score (0=extreme left, 10=extreme right)	4.12	3.86	4.40	4.18	3.97	3.90	4.45
Left-wing (0-3) (%)	39.4	48.3	32.6	35.0	43.2	35.9	38.1
Centre (4-6) (%)	48.0	39.6	35.8	60.0	40.6	43.8	47.6
Right-wing (7-10) (%)	12.6	12.1	11.6	5.0	16.2	10.3	14.3

The study recruited 259 participants from the UK using an online participant panel (Prolific). Participants were randomly assigned to one of the six conditions via a randomizer function in Qualtrics (See Table 2 for demographic information of participants per condition). More participants were in the lower income brackets (average [median] wage in the UK is ~£28,000, with results showing that the sample is skewed towards the lower incomes, which is typical for most research), and more participants self-identified as being left-wing, than right-wing. A Chi-squared distribution

test showed that age, income and political affiliation were non-significantly different across the conditions; however gender was significantly unbalanced across conditions. Income and political orientation were not correlated ($r = .05$, $p = 0.42$) and a one-way ANOVA showed that political orientation was not predicted by income ($F(4, 254) = 1.17$, $p = 0.32$).

5.2.2.3. Materials

All materials used in this research were accessed by participants using Qualtrics, an online digital survey distribution software package. Full survey exported from Qualtrics is available in appendix 9. Analysis for descriptive and inferential statistics was conducted using IBM SPSS statistical analysis software (ver. 25).

5.2.2.4 Procedure

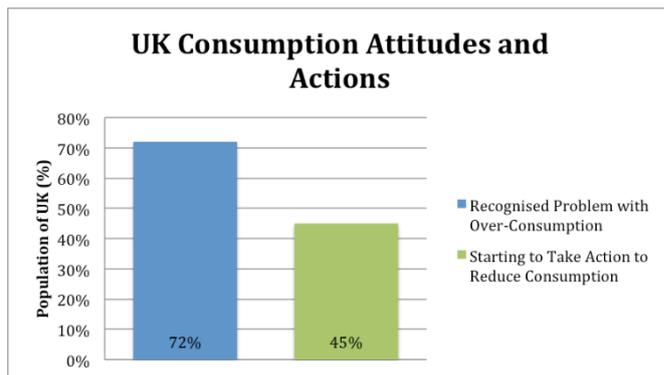
All participants first read information about the study and data protection, and were required to give informed consent. Participants were then given factual information about climate change and consumption, in order to give reference to why policy support and behaviour change might be required (see appendix 8). Experimental manipulation of social norms was implemented through the provision of a graph and short statement (figure 1. detailed below in section 2.2.5), which was added to the end of the information statement. Experimental manipulation of hypocrisy was carried out in accordance with the established practice detailed in sections 1.1 and 2.2.6 where participants in the advocacy and hypocrisy conditions were asked to sign a pledge in order to state their advocacy for a given course of action, in this case to reduce their consumption. Following this, participants in the hypocrisy condition were then immediately asked to recall times in the recent past when their behaviour has transgressed from this pledged advocacy. After these various manipulations all participants completed the dependent variable items on policy support and behavioural intentions. Finally, a dissonance thermometer was used to measure hypocrisy in each group as a manipulation check (see 2.3.1). After the survey, participants were debriefed, including explaining the social norms deception.

5.2.2.5. Social norms framing

The first stage of the experimental design constituted an information statement with a number of facts about consumption and climate change. This stage of the design had two conditions, one condition included only this information statement, the second included a social norms statement with a descriptive norm about how many people recognise

over-consumption as a problem, followed by a dynamic descriptive norm that details a percentage of these who recognise the problem and are starting to take actions to reduce consumption. The statement read as follows: “A recent survey found that the majority (72%) of people in the U.K. realise our consumption levels are too high, and of those people, 45% are already taking steps to live more sustainably by buying less.”

Figure 1. Dynamic social norms framing chart.



The figures used in the social norm manipulation were not factual and had been developed in order to present low consumption as a social norm. This method of deception is common in research and participants were subsequently debriefed.

5.2.2.6. Hypocrisy

The second part of the experiment was the hypocrisy manipulation, which consisted of three levels. The first being a control group with no experimental manipulation. In the other two levels participants were asked to sign a pledge and make a commitment to reduce their own consumption (see fig 2). Participants were told that their signature would be publicly displayed. While in actual fact their signatures were never publicly displayed, it was important the participants believed that the advocacy pledge would be public as this is the most effective at eliciting behaviour change [30].

Figure 2. Advocacy statement for hypocrisy conditions 2 and 3.

<p>As part of this project we are creating a petition for you to sign. This is a way for you to show your support, and encourage members of the public and government policy makers to reduce consumption levels. This petition will be published online and sent to your local MP. Should you wish to, you can share this petition on your social media, links will be provided at the end of the study.</p> <p>This is not linked to your other answers in this survey, and will not be stored by prolific.</p>
<p>I believe we need to reduce our consumption. We should change the way we live our lives in order to be more sustainable and prioritise our own physical and mental health. We must use our resources within the planetary limits and provide the best living conditions for ourselves and the rest of the world. We should reduce our use of materials and should not be wasteful with our natural resources.</p> <p>At the individual level, I am helping this cause by consuming less.</p> <p>This means:</p> <ul style="list-style-type: none">• I'm not buying things I don't need• I'm avoiding single use plastics• I'm repairing and fixing existing products instead of replacing them with new things <p><i>Please add your name below to show your public support for this claim.</i></p>

In the hypocrisy condition, participants were also asked to sign the pledge (as in the advocacy condition), but were then also asked to rate the frequency of any behavioural transgressions that contradict their pledge to reduce consumption. This had the aim of making participants aware of their own lack of consistency in their behaviour with the pledged advocacy regarding consumption. Participants were asked “how many times in the **past week** have you bought...?” in relation to four items; ‘an item made of (or packaged with) single use plastic’, ‘a product that is not ethically produced’, ‘food that you have ended up throwing away’, and ‘something that you didn’t really need’ (rated 1-6:

'not at all' (1), 'once' (2), 'a few times' (3), 'often' (4), 'every day' (5), and 'more than once a day' (6) – an additional option of 'don't know' was excluded from analyses). Participants were also asked "how many times in the **past year** have you bought...?" in relation to two items; 'a new replacement product, instead of repairing an old one' and 'an expensive luxury item' (rated 1-6: 'not at all' (1), 'once' (2), 'a few times' (3), 'often' (4), 'every day' (5), and 'more than once a day' (6), with an additional option of 'don't know' which was excluded from analyses).

5.2.3. Measures

5.2.3.1. Hypocrisy manipulation check

A 'dissonance thermometer' was used in order to measure cognitive dissonance, a scale that was developed by Eliot and Devine (1992). This has been used in some previous research as a proxy for measuring hypocrisy. This measure was reduced to an eight-item scale representing the four dimensions of dissonance: negative self-directed affects ('disappointed in myself' and 'disgusted in myself'), psychological discomfort ('uncomfortable' and 'bothered'), anxiety ('stressed' and 'worried'), and positive affects ('content' and 'happy'). A ninth item was added to try and assess self-reported feelings of hypocrisy; this was labelled 'hypocritical'. Correlations between the dissonance thermometer and the hypocrisy item help gauge the effectiveness of the scale. All items were answered in response to the question "at the moment, to what extent do you feel...?" (1-7, with a label at each end of the scale 'does not correspond to how I feel' (1) and 'completely corresponds with how I feel' (7)) as per the procedure of Pelt et al. (2018).

The dissonance thermometer showed very strong reliability using Cronbach's Alpha score for scale reliability testing ($\alpha = 0.91$), and correlated significantly with the additional hypocrisy item ($r = .53$, $p < .01$). However, when a one-way ANOVA was conducted on the sample, no significant difference was found in the dissonance of the participants across the conditions, when using the dissonance thermometer ($F_{2,259} = 1.01$, $p = 0.36$). Nor was there a significant difference between the hypocrisy conditions when using the 'hypocrisy' item ($F_{2,259} = .584$, $p = .558$).

In order to try and make further sense of this result, we can look at the subsection of participants who completed the transgression scores and see if the degree to which a participant transgressed in their consumption behaviour led to a more hypocritical rating. Transgression scores were positively correlated to higher self-reported hypocrisy

specific item score ($r = .22, p = .024$) and marginal significance with the dissonance thermometer ($r = .181, p = .053$).

5.2.3.2. Dependent variables

The dependent variables were behavioural intentions and policy support items. The items used for the transgressions were included when asking about behavioural intentions along with two additional PEB items ('Travel by foot, bike, bus or train instead of by car or plane' and 'Choose to eat vegetarian / vegan meals and cut down on meat'; both of these items were reverse coded for analysis). Participants were asked 'Think about the **next month**, and your intentions regarding the following actions. How often will you?' with a five-item scale (rated 1-5, 'not at all' (1), 'once' (2), 'a few times' (3), 'often' (4), 'always' (5), and a further option, 'don't know' which was excluded from analysis).

The policy support items were measured on a six-item scale (rated 1-7, 'completely oppose' (1), 'strongly oppose' (2), 'slightly oppose' (3), 'neither oppose nor support' (4), 'slightly support' (5), 'strongly support' (6), and 'completely support' (7)). The policies that were operationalised were chosen to represent the pathways detailed in the qualitative research phase, where vignettes were used to represent changes in society that were commensurate with degrowth, incremental change, and business as usual, trajectories towards reduction of consumption. In particular, policies that were most prevalent, and relevant to consumption were extracted from a policy review of degrowth literature (Cosme, Santos, & O'Neill, 2017), contrasting with an incremental policy, and and a business as usual approach. The six items represented the following policies:

- Community sharing/fixing economy (degrowth): "Local community groups should have support from the government to set up 'repair cafes' and 'library of things' so we can be better equipped to fix things we have, and share appliances and products we don't need to own. This would be cheaper but less convenient than owning them ourselves."
- Environmental taxation (degrowth/incremental): "Government should introduce a tax on activities and products that are damaging to the environment or people. This would make it more expensive to produce and buy products that are environmentally or socially damaging but they would still be available."
- Regulation to ban products (degrowth/incremental): "Government policy should regulate businesses to produce and sell only sustainable and ethical products. For example, cheaply produced clothes and electronics will be banned"

- Reduce working hours (degrowth): “There should be a reduction in working hours. This would mean we have more time to spend with family, and actively engaging in more activities (making things and growing food etc.). This would also mean we have less money to spend, and we wouldn’t be able to buy as many things.”
- Consumption budget (degrowth/incremental: “Government policy should introduce an individual consumption budget where calculations are made around the impact of the things you buy and you are individually responsible for your consumption footprint. You would have a limit to how much, and what you can buy.”
- Free-market deregulation (business as usual): “Business should be given more freedom from government to meet demand. Products would only become more environmentally-friendly if people chose greener products. This 'deregulation' doesn't guarantee a reduction in consumption.”

5.2.4. Results

5.2.4.1. Policy measure support

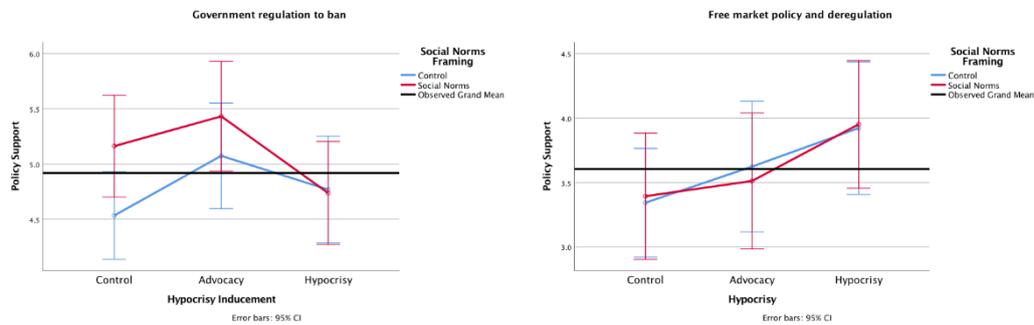
Table 2. Overall means (and standard deviations) showing Support for Policy Measures (n = 259).

	All [n, 259] (S.D.)	1.Control [n, 58] (S.D.)	2.Control w/ Social Norms [n, 43] (S.D.)	3.Advocacy [n, 40] (S.D.)	4.Advocacy w/ Social Norms [n, 37] (S.D.)	5.Hypocrisy [n, 39] (S.D.)	6.Hypocrisy w/ Social Norms [n, 42] (S.D.)
Policy							
Community sharing / Fixing economy	5.75 (1.19)	5.60 (1.43)	5.59 (0.94)	5.80 (1.14)	5.69 (1.26)	5.82 (1.08)	5.53 (1.32)
Environmental tax	5.07 (1.49)	5.12 (1.50)	5.20 (1.45)	4.94 (1.74)	4.81 (1.67)	4.96 (1.55)	4.81 (1.53)
Government regulation to ban	4.92 (1.55)	4.53 (1.59)	5.12 (1.51)	4.72 (1.72)	5.26 (1.64)	4.68 (1.79)	4.47 (1.54)
Reduce working hours	4.61 (1.69)	4.22 (1.86)	4.78 (1.75)	4.74 (1.65)	4.67 (1.60)	4.34 (1.73)	4.42 (1.76)
Consumption budget	3.94 (1.71)	3.81 (1.85)	3.78 (1.49)	4.06 (1.81)	3.89 (1.86)	3.70 (1.71)	3.65 (1.81)
Free market policy and deregulation	3.61 (1.63)	3.34 (1.63)	3.47 (1.65)	3.63 (1.61)	3.48 (1.69)	3.76 (1.64)	3.86 (1.48)

A multivariate analysis of variance (MANOVA) was conducted (using Pillai’s trace), finding a non-significant effect of social norms on policy acceptance measures, $V = .022$, $F_{6, 248} = .920$, $p = .48$ and a non-significant effect of hypocrisy inducement on policy acceptance measures, $V = .071$, $F_{12, 498} = 1.53$, $p = .11$, as well as non-significant interaction effects of social norms and hypocrisy inducement on policy acceptance measures, $V = .043$, $F_{12, 498} = .914$, $p = .53$. However, there were marginally-significant results with separate univariate between-subjects tests illustrating effects of hypocrisy inducement on the regulation of markets, $F_{2, 253} = 2.38$, $p = .095$, and on the deregulation of markets, $F_{2, 253} = 2.74$, $p = .067$. Hypocrisy marginally reduced willingness to support government

regulation, and increased support for deregulation and free-market business solutions. See figures 4 and 5 for these results.

Figures 3 and 4. Experimental conditions and support for increased regulation and free-market business policy



5.2.4.2. Behavioural Intentions

Table 3. Overall means (and standard deviations) for intention to engage in consumption behaviours.

	All (n, 259)	1.Control (n, 58)	2.Control w/ Social Norms (n, 43)	3.Advocacy (n, 40)	4.Advocacy w/ Social Norms (n, 37)	5.Hypocrisy (n, 39)	6.Hypocrisy w/ Social Norms (n, 42)
Behavioural intention item							
Eat meat and/or dairy ³ (n=185)	3.44 (1.67)	3.28 (1.74)	4.05 (1.38)	2.87 (1.66)	3.38 (1.62)	3.34 (1.76)	3.73 (1.65)
Buy new instead of repair (n=168)	3.14 (1.49)	2.84 (1.46)	3.33 (1.36)	2.68 (1.29)	3.16 (1.57)	3.42 (1.57)	3.47 (1.45)
Use single-use plastic (n=238)	3.02 (1.01)	3.10 (0.88)	3.37 (0.79)	3.19 (0.76)	2.86 (1.10)	2.96 (1.12)	2.77 (1.08)
Buy unethical products (n=128)	2.47 (1.14)	2.58 (1.15)	3.21 (1.28)	2.42 (1.09)	2.63 (1.39)	2.10 (1.07)	2.52 (1.12)
Avoid sustainable travel options ⁴ (n=190)	2.34 (1.40)	2.41 (1.57)	2.28 (1.37)	2.23 (1.40)	2.07 (1.24)	2.48 (1.50)	2.44 (1.48)
Make an unnecessary Purchase (n=248)	1.9 (.95)	2.00 (0.94)	2.02 (0.81)	1.88 (1.02)	1.94 (0.98)	1.90 (0.90)	1.87 (1.06)
Waste food (n=256)	1.68 (.94)	1.67 (0.91)	1.94 (0.99)	1.85 (1.00)	1.93 (1.13)	1.53 (0.89)	1.47 (0.94)
Buy a luxury item (n=258)	1.37 (.69)	1.40 (0.84)	1.32 (0.63)	1.44 (0.79)	1.54 (0.87)	1.24 (0.48)	1.33 (0.61)

A MANOVA was conducted (using Pillai’s trace), finding a non-significant effect of social norms on behavioural intentions, $V = .126$, $F_{8, 32} = .57$, $p = .79$ and a significant effect of hypocrisy inducement on behavioural intentions, $V = .664$, $F_{16, 66} = 2.05$, $p = .02$, as well as

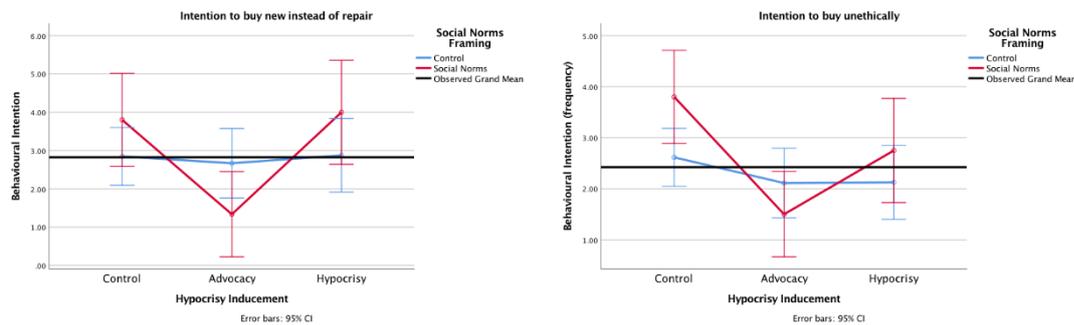
³ Actual item was “how often will you choose to eat vegetarian / vegan meals and cut down on meat” so the label and figures have been reversed to maintain harmony in the scale.

⁴ Actual item was “how often will you to travel by foot, bike, bus or train instead of by car or plane” so the label and figures have been reversed to maintain harmony in the scale.

non-significant interaction effects of social norms and hypocrisy inducement on behavioural intentions, $V = .482$, $F_{16, 66} = 1.31$, $p = .22$.

There were also significant results with between-subject effects illustrating effects of hypocrisy inducement on behavioural intentions related to ethical purchasing ($F_{2, 126} = 6.95$, $p < .005$) and replacing and repairing ($F_{2, 166} = 4.78$, $p = .014$). Ethical purchasing showed significant differences between the hypocrisy control group and advocacy only group with Bonferroni corrected post-hoc testing ($p = .012$) showing the advocacy only group had lower intentions to engage in purchasing unethical products than the control group. There were also between-subject interaction effects of social norms and hypocrisy inducement on replacing and repairing ($F(2, 126) = 3.53$, $p = .039$) showing that when social norms were present the advocacy only group had lower intentions to engage in over-consumption and the hypocrisy group had higher intentions to over-consume. See figure 5 and 6 below for reference of this.

Figures 5 and 6. Experimental conditions and consumption behaviour.



5.2.5. Discussion

The social norms framing was not found to influence support for different policy measures, nor did they appear to influence people's intentions to consume less. In light of these results we must reject *H1*. The inducement of hypocrisy did not influence support for policy and governance but did have an effect on behavioural intentions to reduce consumption. However, the results do not indicate that hypocrisy itself increases intention to lower one's consumption specifically, but the act of a commitment and advocacy to reduce consumption helps to reinforce this as a behavioural intention. These findings mean we must also reject *H2*. *H3* can be partially retained due to a significant interaction effect illustrating that the effects of the hypocrisy manipulation were

strengthened in the social norms condition when evaluating the behavioural intentions. No interaction effect was found between social norms and hypocrisy when evaluating the impact of the experiment on policy and governance support.

The failings of a social norm manipulation could be interpreted in light of recent research from Richter, Thøgersen and Klöckner (2018) who reliably replicated the appearance of a 'Boomerang' effect on the social norms manipulation in their study on sustainable consumption choices in the supermarket. This effect is when the target behaviour of the social norm manipulation results in the increased uptake of the behaviour that one is seeking to reduce. This effect was also found in other research (Cialdini et al., 2006; Schultz et al., 2007). Richter et al. (2018) suggest that a descriptive norm of an undesirable behaviour that is particularly common can have a negative impact on attempts to reduce the target behaviour. The use of a dynamic descriptive norm in this study could have reproduced this, as it acknowledges that a given behaviour is currently widespread, despite suggesting that there is a strong movement towards people changing this behaviour. In hindsight, this manipulation may have legitimised hypocrisy by showing that there are people who are thinking about changing their consumption patterns, but not translating this into behaviour.

The dynamic social norm statistics reported to participants about how many people in the UK were reducing their consumption were not true. In fact, UK consumption figures showing steady growth of household final consumption expenditure (ONS, 2019). Therefore, it is possible that participants did not truly feel like they would be following a social norm by adopting the low consumption behaviours. The social norms manipulation check suggested that they were not sceptical of the information, and believed it to be truthful; however, there is a possibility that the norm of consumption is so strong it cannot be easily manipulated by a simple statistical graph. The reason for the lack of effect could also be the result of a failed activation of the dynamic descriptive social norm relevant to policy or governance. The norm activation was designed to make it salient that most people in the UK were beginning to take action in tackling their consumption levels, and lead people into conforming to this apparent norm. This did not specify a policy preference or support for a type of governance; therefore there was no social norm activation for policy support, only for behaviour change relevant to it.

The hypocrisy framing showed a marginal effect of advocacy on behavioural intentions to repair existing products and purchase ethical goods. These two items both represent a strong commitment to a lifestyle change that is relatively time-intensive and effortful. We can infer from this that making a pledge and committing to reduce one's consumption behaviour resulted in a stronger desire to follow this up with direct action. However, if hypocrisy is induced after this commitment stage, then the effects are no different to receiving no message at all. This could be explained by research that has shown how increased salience of hypocrisy can also evoke a 'rebound' effect, where individuals harden their stance and refuse to change their habits. One reason for this might be that people find it easier to renege on their recent advocacy statement and change their beliefs to be in accordance with the transgression of the target behaviour, and find this a suitable way to relieve themselves from any negative affect arising from the arousal of dissonance (Gamma et al., 2018; Liégeois et al., 2005; Rubens et al., 2015; Vinski & Tryon, 2009). We must understand the conditions of this rebound effect as it is important to understand when activating the salience of hypocrisy is useful or not (Fried, 1998).

The marginal significance of support on policy measures does hint towards the possibility that hypocrisy reduces support for some degrowth and incremental policies concerned with regulation, and increases support for business as usual policies that rely upon personal governance through deregulation and free-market economy mechanisms. The finding suggests that hypocrisy is not a useful mechanism for increasing support for national governance and regulation. This brings into question how appropriate it is for our behaviour change programs to focus on individual responsibility and decision-making. Because hypocrisy reinforces a sense of personal moral responsibility for one's actions, it could be perpetuating an individualistic approach. This could help make sense of why it empowers individuals to change their intentions and reduces their willingness to absolve themselves of this responsibility. However, this could benefit from further exploration in a future study.

Because the hypocrisy manipulation check showed no difference between conditions, there is a chance that the measure was not recording levels of hypocrisy prior to the chance participants had to ameliorate and relieve their negative affect. This could be achieved by supporting a policy they felt would solve the problem, or by reinforcing their intention to consume less. Additionally, all participants were given information about

consumption that may have induced hypocrisy to those participants in the control group. A pure control experimental group and a revised placement of the hypocrisy measures manipulation check should be sought in future research. Another significant caveat that should be made in regard to the effects of hypocrisy upon intentions to reduce consumption behaviour is the smaller sample size of the two significant items. Due to a lot of participants selecting 'don't know' for some of the items, there is potentially a problem with a lack of power.

5.2.6. Conclusion

Inducing social norms was not effective in this study, which could be due to a weak manipulation or a boomerang effect. Additionally, making the public feel hypocritical did not increase their willingness to accept stronger regulation. Offering a commitment to advocate and pledge for a change in their behaviour, however, increased support for regulation and more transformative radical policy, and decreased intentions to live a high consumption lifestyle.

5.3. Research phase 3

A study was devised to simplify and strengthen the research design. Alterations were made in order to create a more obvious distinction between the policy options and make them more relevant to different levels of governance and policy approaches, and to follow the same categories as the vignettes in phase 1. They will now more distinctly represent 'National governance and incremental regulation' (Incremental), 'Personal governance with deregulation of free markets (BAU)', and 'Local community governance and degrowth' (Degrowth) (see 3.2.6 for new items). The social norms manipulation was removed, as this did not result in significant findings in Study 1. A pure control was introduced in order to establish the effects of providing relevant information (kept the same from phase 2 – see appendix 8) versus no information. This would allow the study to ascertain how influential it was to give participants information about the effects of their consumption behaviours with reference to global climate change, and in turn, if the hypocrisy manipulation increased or decreased this effect. Finally, amendments were made to the behavioural intention items to provide examples about what the behaviour changes were (see 3.2.6).

5.3.1. Hypotheses

H1: Hypocrisy manipulation will increase support for incremental and degrowth policy measures and decrease support for BAU policies.

H2: Hypocrisy manipulation will decrease intentions to engage in consumption behaviours.

5.3.2. Method

5.3.2.1. Participants

Table 4. Socio-demographic characteristics of participants, by condition (study 2).

	All (n, 300)	Control (n, 77)	Information (n, 75)	Advocacy (n, 73)	Hypocrisy (n, 75)
Age					
18-25 (%)	24	24.7	22.7	26	22.7
25-34 (%)	37.3	40.3	34.7	37	37.3
35-44 (%)	21	18.2	20	21.9	24
45-54 (%)	12.3	7.8	16	13.7	12
55-64 (%)	4	6.5	5.3	1.4	2.7
65+ (%)	1.3	2.6	1.3	0	1.3
Gender					
Male (%)	23.3	20.8	30.7	19.2	22.7
Female (%)	76.7	79.2	69.3	80.8	77.3
Income					
Up to £15,599 (%)	34.7	39	37.3	35.6	26.7
Between £15,600 and up to £25,999 (%)	31.7	26	24	28.8	48
Between £26,000 and up to £36,399 (%)	19.3	22.1	22.7	17.8	14.7
£36,400 and above (%)	10.3	10.4	14.7	12.3	4
Prefer not to say (%)	4	2.6	1.3	5.5	6.7
Political Orientation					
Politics Score (0=extreme left, 10=extreme right)	4.12	4.31	3.89	4.14	4.12
Left-wing (0-3) (%)	40	37.7	46.7	37	38.7
Centre (4-6) (%)	49.7	51.6	44	42.8	49.3
Right-wing (7-10) (%)	10.3	11.7	9.3	9.2	12

The study recruited 300 participants from a UK sample, again using Prolific. A Chi-squared distribution test showed that age, gender, and political orientation were non-significantly different across the conditions; however income was significantly unbalanced across conditions. Income and political orientation were not correlated ($r = .09$, $p = 0.13$) and a one-way ANOVA showed that political orientation was not predicted by income ($F(4, 295) = 1.16$, $p = 0.33$).

5.3.2.2. Design

This study employed a 1x4 between participants design. The four conditions were as follows:

1. A pure control group where participants were given no information,
2. An information only group where participants were provided with information on climate change and the role of consumption,
3. An advocacy only group in which participants were shown the information on climate change followed by a commitment to reduce their consumption behaviours, and
4. A hypocrisy group in which participants were provided with the information, asked to make a commitment to reduce their consumption behaviour followed by listing their recent transgressions with regards to consumption behaviours.

The dependent variables consisted of two sets: three low consumption policy approach items, and six consumption behaviour intention items.

5.3.2.3. Materials

Materials were the same as in phase 2. Full survey exported from Qualtrics is available in appendix 10.

5.3.2.4. Independent variables

The social norms framing was removed for this study, and the hypocrisy level was expanded to include four conditions. The information given was introduced as an experimental condition, and was the same information from the first study. Materials for the advocacy pledge were also kept the same. A slight change was made to the transgression list, in order to make it clearer how each behavioural domain was relevant to actual actions e.g. “...something made of, or packaged with, single use plastic (e.g. plastic wrapped salad/vegetables, crisp packets, soft drinks bottles)”, “...a new product instead of fixing an old one (e.g. repairable shoes, electronic devices)”, and “...a product that is not ethically produced (e.g. made with cheap labour, conflict metals, damaging to the environment)”. These items were all amended to have the same ‘polarity’, instead of having reversed items as in Study 1, in order to reduce cognitive load.

5.3.2.5. Hypocrisy manipulation check

The dissonance thermometer was the same as in Study 1; however it was moved to before the dependent variables. This was due to concerns in Study 1 that the placement of this measure at the end of the study meant that any negative affect or dissonance resulting from the hypocrisy had been ameliorated by support for policy and expressed intentions to consume less.

The dissonance thermometer ($\alpha = 0.89$) was significant positively correlated with the hypocrisy item ($r = .54, p < .001$). A one-way ANOVA showed that hypocrisy was significantly different across conditions ($F_{3,296} = 5.38, p < .001$), with Bonferroni corrected multiple comparisons showing that the control condition felt significantly less hypocritical than any of the experimental conditions. However, these post-hoc tests did not show any significant difference between the three experimental conditions. Transgression scores for those in the hypocrisy condition were marginally significantly positively correlated with self-reported hypocrisy ($r = 0.24, p = 0.08$).

5.3.2.6. *Dependent variables*

The policy approach items were re-written to be more focused, and reduced to three items to clearly illustrate different political strategies with minimal crossover. There is a national governance strategy commensurate with top down incremental regulation, personal governance strategy commensurate with an individual responsibility to act in a free market, and bottom up community orientated local governance commensurate with degrowth agenda. The items were:

- “There will be more control over businesses to produce and sell only sustainable, easily repairable and ethical products. (e.g. cheaply produced clothes and single use plastics will be banned). Making these products unavailable is the best way to ensure we can reduce our material consumption.”, representing ‘National Governance and Incremental Regulation’, (Incremental)
- “Business will be given more freedom to meet consumer demand. Products will become more environmentally-friendly if people buy more 'green' products and don't buy harmful or unsustainable products. If people don't want environmentally damaging products, they won't buy them. People can be trusted to make informed decisions about what they buy”, representing ‘Personal governance with deregulation of free markets’ (BAU)
- “There will be an increase in local community led projects where people can borrow tools and appliances from a 'library of things', instead of individually owning products we don't use all the time. There will be more space made available for allotments and community growing. People will work fewer days a week, allowing for more time to be spent with friends and family, and making or repairing their own products instead of buying new things.”, representing ‘Local community governance and degrowth. (Degrowth)

Once again, these were measured on a 7-item scale (rated 1-7, ‘completely oppose’ (1) to ‘completely support’ (7)).

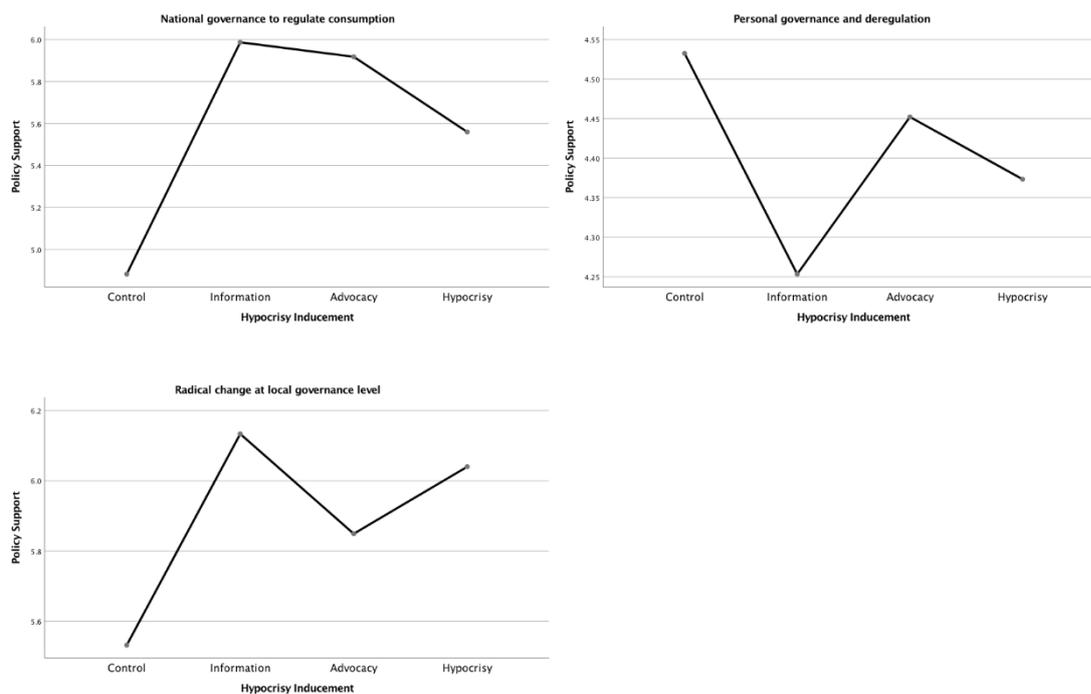
Behavioural intention measures were kept largely the same as in Study 1 and mirrored the changes made to the transgressions, with the small amendments made to try and reduce ‘don’t know’ responses. Participants were asked ‘Think about the **next month**, and your intentions regarding the following actions. ‘How often will you...?’ in relation to the six items (rated 1-5, ‘not at all’ (1), ‘once’ (2), ‘a few times’ (3), ‘often’ (4), ‘always’ (5), and ‘don’t know’ which was removed from analysis).

5.3.3. Results

5.3.3.1. Policy measure support

A MANOVA was conducted (using Pillai's trace), finding a significant effect of experimental manipulation on policy support $V = .143$, $F_{9, 291} = 4.93$, $p < .001$. Between-subject effects showed significant effects on national governance to regulate consumption ($F_{3, 297} = 14.03$, $p < .001$) and radical change at local governance level ($F_{3, 297} = 3.74$, $p = .012$). Deregulation was not significantly affected. Bonferroni corrected multiple comparisons showed a significant difference in support for regulation measures between control and all three experimental conditions ($p < .001$), but no significant difference between the three experimental conditions. Additionally, Bonferroni corrected multiple comparisons showed a significant difference in support for radical change measures between control and information-only condition ($p < .01$), but no significant difference between any other conditions.

Figures 7, 8 and 9. Policy support for national, personal and community governance.

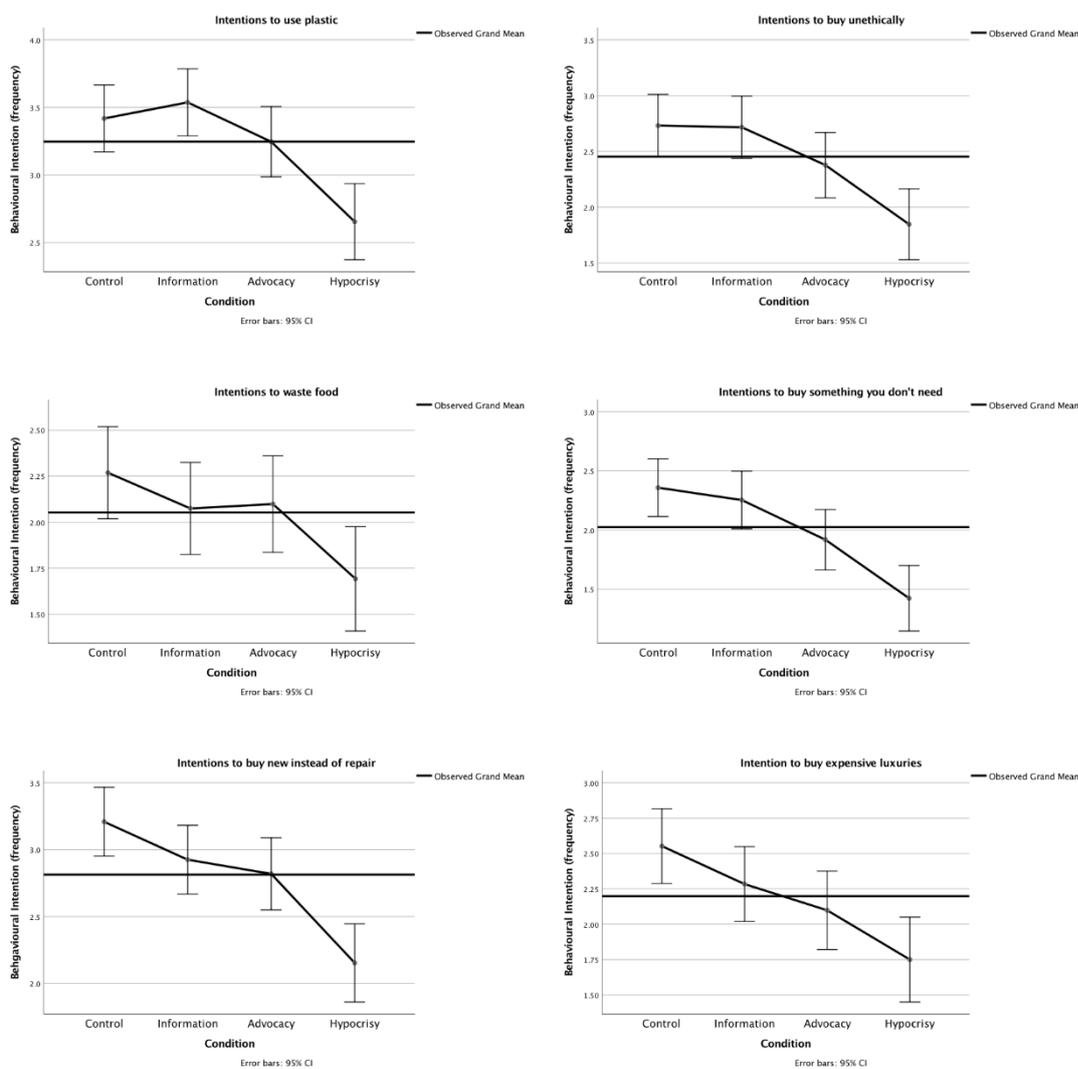


5.3.3.2. Behavioural intentions

A MANOVA was conducted (using Pillai's trace), finding a significant effect of experimental manipulation on behavioural intentions $V = .197$, $F_{18, 282} = 2.81$, $p < .001$. Between-subject comparisons showed significant effects on reducing behavioural intentions of all of the items: Intention to use plastic ($F_{3, 297} = 8.13$, $p < .001$); Intention to

buy unethically ($F_{3, 297} = 7.25, p < .001$); Intention to waste food ($F(3, 297) = 3.10, p < .05$); Intention to buy something you don't need ($F_{3, 297} = 9.90, p < .001$); Intention to buy new instead of repair ($F_{3, 297} = 9.91, p < .001$); Intention to buy expensive luxuries ($F_{3, 297} = 6.61, p < .001$). Bonferroni corrected multiple comparisons showed a significant difference in consumer intentions between control and hypocrisy groups across all items ($p < .001$), but no significant difference between the control, information only, and advocacy groups, with two exceptions. These exceptions showed that Bonferroni corrected multiple comparisons were significantly different in reducing behavioural intention to buy things you don't need (with significant differences between information-only and hypocrisy, both $p < .001$, as well as the aforementioned control and hypocrisy conditions) and buy new instead of repair items (where all conditions were significantly different to hypocrisy, $p < .01$).

Figures 10, 11, 12, 13, 14 and 15. Intentions to engage in consumption behaviour.



5.3.4. Discussion

The hypotheses for Study 2 were adopted from Study 1 and sought to observe the effect that was predicted in light of the literature reviewed originally, rather than to replicate any findings from Study 1. We cannot accept H1, as the only significant differences in policy acceptance were in comparison to the pure control group. We can accept H2 as we found that the hypocrisy condition showed significantly lower intentions to engage in consumption behaviour.

Study 2 shows that the provision of information about the seriousness of climate change and the relevance of individual-level consumption behaviours can increase support for stronger regulation at a national governance level and for locally led community level governance for radical lifestyle changes commensurate with a degrowth agenda. The addition of a control group allowed us to recognise the marked difference between those who were given the information statement, and those who were not. However, the experimental manipulation levels were not significantly different from each other with regards to support for public policy and governance. Self-reported measures of hypocrisy and cognitive dissonance show that the control group felt significantly less hypocritical than the other groups, so perhaps a mechanism of hypocrisy was already activated by the mere presentation of information. This is consistent with research investigating organic food purchases and meat-consumption and the effects of knowledge provision and dissonance relief where information helps to reduce differences between attitudes and behaviour (Hidalgo-Baz et al., 2019; de Lanauze & Siadou-Martin, 2019).

Hypocrisy was significantly more effective at reducing behavioural intentions for consumption, with those participants who read their transgressions showing the lowest intentions for consumption behaviour in the future. We did not replicate the marginal rebound effect found in study 1; however, with such a clear pattern of significance across all of the items (and improved design), we can be more confident in the findings from Study 2. Making participants aware of their hypocrisy appears to have motivated them to ameliorate this discrepancy by intending to act in accordance with their recently signed advocacy statement.

5.4 General Discussion of Research Phases 2 and 3

Hypocrisy inducement yielded an interesting mix of effects upon policy acceptance. The introduction of a pure control group in Study 2 allowed us to demonstrate the effect of

information provision upon support for more regulation at national governance level and radical change in local communities. These two policy pathways represent both top-down and bottom-up approaches to implementing a degrowth agenda, suggesting that the provision of information will be important to incorporate in a transition. It is possible that the provision of this information alone increased feelings of hypocrisy, as all conditions that were given the information self-reported higher hypocrisy. Further examination of how a process of information provision might provoke reflection and associated guilt might help to further understand this finding.

Hypocrisy may be best at influencing an intention to change behaviour. However, taken together with the findings of these two studies and the results regarding policy options and governance levels, we can suspect that hypocrisy reinforces a sense of personal governance of individual responsibility in people, resulting in higher support for deregulation and free-market solutions. So profound is the entrenched nature of neoliberalism, social psychology and even the environmental movement itself has often focused on individual agency and decision-making responsibility (Hursh & Henderson, 2011; McCarthy & Prudham, 2004; McDonald et al., 2017). This could also be considered a limitation of the construct itself, where the focus on individual decision making and intra-personal hypocrisy supports an individualised exploration of the ability to influence public acceptability. Governments and activists alike have often sought to influence individual actions that are 'simple and painless' rather than attempting more ambitious change on a larger scale (Thøgersen & Crompton, 2009). The findings in this current study show that inducing hypocrisy reproduces support for policy that places responsibility on individual decision-making, which could be what is causing hypocrisy in the first place. This interesting paradox should be further explored in order to unpack hypocrisy and its self-perpetuating impact on policy and governance.

Interestingly, the most effective manipulations of hypocrisy upon behavioural intentions were for the more challenging lifestyle changes. Consuming ethically and repairing consumer items require some effort on behalf of the individual and yet they were most significantly increased by the intervention. This shows that hypocrisy may be a powerful tool for changing intentions for more difficult to change behaviours.

The dynamic social norms framing was not found to be effective in influencing low consumption behavioural intentions in Study 1, which is most likely due to the dominance

of consumption-based living. Therefore, it could be more useful to seek ways for social norms to be generated through policy and governance, rather than attempting to generate support for a policy through a descriptive social norm framing (which is misaligned with social reality). The implementation of public policy can contribute to the emergence of social norms and increase public support and acceptance, where this might have been lacking prior to launching. Nyborg et al. (2016) explored how recycling was once unpopular; however with the introduction of policy, regulation and infrastructure it has now become socially normalised and widespread. Similar effects could be explored in future research on social norms and low consumption.

A moderating effect of social norms on hypocrisy is noted for further investigation within a hypocrisy paradigm. Study 1 showed a 'boomerang effect' where advocating for a pledge after being primed with dynamic social norms framing increased intentions to consume less, but when hypocrisy was induced after pledge advocacy the intention to consume was higher. Study 2, which did not employ any social norms, had none of these rebound effects. The inducement of hypocrisy here only increased the intended effect of the manipulation in intentions to engage in low consumption behaviours. Although this study removed social norms due to a lack of effect, the inconsistencies between findings in Studies 1 and 2 could be further explored and potentially explained by social norms interaction effects.

5.5 Limitations & Future Research

Due to recruitment methods the sample here was slightly skewed towards left-wing and lower-income groups. With an ever-changing political climate in the UK, we cannot be sure how representative this sample is to the UK population at the time of data collection in 2019. This single item measure of political orientation is fairly primitive and might not be easily understood, hence the complexities of political identity in the UK in 2019 cannot possibly be captured by it, and therefore we cannot make claims based on this measure in our research. Critically, the measure of political affiliation was balanced across conditions; as such any experimental findings were due to conditional differences not sample bias. However, it would be useful for future research to examine more closely how political identity (particularly right-wing) and/or income levels (particularly higher income) might affect policy support and behavioural intentions in this domain. Another sample-based concern is that the participants in study 2 were skewed towards females.

Again, as this was not significantly different across groups we can be confident of our research findings, but future research would be advised to redress this.

A possible limitation was that we chose to operationalize governance levels in terms of aggregate, but relatively crude, categories of policy which encompassed multiple elements; as such, we do not know whether there were particular aspects of the policies that respondents supported or opposed. This approach allows for a more holistic assessment (and arguably one that is more ecologically valid, as it captures more complexity and exposes trade-offs) of governance approaches across multiple scales, but at the expense of a fine-grained analysis of specific policy elements. Public responses to these policy elements could be examined in future work.

A further limitation of this phase could be said to be that it looks only at behavioural intentions, rather than actual behaviour. However, recent meta-analysis has shown that hypocrisy is effective at influencing behavioural intentions as well as behaviour (Priolo et al., 2019). Furthermore, research has found a greater effect upon behaviour than attitudes, so this contributes towards understanding how hypocrisy might influence intentions to consume less. Future research would be well poised to explore the effect upon actual behaviour change in light of the findings here. On a related note, it might be possible to explore hypocrisy within actual behaviours with a research design with a delayed activation of hypocrisy and stage of data collection at a different time point. This would mean that the priming of hypocrisy would be related to recalled behaviour *after* the pledge had been made, rather than recalling events where the transgression had occurred prior to the pledge. Although this is entirely consistent with the activation of hypocrisy within the literature, it's possible that the sequential design of the study may have resulted in a weaker activation of hypocrisy, and although results were significant in this current iteration, it's possible that they might have a greater influence in a different design.

This chapter details how hypocrisy can influence consumption-related behavioural intentions, providing a rationale for it to be explored as a mechanism in economic and moral decision-making. This study did not collect data on the reflections of the participants, and as such we cannot infer how much agency participants felt they had in whilst engaging in their decision-making. Seeing how hypocrisy might relate to other psychological traits should form part of a new research agenda in this area, and could

help further explore agency and ability to change. Measuring other variables such as, for example, self-efficacy and perceived behavioural control could help explain further how a sense of responsibility and inability to act manifests in those experiencing hypocrisy. These factors could be boundary conditions that moderate or mediate the effectiveness of hypocrisy inducement upon behaviour change.

Chapter 6: General Discussion

This chapter will serve to bring together findings from the qualitative and quantitative research phases and assess their contribution to existing literature. In light of these contributions the chapter will discuss theoretical and practical implications of the findings. There will be a statement on the limitations of the study, in terms of both methodology and scope, before suggesting how future research and policy might be guided towards further exploration of the subject area. Finally, a conclusion will summarise the main contributions and suggestions.

6.1 Summary of aims and research questions

In order to put the research findings into context, this sub-section will briefly revisit the main aims and rationale of the research. The thesis sought to investigate the public acceptability of low consumption futures, and the lifestyle and policy changes required to achieve these. The interdisciplinary literature review located gaps where a critical realist application of social psychology research agenda might be able to offer new developments to the existing knowledge. Evidence highlights economic growth threatens socio-ecological harmony and contributes to resource scarcity. Over-consumption at the individual level could have undesirable consequences to people by increasing social inequality, causing mental health problems, and limiting levels of happiness.

A transition away from the status quo where people consume much less would be nothing short of a paradigm shift for modern societies, where planetary conditions could be brought back under control and citizens might have greater life satisfaction. As such it was necessary to explore not only people's thoughts, experiences and motivations around low consumption behaviours and policy pathways, but also to explore the possible ways to support such transformative change. Seeking to understand the levels of public acceptability of both policy pathways and changes to behaviour offers a more complete view of the social, political and psychological drivers of and barriers to transformation to guide future research and policy development.

A mixed-methods approach was used comprising the use of focus groups as an exploratory tool in Phase 1, which was subjected to a qualitative thematic analysis, as well as the application of an experimental paradigm approach in Phases 2 and 3, where quantitative analysis explored some key findings from Phase 1. In adopting a critical realist framework, this research project explores empirical data as an observable

representation of reality, yet maintains a critical analysis of the personal, social and political context in which the data exists.

6.1.1 Summary of findings

In summary of phase 1, the influence of neoliberalism was apparent when exploring how low consumption behaviours were obstructed; convenient and expedient options were favoured in a rational economic model of decision making, and it was acknowledged that actions were chosen because they were easiest and maximised efficiency in time and money (Coleman, 1990). Yet there was explicit recognition, and emergent analysis, that showed these were bounded by cultural norms and infrastructural constraints, echoing theories of social practice that criticize rationality (Bourdieu, 1990; Shove, 2012). The interacting dynamics of work, employment hours, personal finances, and wide availability of cheap consumable goods fostered a “throwaway society” and encouraged compensatory consumption through a model based around the hedonic treadmill despite an awareness of its unsuitability for bringing more happiness (Keely, 2005). Making up for time spent at work with consumption supports research on voluntary simplicity and its motives, where a choice to spend less time at work is presented alongside a drive to reduce consumption (Boujbel & D’Astous, 2012; Schor, 1998; van den Bergh, 2010). Making these convenient choices and engaging in compensatory consumption were often perceived retrospectively as less fulfilling, and commonly resulted in feelings of guilt and hypocrisy, which provides a more novel insight, allowing this thesis to support recent conceptual literature with empirical data (Soper, 2020). Concern about how the agenda of corporate business was often not matched with that of wider global society, or personal moral and ethical standards, was a concern for the viability of the future scenarios that challenged the norms of today; the control and influence upon government from the private sector to facilitate a capitalist economic agenda was too strong. This highlighted structural barriers as a hindrance to the adoption of low consumption lifestyles, which has been explored in relation to climate change adaptation more generally (Biesbroek et al., 2013), but can offer empirical support in the domain of low consumption lifestyle change. Some people felt ‘locked-in’ to their high consumption behaviour and lifestyle was that their only sense of agency was as a consumer, rather than a citizen (Caruana et al., 2016; Jackson, 2005; Sanne, 2001; Unruh, 2000; 2002). This challenges the notion of consumer sovereignty, which is a free-market mechanism that should influence supply

and demand (Ginter, 1972; Lerner 1972), which has been criticised in previous literature with regards to consumption behaviour (Carrigan and Attalla, 2001; Carrington et al., 2014; Chatzidakis et al., 2007; Jackson, 2005). This also supports efforts to understand the role of social psychology to better understand neoliberalism, where research has suggested shifts away from a sense of self driven by political citizenship towards consumerist individual expression (Clegg & Lansdall-Welfare, 2020; Dawes, 2014; Maxton Lee, 2020).

Participants acknowledged their engagement in altruistic behaviours such as volunteering, or community work, but expressed that this also made them feel good, and that they were motivated by self-interest as much as the good of the community (Dominicis et al., 2017). This suggests transferability of findings from recent research on philanthropy showing that self-interest and altruism are not necessarily distinct (André et al., 2017). Finally, certain modes of consumption that were not as resource intensive, or that were more fulfilling than material accumulation were recognised as a potentially positive way to reorient our consumption away from excess and towards necessity and human needs (Buchs & Koch, 2018; Gough, 2015; Soper, 2020). Responses to a radical degrowth scenario were broadly positive, but often met with suspicion around the absence of engagement with technologically-focussed and development-orientated solutions to climate change which were detailed in other future scenarios.

In Phases 2 and 3, the quantitative findings go some way to support existing literature with regards to hypocrisy and behaviour change (Gamma et al., 2018), and failed to replicate some expected effects of social norms (Farrow et al., 2017; Poskus, 2016). This notable divergence from empirical literature that showed the effects of a dynamic social norms manipulation upon water consumption (Lede, 2018; Sparkman & Walton, 2017), are possibly not transferrable to a more general low consumption behavioural domain. The activation of hypocrisy showed that increased salience of awareness around hypocritical past behaviour could decrease some intentions to engage in high-consumption behaviours, but there was no reliable reproduction of an effect upon policy acceptance. This finds convergence with empirical research that illustrates intentions to change behaviour can be influenced by hypocrisy (Gamma et al., 2018), but illustrates that this doesn't extend to policy support which was as yet unexplored. However, the provision of information about climate change and individual consumption, which

detailed the effects of consumption upon climate change and resource scarcity, was effective in increasing policy support supporting existing research (Espinosa & Stoop, 2021; Latinopoulos et al., 2018) and a social mandate for action (Howarth et al., 2020; Wills, 2018); yet social norms did not change policy support, which was inconsistent with empirical research (Hobman & Ashworth, 2013). The relevant policy support was increased via information provision for stronger regulation, government intervention in market supply chains, and policies that support radical changes to work, community organisations and home life in line with lower-consumption lifestyles. In sum, social norms for consumption might warrant more exploration, perhaps applying a stronger manipulation, but hypocrisy appears to be useful for increasing behavioural intentions to consume less, and information provision increases support for low consumption policies.

6.1.2 Research questions

Taking these findings together can help us to answer three main overarching research questions of the thesis:

1. What facilitates or obstructs acceptance of low-consumption lifestyles?
2. Are there ways to frame low-consumption lifestyles so they are more acceptable?
3. What can we learn about the different policy approaches for the governance of low-consumption lifestyles?

When addressing the first of these questions, the findings of this research have illustrated that neoliberalism exerts considerable influence on the availability and acceptability of low consumption lifestyles, many of which are prohibitive to, and limiting of, the scale and speed of societal transition required to effectively mitigate climate change and reduce consumption to sustainable levels of resource use and associated carbon emissions. This influence is recognised in perceptions of social, cultural and economic life, where individualism and weak governance are contrary to the requisite local and global cooperation for agreements on targets and regulations required, as well as at the level of the individual level, where agency in our moral and ethical imperatives are being severely limited to models of consumer sovereignty and an understanding of decision-making dominated by deregulated market forces outside individuals' control. This research answers calls to understand why barriers emerge and change (Eisenack et al., 2014), rather than merely locating more barriers themselves (Biesbroek et al., 2013), and

illustrates that neoliberal capitalist individualism produces both structural and psychological barriers to public acceptability of low consumption lifestyles. However, as we have discussed, this dominant cultural norm also offers promise for utilising preferences for self-interestedness and forms of consumption (experiential and utilitarian) which might be less damaging to the environment but still contribute to well-being and satisfaction.

These findings seek to both co-opt and appropriate the trappings of the status quo by appealing to instruments of neoliberal society and the proclivities of individuals living in it, by framing towards an altruistic self-interest and communitarian individualism. Additional framings were explored, highlighting inconsistencies between research phases, where qualitative data suggested that social norms might be useful for framing low consumption lifestyles, yet the quantitative experiments did not elicit significant results. Hypocrisy framing was effective for increasing behavioural intentions to consume less. Information provision was the most effective for increasing the public acceptance of policy.

This is also bolstered by the prospect of offering a reorientation of consumption that allows for the political mandating of policy that prioritises socio-ecological harmony by influencing structural change in society through increased regulation and supporting lifestyle changes. If policy can communicate the provision of information, particularly through deliberative methods it appears that it may be possible to increase the awareness and acceptability of low-consumption lifestyles. The potential for increased life-satisfaction from more radical lifestyle changes in the degrowth scenario was positively received. A struggle was observed where participants felt unable to change their behaviours, and as such stressed a preference across all phases of the research for government to lead the way in forms of regulation, to facilitate low consumption.

The following subsections of this chapter explore the theoretical implications of findings from across these research phases on conditions for increasing the public acceptability of policy and behaviour change initiatives. These include theoretical implications upon: (a) the wide range of influences that neoliberalism has upon individual agency and structural barriers to acceptance of low consumption lifestyles, (b) the shortcomings of behaviour change models that treat individual and society separately when considering low consumption lifestyles. These can be taken forward to practical implications: (i)

increasing public acceptability of low consumption lifestyles by building a social mandate for policy, (ii) the role of using information provision to increase policy support and risks of invoking hypocrisy in order to reduce behavioural intentions (iii) the potential for increasing adoption of low consumption lifestyles by appealing to self-interested motivations. Findings will be situated in reference to existing theory and practice in order to clearly demonstrate these implications.

6.2 Theoretical implications

6.2.1 Neoliberal agency and consumption

As previously examined in chapter 4 neoliberalism has been a potent concept for helping to understand consumption practices in this research. All themes emergent from the data in the qualitative research phase can be understood as expressions of a deeply entrenched neoliberal culture exerting influence on the availability of action. Neoliberal social structures have been said to “set many of the rules that both constrain and empower social behaviour” (McDonald, Gough, Wearing & Deville, 2017, p. 363-364). In relation to a critical realist framework, a process of retroduction allows us to accept the claim that neoliberalism is the necessary condition for the activation of consumption behaviours. That is to say that its unquantifiable but causal influence might be what limits us to certain modes of consumption and agency, and therefore it is neoliberalism that so often obstructs an engagement in low consumption lifestyles. Experimentally manipulated interferences with the typical operations of a neoliberal free market throughout the design of Phases 2 and 3, specifically provision of information and increased awareness of inherent hypocrisy, increased likelihood of intentions to consume less, and support for regulation and radical lifestyle changes respectively. This subsection will explore the obstructing and limiting role, in reference to existing research, and a practical solution for turning this towards the activation of low consumption lifestyles will be offered in a following section later in the chapter.

The research findings that place neoliberalism at the centre of the obstruction to low consumption lifestyles show that the structures of society have a profound impact on the psychology of the inhabiting individuals, evidencing the need to focus on both structure and the individual. There remains a paucity of empirical research that specifically looks at what radical and systemic changes to the world’s economic structures might mean to the lifestyles of individuals, but this research goes some way towards challenging the

dominance of orthodox neoliberal policy and models of economic growth as mechanisms for change with regards to consumption behaviour. This research uses empirical research methods to lend weight to literature that seeks to understand this complex interrelationship of a capitalist culture and the individual. We learn that neoliberal individualism affects the way we consume material resources to the point where its functions and features are taken for granted, and aspects of individualism and self-interest are present even in the acceptance of low consumption futures.

The propensity for convenience and expedience towards greater efficiencies, the drive for self-interested engagement in otherwise altruistic behaviours, and the understanding of how government and business interact, display evidence for how neoliberalism has invoked an *internalized corporate culture* (Kanner and Soule, 2004) and an entrepreneurial sense of self (Adams et al., 2019). Exposure to the dominance of corporate culture in work, social and economic life spills over into personal life and individual psychology, influencing our decision-making capacities. The reported results from this thesis provide an empirical basis to help recognise the difficulties that neoliberal ideology creates for an individual to operate (live!) outside of the market, and to be able to imagine an alternative way of living (Fisher, 2009; Latouche, 2015; Teo, 2018).

By providing participants with new visions based on extant theory, research, and practice, as this research did with vignettes in Phase 1, we have been able to assess the public acceptability of the new ways of living. The research conducted in this thesis evidences a psychological manifestation of the neoliberal in terms of what motivates our action and constrains our agency within the social context of our everyday lives. Behaviours and attitudes were affected by this dominant mental landscape where many participants experienced a difficulty in the ability to imagine the viability of scenarios outside the status quo, even if they themselves would prefer them. Responses to the vignettes evidenced a tendency to prioritise self-interest as a motivation for the alternative lifestyles, as well as being a main factor in the acceptance, support, and motivation for altruistic behaviours in their own lives. Where existing research has in fact found that self-interestedness is linked with lower engagement in environmental behaviour (Grouzet et al., 2005; Maio et al., 2009), we might suggest that there is more nuance in this dynamic when explored qualitatively, and perhaps altruistic values and

self-interested values are not diametrically opposed, as some research tools tend to require them to be (Schwartz, 2007). Rather our analysis shows that a requirement and pressure to make decisions with regards to consumption within the boundaries of the market perpetuates neoliberal individualism where self-interested motives are more readily mobilized. This supports some recent empirical findings and theoretical literature (Dominicis et al., 2019; Soper, 2020); the practical implications of this observation are discussed later in this chapter.

Recent efforts to explore the role of neoliberalism and social psychology have suggested that political citizenship is outfavoured by consumerist agency (Baumann, 2013; Bettache et al., 2020; Clegg & Lansdall welfare, 2020; Cosgrove & Carter, 2018; Dawes, 2014; Evans et al., 2017, Maxton lee, 2020), and results from this research are strongly supportive of this proposition, emphasizing its relevance in the domain of climate-relevant low consumption. Once again, there appeared to be an awareness from the participants of the limitations of their agency and the unrealistic reaches of changing their individual action in order to influence social change. These individual actions were noted as being primarily in the role of consumer, though it was recognized that a stronger government, one less indebted to businesses and corporations, could facilitate greater levels of change towards low-consumption lifestyles. Practical implications of this are discussed with regards to social mandates from deliberative methods later in this chapter.

Quantitative data provided empirical evidence that information provision on the links between climate change and individual consumption, and the invocation of advocacy and hypocrisy inducement can increase behavioural intentions to consume less. These findings could be reinforcing a model of rational decision making, and the concept of consumer sovereignty, by creating a level playing field for transparent decision-making, as opposed to the obfuscated and complex dynamics of a free market where there is minimal regulation required around supply chains, and any unethical practices are not required to be divulged at point of purchase. Indeed, organisational disclosure of greenhouse gas emissions has been identified as an immediately effective action that could help trigger societal transformation to net zero (Otto, 2020). As it stands, perhaps the mechanism for neoliberal consumer sovereignty is suffering from a deregulated market which makes no efforts to reveal the harmful effects of production and

consumption, at the risk of reduced profit – the increased regulation, or an informative agenda to make these effects clear may be required to improve decision making processes in a market-oriented society.

The dominance of a neoliberal worldview, observed in many individual perspectives, illustrate the challenges that this poses for the pathways for social change that are outside of the current paradigm, and is welcome empirical support for many writings in degrowth that talk of the importance of ‘decolonising the imaginary’ (Latouche, 2015; Liegey & Nelson, 2020), and the need to recognise new pragmatic approaches for co-opting the neoliberal status quo towards socio-ecological harmony (Soper, 2020). These findings from across the research phases also have implications on the models of behaviour change that we can try to understand decision making around low consumption behaviour, which will be explored in the following sub-section.

6.2.2 Models of behaviour change and public understandings of climate change

There are many psychological theories and models for behaviour which can help us understand consumption behaviours, some of which were discussed in Chapter 2 (also see Jackson, 2005 for a review in reference to consumption behaviours). We can recognise how different elements of consumption behaviour and policy support observed in this thesis can be explained by a variety of different models. Prioritising convenience and self-interest has been shown to be prevalent across the data presented here, lending weight to rational choice models (Coleman, 1990). However, there are components and exogenous factors highlighted in the qualitative work that are not always recognised or understood in these models. Our research showed that when people made decisions according to rational choice and expectancy-value models, their reflections, especially of the moral and ethical imperatives, illustrate that other dynamics that are not captured, namely resultant guilt, hypocrisy, and feelings of being locked into their practices and behaviour by external influences such as cultural norms and the politico-economic context. These findings partially support the relevance of social practice theory, which de-emphasises attitudes and values placing the individual as a subordinated and subjugated actor with little to no influence upon their own actions (Bourdieu, 1977; Giddens, 1984; Kurz et al., 2015; Shove, Pantzar & Watson, 2012). This research found several cases of people motivating themselves away from these dominant ways of living (e.g. by choosing to work less), or express preferences for certain lifestyles (e.g. to

consume ethically), for which they are not always easily supported by cultural and political structures under which individuals are operating. The perspective that neoliberalism exerts power of the availability of individual action is only partially consistent with Marxist, critical theoretical perspectives, where a populace are being manipulated and controlled by the market and culture (Adorno, 1991; Haug, 1986; Marcuse, 1964; Leiss, 1978; Lodziak, 1995). However, the self-reflection and awareness from participants about these powerful dynamics means that they fall short of understanding our data fully due to their commitment to the consumer as a subject who is blind and unaware. This research illustrates how various behaviour change models only tell part of the story when examining the motivations behind behaviour and fail to recognise and account for discontent in the actors who express a preference to behave in other ways than they actually do, consistent with literature detailing 'regretted purchases' (Roberts et al., 2017). One must accept that whilst various models, taken separately, can provide defensible explanation for some human behaviours and help us to recognise the cultural norms and societal structures that guide the individual towards prioritising certain ways of living that are inconsistent with low consumption futures, but that we must remain open to interpreting data from multiple perspectives in order to gain the fullest picture and richest data. This multiplicitous approach is consistent with a critical realist framework.

Taking together many findings of this research, one model alone cannot appropriately account for how public acceptability for low consumption lifestyles can be completely understood; rather, different models can help us learn more about the different issues that have been raised. Where rational choice models illustrate the propensity of people towards self-interested individualism, they offer no theoretical insight on the deeper feelings of dissatisfaction and guilt that arise from them, nor of the existence of altruistic and collectivist practices. The evidence presented on social norms, whilst strongly emergent in the thematic analysis in Phase 1, was not statistically significant in Phase 2, suggesting further complexity in how we can measure and frame norms in complex domains such as consumption behavior. And finally, the expressions of people who feel locked into doing what they know and what is most familiar find traction with habitual models and social practice (Kurz et al., 2015).

Ultimately, the majority of these models, particularly those more dominant in psychology

presume agency of individuals as consumers, which is challenged by the findings in Phase 1, as well as the contextual retroductive process helping to situate the findings as constrained and limited to neoliberal ways of living. This highlights the importance of cultural theory, such as structuralism, and theories of social practice. Our research supports critical theoretical approaches where the deconstruction of power is required to illustrate how embedded our environmental behaviour is socially constructed within the surrounding society and culture (Giddens, 1984). The influence and power that neoliberalism exerts through structured institutions of finance, governance and global society on the whole, has a lasting impact on the psychological availability of certain types of action, specifically the public acceptability of low consumption lifestyles. The data presented in this thesis illustrates that this ideological commitment to neoliberal economism manifests in the psychologies of the society's inhabitants, which necessitates the observation and treatment of data through multiple models of understanding, at both the level of structure and individual. In reference to empirical literature green consumption, the conditions for effective decision-making required availability of alternative and perceived sense of agency (Nguyen et al., 2018), both of which our research highlights as being limited by neoliberalism. The research also shows that there are ways to influence policy support, and behavioural intentions, by understanding models of behaviour and decision making from rational choice models and expectancy-value models through information provision and evoking hypocrisy. Social change will have to confront the structural changes needed to reduce the influence of neoliberalism, as we suggest with increasing policy support for regulation and community empowerment, and this might be targeted through understandings of human behaviour that operate within its structures of self-interested individualism.

Indeed, we need not entertain this schism in ethical consumption literature which seeks to either maintain a focus on *either* cognitive decision making *or* sociocultural dynamics (Hiller and Woodall, 2019). We find that there is little practical difference between a willing participant making individualist and self-interested decisions freely as a sovereign agent, or unwillingly as a result of social distortion and manipulations of consumerist society (Soper, 2020). And in fact by accepting both as different ways of producing equally valid and useful knowledge, we can hope to build more integrated policy that incorporates a multitude of approaches to changing behaviour. The analysis shows that we should not treat consumption problem as a personal and individual

decision-making problem or a culturally deterministic and socially constructed power dynamic (whilst recognising their distinct contributions to understanding) and goes beyond to imagine a new form of empowered citizenship and a contemporary consumerism, in line with Soper's (2020) vision of an 'Alternative Hedonism' which will be explored in practical implications below.

Many of the insights and findings from this thesis speak across the boundaries of individual decision making, cultural norms and social practice, blurring the boundaries of what are predominantly kept separate within academic study of consumption behaviour in psychology and sociology (Whitmarsh et al., 2011). This discussion of theoretical implications of how our findings are situated in reference to existing theoretical models builds upon a call for multi-model pragmatic approach to research (Wilson & Chatterton, 2011). The critical realist perspective of this mixed-methods research allowed for the acceptance of a variety of perspectives, where others have argued for the merit of epistemological purity (Shove, 2010; 2011). Our findings necessitate the recognition that rigid epistemological assumptions are useful yet limited, and a new way to recognise understandings of behaviour that bridges this is essential for practical engagement with the changes required at the levels of individual and structure – more research adopting a critical realist framework should be encouraged by this. The approach to deal with the production of knowledge in this way means that suggestions for practical application of research findings from this thesis can attempt to argue for both individual and system change, to both empower and absolve the individual from the responsibility to change their beliefs and actions, in order to influence systemic changes through individual, community and national, even global, political citizenship.

6.3 Practical implications

This research has evidenced a complex set of dynamics working towards the public acceptability of low consumption lifestyles by illustrating that individual preferences for structural change should be considered a viable and pertinent focus of environmental social sciences – and echoes recent claims that both individual *and* structural change are required; that these are not separate foci for distinct disciplines (Capstick et al., 2020). Furthermore, by acknowledging that the ways we act as individuals, and the way we form an electorate, have the potential to give agency to people in a way that recognises

individual freedom and collective action, outside of markets and atomistic decision making (Soper, 2020).

Specifically, practice should consider how social mandates for policy can help to provide policymakers with the confidence to introduce the radical changes we need as part of their manifestos and governance strategies. Transparent and scientific information about climate change mitigation and consumption behaviours could be used to build support for policies that introduce stronger government regulation on personal consumption and business practices, and those that facilitate lower consumption lifestyle changes such as working less and fostering community level solutions to resource use. Considerations are discussed around how one can co-opt some elements of neoliberal individualism and motivate them towards more socio-ecological harmony.

6.3.1 Utilising social mandates to overcome the governance trap

When given the opportunity to express their agency as a citizen, and not just a consumer, through support for policy, there was preference for low consumption pathways that increased structural changes to society by both increased regulation in a top-down manner as well as supporting grassroots initiatives from the bottom up. In addition, the likelihood of increasing support for these pathways was most effectually provoked by the provision of information. The findings go some way to support an understanding of behaviour change that can overcome the 'governance trap' of public acceptability to climate mitigation (Pidgeon, 2012). However, where Pidgeon (Ibid.) claims that an unwillingness in the public to accept either the reality of climate impacts or the scale of radical lifestyle change required to further avoid them, the results from this research provide more hope when focusing on the more specific behavioural domain of consumption behaviour. Rather than detailing an unwillingness to accept radical lifestyle changes, qualitative analysis suggested that there is in fact a deeper satisfaction and meaning from life to be gained in alternative visions of low consumption lifestyles, and quantitative research shows that information campaigns that clearly set out and connect the pitfalls of consumption and climate catastrophe increases a willingness to support more government regulation and radical lifestyle changes in order to reduce consumption.

There are promising signs that this research may help to increase the viability of a democratically driven solution to climate change, which has been challenged by others (Bluhdorn, 2013; Giddens; 2009; Shearman & Smith, 2007). The importance of electorally mandating radical economic and political change is brought to the centre of solving the consumption problem by this research, supporting existing research on climate action strategy (Howarth et al, 2020) and new theory on targeting consumption behaviour change (Soper, 2020). The prospect of an eco-dictatorship, which appears somewhat of a necessity for climate mitigation in the absence of a democratic pathway, is neither appropriate nor desirable, and we should rather seek a groundswell of public support and acceptability for lifestyles changes away from growth-centric models (Victor, 2008). This should be attempted through deliberative methods, discussions and information provision regarding the reality of how climate change is affected by consumption.

This also offers empirical evidence to models for social mandate offered by Willis (2018) and others (Clark, Webster, & Corner, 2020). Clark et al., (2020) provide a model where a virtuous cycle of social change recognises the ability of individual changes to attitudes and beliefs have the power to create a social mandate for policy to regulate and legislate for measures that remove structural barriers and facilitate behavioural adoptions further down the line. In terms of policy recommendations, the insights from this study should bolster support for the use of climate assemblies, where deliberative democracy can play a role in information provision and citizens can play an active role in the policy process.

To pre-empt a critique of this model where one might suggest that it relies still too much upon the aims and motivations of individuals, the fact that research in phase 2 and 3 of this thesis found support for more regulation that could help to curb the systemic dominance of free markets and increase the support for regulation upon businesses and modes of production that rely upon consumption is a promising acknowledgement. Not only can we socially mandate more environmentally focused policies, there is the potential to increase a social mandate for the reform of markets and role of governance itself, in order to benefit socio-ecological harmony.

6.3.2 Information provision and hypocrisy activation: opportunities and risks

Providing information that links lifestyle level consumption with climate change and resource scarcity was shown to increase public acceptability of low consumption policy,

whereas the additional activation of hypocrisy was required to reduce behavioural intentions to consume. These findings augment the qualitative findings that illustrated how a sense disconnection caused by global supply chains and unregulated labour made it difficult to consume ethically. They also add a level of understanding to the reports of a sense of consumer disempowerment that reduced agency for individual action. However, increasing the salience of hypocritical views held by individuals who pledge for low consumption lifestyles, they assume the role of a consumer, and intend to act accordingly, but do not tend to support policy that might create a social mandate. This lends support to the claim that if individuals are encouraged to make decisions on what they do with regards to social and environmental consequences they are acting as citizens, rather than as merely 'consumers' (Soper, 2020).

Information about the dangers of over-consumption, increasing the awareness that individual behaviours can contribute to problems of consumption were found to increase support for policy that represented moves away from neoliberalism (market regulation and community development). Information provision is variable in its effectiveness across different behaviours (Espinosa & Stoop, 2021), but has found traction here in the domain of low consumption policy support, as it has in existing research on policy for dealing with plastic waste, showing an influence on policy preference, but not behavioural intentions (Latinopoulos et al., 2018). Specifically, information provision led to more support for (a) stronger national government interventions to legislate against harmful business practices and consumer engagement in the most harmful consumption practices, and (b) radical change associated with a degrowth scenario where local community led governance and an infrastructural sharing economy were developed to give people more control in new ways of living where they worked less and had a more active role in consumption rather than one that is outsourced to commodities. This shows that information created support for absolution of individual responsibility, but also the support for increased empowerment individuals as members of family life and participants of local community evident within the radical scenario. Randomised control experiments on the types of information, and the exploration of how these different types of information might influence specific variables such as perceived behavioural control, self-efficacy with express relevance to issues of consumer sovereignty would be welcomed to make this relationship clearer.

The effects of the hypocrisy manipulation upon policy support were less clear, but nevertheless can help us further understand how the way we intend to behave is different to how we think about policy support. Marginally significant results in phase 2 that found hypocrisy inducement increased support for the deregulation of markets and neoliberal policy, which supports an interpretation that empowering people to believe that their moral discrepancies that are highlighted in their own hypocrisy can reinforce the belief that individual intentions to change behaviour. It appears that the notion of consumer sovereignty which neoliberal free markets are founded upon are not functioning appropriately, for hypocrisy and guilt appear to be retrospective outcomes, as was shown in phase 1, or stopping short at behavioural intentions, unable to sublimate into action in the face of systemic and structural barriers. This offers empirical corroboration of Carrington et al.'s (2016) view of the maintenance of consumer sovereignty as a dominant mode of agency for social change *despite* the attitude behaviour gap illustrates and in fact reinforces neoliberal capitalism *because* it fails. In resolution to this, by offering information about climate change and consumption, without hypocrisy, we can see that policy support for government regulation to ban harmful practices and products is increased. It is possible that this helps to absolve the responsibilities and sense of personal duty that is placed upon individuals in a neoliberal free market. The illusion of consumer sovereignty that is exposed when people are made to feel hypocritical as we found in the quality of experiences in Phase 1, or as was induced in Phases 2 and 3, reinforce the sense of neoliberal agency that an individual is made to feel responsible and blamed for shortcomings, and this permits them to see the world from an individualist and market-driven perspective.

Awareness and motivation to reduce consumption are not enough to enact the changes themselves, and instead leave people with guilt and remorse, supporting the existence of an attitude-behaviour gap (Chatzidakis et al., 2004). This guilt means that people feel responsible for their behavioural shortcomings and moral inconsistency, as well as having to endure distress and negative affect. The observation that even those with motivations to alleviate this psychological discomfort, are failing to make the required changes in behaviour commensurate with effective climate (and hypocrisy) mitigation, there is even less hope to change the behaviours of those who simply are not aware or motivated. Translating these measures of behavioural intention into a political mandate, and behavioural action might be a possible avenue to explore further. Although, we know

that such change will require structural changes that are commensurate with regulation and lifestyle change in order to lead to increased uptake of low consumption lifestyles. In order to achieve this, the research findings from this thesis illustrate that information provision and deliberative engagement are likely to be more successful and appropriate than induced hypocrisy. This might be particularly relevant to policy geared towards the individual, as we see in the House of Lords report on 'Behaviour Change' (2011), where there are a number of policies that are suggested across a wide range; from fiscal dis/incentives to 'nudges'. The 'nudges' include information provision, and social norms, with a suggestion of regulation to be implemented to aid individuals in changing their behaviour. The report notes that regulation has a possible role to play in ensuring the practice of businesses is legally required to provide information which can help to guide individual decision making, which should be more seriously implemented in government policy, against the trend of neoliberal deregulation. Furthermore, framing these types of regulation in a way that highlights what can be gained through low-consumption rather than a punitive framing would therefore be recommended.

6.3.3 Positive projections of low consumption lifestyles

Not only are widespread consumerist lifestyles incompatible with the aversion of a climate catastrophe as we have illustrated in Chapter 2, our research findings have shown that it is often existentially undesirable and psychologically harmful (Kasser, 2002; Soper, 2020); participants in the research phase 1 were reluctant to self-identify as materialistic and as someone who lived a high consumption lifestyle, and reported feeling trapped into regretful patterns of consumption, which support existing research that details regretted purchases (Roberts et al., 2017) and recognises a trend for 'anti-consumption' (Hansson, 2018). We can recognise the potential in how a positive framing and reception of degrowth lifestyles might help low consumption lifestyles to prosper and proliferate – they offer a lifestyle freed from the constraints and losses of consumerism. Framing this aversion of negativity and guilt as a self-interested motivation could be mobilized as a strategy for increasing the accepting a degrowth future, as opposed to something that detracts from it. Although, many expressed an unwillingness to accept their own materialistic desires when directly confronting it themselves, they were simultaneously disclosing accounts of the happiness they experienced if the materialism represented low consumption practices or facilitated environmental goals. Finding a way to use this self-

interested desire for gratification through forms of consumption could be a useful avenue for future research to explore. After all, research from Dominicus et al., (2019) has shown that self-interested framing can lead to more uptake in pro-environmental behaviours; and co-benefits research in health psychology provides a promising avenue to explore what else can be gained and could be applied to the domain of climate mitigation behaviours, which has been recognised in literature on energy policy supporting mobilisation of intrinsic motivations (Dowd & Hobman, 2013). The recognition that neoliberalism is entangled with our consumption behaviour has been well documented in this research, and whilst there is evidence to suggest there are useful ways to combat this with information provision and the building of social mandates. There is an opportunity to look at the findings of our research to see where some of the dominant social values reproduced by neoliberalism might be geared towards the fostering of socio-ecological harmony.

This research has found support for increased regulation and government supported transitions in both qualitative accounts, and quantitative data regarding policy support. This was concurrent with observations that there was also a prevalent wariness of socially regressive scenarios of the future seen as overly nostalgic of the past, or visions of a society that is considered too controlling and limiting on freedoms. This research has highlighted that freedom of choice is often curtailed by markets, structures of power, and ways of living in a neoliberal society, to the point where consumers feel trapped and unable to influence change - but it has also found that perhaps this can be overcome by new freedoms to live more simply, more locally, and be more fulfilled, rather than adhering to what is commercially viable, if only it were more convenient and available to do so. This is most clearly evidenced in the discussion between vignettes that represented incremental taxation and the radical degrowth scenario, where incremental policy that increased socio-ecological harmony with fiscal measures were discussed less favourably than radical lifestyle changes where more was to be gained for an individual's well-being and quality of life. Analysis of qualitative data detailing hypocrisy and the co-benefits of individual environmental actions echo Soper's call for an alternative hedonism, that "points to the disenchantments of consumers themselves" (p.4, 2020). Similarly, participants' expressions of the co-benefits (e.g. exercise from active travel, satisfaction from learning how to repair items, etc.) of sustainable options parallel with Soper's argumentation for encouraging low consumption lifestyles by "appealing to what people

could expect to gain from adopting more responsible ways of living” (p.4). This could be explored through benefits of decreased work hours that can break the work-spend cycle (Schor, 1998), by facilitating more freetime, particularly an exploration of ‘self-realising’ activities such as creative and leisure activities, as well as ‘self-provisioning’ activities, such as gardening or making clothes (Arnold, 2021). Increasing the positive role of utilitarian or experiential consumption, for example, could be important to highlight and build support around also speak to this notion of an alternative hedonism. Policy suggestions in this area should be mindful that some forms of experiential consumption may not lead to overall reduction in consumption levels, particularly when certain leisure activities are upscaled, such as sport and travel are concerned (Hanbury et al., 2019). Furthermore, policy makers should heed the warning that reducing work hours without reducing wages may not have the intended effects with regards to lowering consumption, where the reduced income and increased time would result in less consumption. This is noteworthy due to the recent trialing of four day weeks in Scotland, where employees will not take cuts to their overall income (BBC, 2021).

6.4 Limitations and suggestions for future research

Whilst limitations of the research findings and suggestions for future work have been part of the discussion sections of the empirical chapters, as well as mentioned in this general discussion, this short subsection will reiterate them in order to fully contextualise the overall contributions.

Participant sample bases in across both research phases were self-identified as politically left leaning samples – who are statistically more likely to support green agenda, environmental policy and engage in PEB (Milner et al., 2019 and Cruz, 2017 for meta-review) and therefore possibly low consumption behaviours. However, as has been previously disclosed, the political orientations were broadly similar across conditions and groups. Additionally, we can note that even those who are politically aligned with environmentalism are still struggling to enact their moral preferences. It may be difficult to invoke policy support for the inculcation of low consumption lifestyles in those individuals who are more on the right where it may be inconsistent with their values (Kahan, 2012), or in denial of climate change and scientific consensus which is apparent in a polarized political landscape (Deryugina & Shurchkov, 2016); more research should endeavour to test this experimentally. Furthermore, it may still be possible to appeal to

their self-interested individualism by promoting the lifestyle benefits of low consumption, as we have suggested as a practical application of findings.

Another methodological limitation of the focus groups could be that there was no explicit discussion of economic growth, or criticism of neoliberalism, as part of the deliberative information. Whilst this is considered a methodological strength, as it likely reduced polarized opinion regarding political ideology and commitment to certain worldviews, there is perhaps more to explore now that our research has laid down some foundations for exploring these issues. The application of findings regarding information provision could be used in deliberative workshops and citizens assemblies, for example, and further explore the relevance of these concepts to low consumption futures. Once again, this builds on support for the view from others arguing for deliberative citizen engagement (Clark et al., 2020; Howarth et al., 2020; 2018; Willis, 2018).

Information provision in these experiments was presented in the absence of competing narratives, which would almost certainly be a practicality to consider in the real-world application of the findings here. There is no evidence here to support claims that scientifically rigorous information, like the kind that was presented in the materials used for this study, would be more effective than any other type of information at provoking policy support for measures appropriate to mitigate climate change in line with Paris agreement. It would be useful to empirically test and experimentally manipulate different types of information, as we know that different strategies for communication can result in different outcomes (Moser, 2010; 2016). It is possible that competing counter-narratives that stress technological fixes and a need for economic growth, or political motives that sow discontent and climate denial, could in fact reduce support of policy measures for more regulation and radical lifestyle change, and instead raise support for policy that seeks to maintain the status quo and/or further deregulation and personal responsibility to act.

Order effects were not controlled for in the presentation of the dependent variables for Phases 2 and 3. Therefore, it is possible that exposure to policy frames in advance of behavioural intentions might have provoked insight and reflection. The reading of policy pathways, after the participants had been exposed to the climate information may also have had an effect on behavioural intentions. The fact that someone has just indicated support for a policy they believe to be commensurate with reducing consumption and

mitigating climate change might have primed them to respond to behavioural intention questions differently. Randomised presentation of the DV blocks could help to overcome this problem in replication studies, or research that seeks to advance understandings that have been developed here.

One can interpret that a failure to activate dynamic social norms in the experimental phase is a result of the deeply entrenched individualist neoliberalism and widespread consumerist aspects of our lifestyles in the UK. Perhaps a mere priming manipulation was not explicit or specific enough to create a true perception that low consumption was 'socially normal'. This relevance of social norms in Phase 1 means that there is the potential for more insight to be gained despite non-significant findings in experimental models, and further study of the concept and its influence on public acceptability is further warranted by literature on the relevance of the concept to dismiss it entirely (Poskus, 2016; Farrow et al., 2017).

Practical implications of research findings resulted in the exploration of the possibility of co-opting aspects of neoliberal individualism and self-interestedness. Testing positive frames of low consumption, geared towards appealing to self-interested motives for socio-ecological behaviour could form the basis for experimentation with a theory of alternative hedonism as a central concept. However, this should be stipulated not to be motivated solely by self-interested *financial* motives, which have found to be unhelpful in promoting PEB and low consumption behaviour (Evans et al., 2013), but rather around hedonic pleasures of engaging in a new way of living. Further exploration of the psychological mechanism that might be relevant to the limiting effects of neoliberalism would also help to further understand the relationship between structure and agency as we have started to uncover with neoliberal hypocrisy. For example, further understanding the neoliberal influence upon a concept of learned helplessness might explain why research has shown it to be predictive of environmental concern and PEB (Landry et al., 2018). Another suggestion along these lines might be to consider the relevance of self-determination theory (SDT) (Deci & Ryan, 2000) which emphasises the need for autonomy in one's life, which might be applied to address perceived constrained individual freedom and dissatisfaction with neoliberalism. Literature suggests that using SDT has been useful for changing health behaviours and increasing psychological well-

being (Ntoumanis et al., 2020), which might be relevant to consider and integrate in future exploration of low consumption behaviours.

Fundamentally, a limitation to the study is that behavioural intentions were explored, rather than behaviour itself, yet the ‘intention-action gap’ is a well-known problem in behavioural research (Nguyen et al., 2019). Research shows that this gap can be reduced by though availability of green products and other supporting infrastructure, but these factors were not measured or manipulated in this research. Indeed, a fruitful area for future research would be to test interventions that *combine* information provision with more structural or social measures, such as constraining access to high-carbon products or convening group-based discussions (Capstick et al., 2015). Whilst much research shows that hypocrisy is useful in changing behaviours, as our general discussion of findings has shown, there are some structural barriers to translating behavioural intentions to consume less into behavioural actions, such as availability of alternative options.

6.5 Conclusion

It appears that the notion of consumer sovereignty which neoliberal free markets are founded upon is not functioning appropriately, and that increased transparency in information provision and activation of hypocrisy might help to improve this mechanism and increase behavioural intentions to reduce consumption. However, this strategy risks reinforcing the dominance of neoliberalism and with this reducing the opportunity for structural change, which could be less likely to facilitate behaviour change. One should provide clear and factual information about the risks of consumption, and present top-down solutions as a means to ameliorate the hypocrisy and dissonance that is emergent from individual decision making and neoliberal perspectives on responsibility and social change.

The paradox of political feasibility and social desire for change, where both citizens and governments are looking to each other to make the first move, as recognised in previous literature as a ‘governance trap’ is partially addressed in this research. This should be explored further using a multi-model approach that recognising the importance of psychological, economic and social models of behaviour and that using this approach to individual and structural change can help to more fully understand the best routes towards widespread public acceptability, and ultimately adoption, of low consumption

lifestyles. Using information provision and deliberative methods in communicating the need for social transitions can increase support of policy that invokes radical change and increase the likelihood of creating a social mandate for effective governance to help reduce consumption levels and foster lifestyle change commensurate with climate targets. This strategy is also suggested to increase policy support for measures that can increase regulation and foster new lifestyles that are divergent from high consumption neoliberal individualism. This increase of policy support may help to provide a social mandate for structural change that can help to bridge the gap between intentions and actions which result in hypocrisy and obstruct social change.

Neoliberalism was felt strongly in the accounts of participants in Phase 1 when discussing its associations with business, government and notions of 'development', and critical accounts were made about a sense of cultural regression associated with degrowth and a potential lack of enjoyment around some aspects of low consumption lifestyles. There is the opportunity to co-opt this drive for progress in a more economic sense into a drive for personal and community development. Whilst one must propose that the minimum level of change would be to significantly increase regulation, there is also a need to envisage new forms of consumption. The most pragmatic way of doing this might indeed be to appeal to a self-interested individualism that we found was still a very important factor in decision making in the realm of consumption. Patterns of consumption need not be as damaging as they currently are, and a combination of altruistic drives for socio-ecological harmony and individualist self-interested motivations may still be met by reframing of utilitarian consumption, that serves the basic human needs, or experiential consumption that might more easily be facilitated by a sharing economy or collaborative forms of material accumulation. This research shows that policy and communications geared towards increasing the public acceptability of low consumption lifestyles should therefore inform, emphasise and explore what is to be gained by alternative forms of living, as well as what might be forsaken.

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Appendices

Appendix 1. Initial recruitment survey for participants in Phase 1



PhD Student Research Project

This study is being carried out as part of a research project based in the School of Psychology at Cardiff University. We are interested in people's perspectives on current topics, and what the future might be like.

You will be paid **£50 for 3 hours** of your time for a group discussion on your views about a variety of issues in society. This will take place on a weeknight evening in September (dates to be confirmed). This discussion will be recorded and used for the research project. Drinks and biscuits will be provided during a 15 minute break at the midway point.

To see if you are eligible to take part in the study we need you to complete this screening survey, which should only take 1-3 mins. If you are selected, you will receive more information about the event, including specific time and locations of the event, in due course. You will receive payment at the end of the group discussion.

Data will be anonymised as soon as data collection is completed and stored confidentially.

We will not use your data and information for anything else other than the research project and will not share any of your contact details with anyone.

If you have any questions or concerns please feel free to contact any of the researchers involved in the project, using the contact details below.

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Appendix 2. Pre-focus group questionnaire of social psychology variables

1a) Which of the following do you think should be the UK's highest priority, the most important thing it should do? (Please circle the number)

1. Maintain order and stability in the country
2. Give people more say in government decisions
3. Fight rising prices
4. Protect freedom of speech

1b) Which do you think should be the UK's next highest priority, the second most important thing it should do? (Please circle the number)

1. Maintain order and stability in the country
2. Give people more say in government decisions
3. Fight rising prices
4. Protect freedom of speech

2) Please read each of the following items carefully, thinking about how it relates to your life, and then indicate how true it is for you. (Please tick the in appropriate box)

	Not at all true			Somewhat True			Very True
Most days I feel a sense of accomplishment from what I do.							
People are generally pretty friendly towards me							
I generally feel free to express my ideas and opinions.							
I often do not feel very capable.							
I consider the people I regularly interact with to be my friends.							
I feel like I can pretty much be myself in my daily situations.							

3) How important are the following issues in your personal life? (Please tick the in appropriate box)

Statements	Not at all important						Extremely important
Freedom, creativity, independent, choosing own goals, curious							
An exciting life, a varied life, daring							
Pleasure, enjoying life							
Ambitious, influential, capable, successful							
Social power, wealth, authority, preserving my public image							
National security, reciprocation of favours, family security, social order, clean							
Obedient, self-discipline, politeness, honouring of parents and elders							
Respect for tradition, accepting my portion in life, humble, moderate							
Helpful, responsible, forgiving, honest, loyal, a spiritual life							
Equality, unity with nature, wisdom, a world of beauty, social justice, broad-minded, protecting the environment, a world at peace							

Appendix 3. Voluntary simplicity behaviour checklist for Phase 1 focus groups

Please have a look through this list of different behaviours – tick the box on the right that best represents how likely you would be to engage in this behaviour on a regular basis

Food	Already do	Would like to do	Would not do
Growing organic food at home or in allotments / urban farms			
Cooking meals from scratch			
Eating vegetarian or vegan main meals			
Buying / Repairing / Making	Already do	Would like to do	Would not do
Buying locally produced goods and produce			
Buying second-hand goods			
Shopping exclusively out of necessity not pleasure			
Avoiding the purchase of luxury goods			
Repairing existing products			
Creating or making your own products instead of buying new			
Buying environmentally friendly products eg. (Fair trade, organic, in season)			
Energy and Transport	Already do	Would like to do	Would not do
Purchasing solar panels			
Buying energy from a renewable energy provider			
Reducing household energy			
Riding bikes or walking short journeys			
Using public transport instead of personal transport			
Work and Social Life	Already do	Would like to do	Would not do
Working fewer hours (by choice)			
Engaging in community projects (e.g. Volunteering)			
Spending time on personal hobbies			
Spending more time with family			
Active relaxation and spiritual exploration (e.g. Yoga, meditation)			
Signing petitions			
De-cluttering one's home			
Taking part in protests			
Working for a cause you believe in			
Having only one child (or no children) – due to concerns with overpopulation			

Appendix 4. Results from Voluntary simplicity checklist in Phase 1

	All		Group 1 (n = 6)		Group 2 (n = 7)		Group 3 (n = 4)		Group 4 (n = 5)	
	Mean	% No	Mean	% No	Mean	% No	Mean	% No	Mean	% No
Voluntary Simplicity										
Food	1.64		1.65		1.89		1.42		1.53	
Growing organic food at home or in allotments / urban farms	2.18	31.8	2.50	50	2.67	42.9	1.75	25	1.50	0*
Cooking meals from scratch	1.23	0	1.17	0	1.33	0	1.25	0	1.00	0
Eating vegetarian or vegan main meals	1.52	9.1	1.41	0	1.67	14.3	1.25	0	1.50	20
Buying / Repairing / Making	1.81		1.60		1.98		1.71		1.93	
Buying locally produced goods and produce	1.45	0	1.33	0	1.67	0	1.5	0	1.20	0
Buying second-hand goods	1.25	9.1	1.00	0	1.67	14.3	1.00	0	1.60	20
Shopping exclusively out of necessity not pleasure	2.52	63.6	2.00	33	2.86	85.7	2.25	50	3.00	80
Avoiding the purchase of luxury goods	2.38	50	2.00	33	2.67	57.1	2.50	50	2.50	60
Repairing existing products	1.59	9.1	1.16	0	2.00	14.3	1.50	0	1.50	20
Creating or making your own products instead of buying new	2.08	18.2	2.16	33	2.33	28.6	1.90	0	2.00	0
Buying environmentally friendly products e.g. (Fair trade, organic, in season)	1.43	0	1.50	0	1.33	0	1.25	0	1.33	0
Energy & Transport	1.53		1.57		1.45		1.50		1.62	
Purchasing solar panels	2.20	22.7	2.33	33	2.25	0*	2.50	25	2.37	40
Buying energy from a renewable energy provider	1.62	4.5	1.67	0	1.33	0	1.50	0	2.37	20
Reducing household energy	1.41	0	1.50	0	1.67	0	1.25	0	1.25	0
Riding bikes or walking short journeys	1.23	4.5	1.17	0	1.42	0	1.0	0	1.62	20
Using public transport instead of personal transport	1.18	0	1.17	0	1.00	0	1.5	0	1.25	0

Personal, social and work life	1.78		1.75		1.8		1.9		1.69	
Working fewer hours (by choice)	1.90	18.2	1.67	16.7	2.33	14.3	2.5	50*	1.5	0
Engaging in community projects (e.g. Volunteering)	1.77	13.6	1.50	0	2.67	28.6	1.8	0	1.75	20
Spending time on personal hobbies	1.32	0	1.00	0	1.33	0	1.50	0	1.25	0
Spending more time with family	1.59	4.5	2.00	16.7	1.33	0	1.50	0	1.5	0
Active relaxation and spiritual exploration (e.g. Yoga, meditation)	2.05	31.8	2.00	16.7	2.67	71.4*	1.50	0	1.5	20
Signing petitions	1.20	4.5	1.50	16.7	1.00	0	1.25	0	1.00	0
De-cluttering one's home	1.77	0	1.67	0	1.67	0	2.00	0	1.75	0
Taking part in protests	2.14	40.9	2.17	50	1.67	28.6	2.5	50	2.00	40
Working for a cause you believe in	1.43	0	1.50	0	1.67	0	1.25	0	1.5	0
Having only one child (or no children) – due to concerns with overpopulation	2.63	68.2	2.5	66.7	1.67	28.6	3.00	0	3.00	100

Mean scores are devised from variables where 1 = already do, 2 = would like to, 3 = would not do. Percentage scores show number of scores of 3 where the participant noted they would not do.

5 overall highest mean scores are emboldened in Red, showing least attractive. 5 overall lowest means are emboldened in green to show most attractive. Top 5 overall highest % of 'would not do' are emboldened in black. Italics and asterixed scores show notable deviations in the group from overall scores.

Appendix 5. Introduction of ground rules and expectations from researchers and participants for Phase 1

As previously discussed, today will be a group discussion about lifestyles, ideas about society and discussing what the future might be like. There's no right or wrong answers, we just want to know what you think – if you aren't sure about what you think, it's also very interesting for us if you explain your thoughts around your potential opinions, or how you think other people might think about the topics we are discussing, so be as open and honest as you can. It's really important that we can all respect each others views and opinions, and allow other people to talk, but it's also good to engage with other people's ideas and discuss how you might agree or disagree with them. As we have disclosed, everything will be confidential, and that includes between everyone here – so please don't talk about other people's views, and respect other's privacy once we leave the room today – this includes not taking any photos, videos, or recordings of your own. You've each got some paper and pens, so if you have a thought, it can be nice to note it down and mention it later if somebody else is talking at the time. You're free to withdraw for any reason if you want to, or if you don't want to discuss a particular topic there is no need for you to do so – we want everyone to feel comfortable! All of this sounds quite technical, but it should be really interesting and enjoyable so just relax! We'll give you some more information at the end, and you have our contact details if you want to get in touch in the future.

Appendix 6. Full Phase 1 focus group schedule

Deliberative Focus Group Schedule: (3 hours total with break and refreshments)

Intro and Names, random info question / icebreaker

1. *Happiness, well-being and life-satisfaction (15mins)*

- What makes you happy?
- What could you not live without? (leave open...then ask; physical items *and* 'relational' goods)
- What do you aim towards / life goals?

(Prompts – What about other people? Has this / will this change(d) over time? How about other areas of your life? (Family, Work, Evenings, Weekends, Health and fitness) – *Ask people to make a list of these things!*)

2. *Role of consumption and materialism (25mins)*

- What things do you spend your money on?
- How does shopping and buying things make you feel?
- What about buying things makes you happy / or not happy?

(Prompts – Are they separate to your life goals? Pleasure vs utility? Prompt away from socially desirable answers – think of monthly outgoings etc) - *Ask people to make a list of these things!*

3. *Needs and luxuries (20mins)*

- What are the five last luxury goods / services you bought? Last five times you have treated yourself to?
- How do you define them? What makes them a 'luxury'?
Introduce new cards with 'luxuries' (Gough 2017)
- What luxuries could you do without (or find the easiest)?
- Any that you couldn't live without (or find the hardest)?
- Does anything about buying things make you unhappy?
- How do you overcome this?

(Prompts – Leisure and work? Entertainment? Practical hobbies? Travel? Technology? Fashion? What about for people across the country / world? How often are these – regular? One-off? Cost? Category satisfaction of need)

BREAK FOR REFRESHMENTS (15 mins – Biscuits and tea/coffee!)

4. *Voluntary Simplicity Behaviours – Tick Sheet (already do, would do, wouldn't do) (40mins)*
 - Complete tick sheet
 - Are you doing these already? Take each block at a time
 - Who is doing it and why?
 - Would there be any benefit of doing these things? If so, to whom/what? (Prompts: other people, environment, self)
 - Norms? Can you imagine them being normal? What if everyone does them?
 - Do you think doing them would make you any happier or less happy?
 - From the ones you wouldn't do – how might you change your mind? What incentives might you need?
 - What about each sub section?

5. *Degrowth Policy suggestions – Vignette tasks (40mins)*
 - Chance to introduce their own along the dimensions of vignettes.
 - Introduction: think of the future, are we living similar lifestyle? Will people be happier? How so? What would need to change?
 - Introduction: You will now be presented with a set of stories that are set in the future. We are going to look back at what our lives were like now, and think about what our lives in these future scenarios are like, and how society has changed. After we have read each scenario, we will pause to talk about our ideas about this future life.
 - One at a time -
 - Marker pens for do and don't like – read on their own 3-4 mins
 - Which was your favourite?
 - Compare their own with the ones they've just read

6. *Follow up questions – Allow to be broad (15mins)*
 - Who do you think is responsible for bringing about these changes in society?
 - What do you think the could stop these changes taking place?
 - Thinking about what you said earlier about ...(see below)... what do you think now?
 - What makes you happy
 - What you spend your money on
 - Your needs and luxuries

ANY THING ELSE YOU WANT TO ADD ABOUT THOUGHTS THAT YOU'VE HAD

FEEDBACK?

Appendix 7. Vignettes

Working Less...Living More

The carbon footprint and environmental damage of society is much smaller than it used to be, and this is primarily down to people consuming a lot less commodities and environmentally damaging services. The amount of things we used to buy, and the amount of energy they would use was a huge contributor to the causes of climate change. The length of working hours started to change about 10 years ago. To begin with workers were given an extra two days holiday, increasing each year until everyone was working 90% of the hours they used to. Because we now all work a bit less, the amount of work not being done has been taken up by unemployed people. Those of us who used to earn £30,000 a year now earn £27,000 – but that’s because we have 25 extra days holiday every year now (total 50 days). We have less money, but we have more time, and now so much of our money isn’t spent on buying products and using services - we have more time to do more things for ourselves. The extra days at home are also spent with our family, or looking after elders and children in our community, sometimes making and repairing things we need, which is actually a lot more rewarding! We even have time to grow (and swap!) vegetables in community gardens and more time to cook our meals from scratch, so we eat more delicious food and don’t use as much packaging. I’ve realised I’m living a more fulfilled life playing more sport, spending more time following my hobbies, and taking part in local community projects like the youth education projects and discussion groups about how to improve our local services. Some things aren’t as easy, and a lot of things are done by hand now, like washing clothes, and our pots and pans, instead of energy intensive washing machines and dishwashers. I actually feel a lot more in control of my life now, and it feels strange that we didn’t use to engage in these activities. Now that there isn’t advertisement everywhere, I don’t really have that craving I used to get for what I was told would be the newest, next best thing. Some people miss spending their money on new gadgets or going shopping, which is no longer sustainable, but we can take appliances and gadgets to get fixed and upgraded, or make them ourselves. I can even borrow them from local ‘product lending libraries’ which makes a lot more sense, or even take the time to learn about how to fix things myself! Life is less convenient now, but because we all work less we have more time to do things at home with friends and family, and as part of a community we can look after ourselves!

Cutting the cost of being green

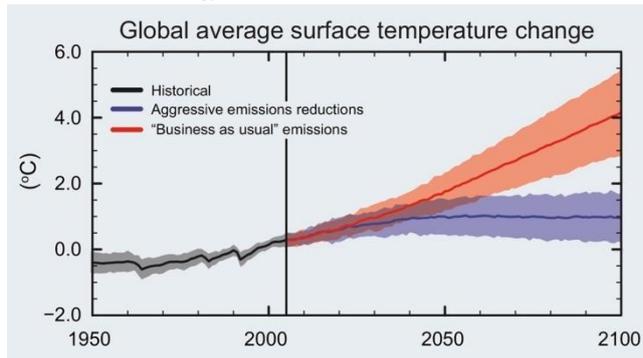
We stopped getting taxed directly on our income and employment years ago. Now there are much bigger taxes on products and services that are harmful to the environment, costed by their negative impact on air quality or resource use, for example. If I buy green, I pay very little tax at all! It started off by increasing the taxes on petrol, which was already expensive, and we had to pay to be able to drive in rush hour, and now there are tolls on all major roads. This was difficult to begin with, but with improving public transport, and with fewer cars on the road it was safer to ride my bicycle to work, and the buses and trains became a lot more affordable and reliable. Having a car is the exception now, not the rule, but rental services are available for those who need them. Air travel is much less common these days, as it's so expensive and incredibly damaging to the environment. Most people go on holiday in their home country, or take advantage of the high-speed rail network across Europe (and beyond!), which is far cheaper than it used to be, but not quite as easy as jumping on a plane! For years we didn't properly take into account the environmental damage that the things we were doing and things we were buying. Now everything in the supply chain is taken into account and counted: the raw materials that have been mined, the chemicals used, the fuel for production and transportation, even how efficient the product or service is when its used, and how long it will last for. Years ago, it was really difficult to know what the impact was of the things we did – there was little to no information about the impact of the things we bought and the services we used. This seems totally irresponsible now that awareness has been raised. With these taxes on resource usage and environmentally damage, some of the things we used to have a lot of, are in general, a lot more expensive. Cheap clothes and footwear, non-recyclable plastic gadgets/appliances and non-seasonal food (as well as all meat and dairy), are all very rarely consumed now, unless their environmental impact is low. Sacrificing these pleasures wasn't easy (I miss my bacon sandwiches!), and lots of things are less convenient now, but lots of products that used to be expensive became much cheaper and therefore more desirable as they became more in demand, for example local organic vegetables, eco-cleaning products, independent clothes shops and even just getting things fixed when they broke – I can't believe it was actually cheaper to buy new back then!? Nowadays the cheapest way to live a comfortable life is also the most environmentally friendly.

Science can save some of us!

We have managed to maintain a high standard of living, and haven't had to change the way we live too much, but technology has made sure we don't damage the environment as much as we used to. New business sectors have been created by these green industries, making sure our economy keeps growing. Scientific breakthroughs with new technologies have allowed us to minimize the negative effects of global warming and it's been an easy transition that we have seen continued progress and improvements of efficiency and comfort. In terms of our daily life, lots of products and services have moved towards digital and online platforms, we can monitor all our impacts through smart technology linked to our handheld devices. For example, those of us who can afford to own a smart fridge, we can be sure not to waste any food, as everything is monitored to help us use things in date to minimise waste, and it order automatically from the supermarket when things are running low! We can change the thermostat in our houses away from home with an app on our phone, store music, books and video collections in the cloud instead of buying physical products. Even buying everyday household items is linked to technology as we can use 3D printing to get whatever we need quickly and the most efficiently, without any waste from over production in factories. In other parts of the world, this hasn't been the case...most people, in Europe for example, have managed to maintain our standard of living, but other parts of the world have already been impacted by climate change, with drought, famine and rising sea levels, its only the financially secure that have been able to benefit from the new technology and green industry. Its only a matter of time before we can help those people out too, but at the moment food, water and energy are in such short supply it means that we can't look after everyone in the world. It's only fair that the companies and countries that put the money and work into developing these new technologies get to benefit from them first. Less well off people are still struggling with rising energy costs, and can't really take advantages of much of the new in-home technology, but hopefully the technology will make things cheaper down the line. We still consume a lot of stuff, but most of it can be recycled – we still haven't managed to reduce our emission in line with the targets set to avoid climate change. There is lots of technological progress so hopefully there will be a development soon to help to keep reversing and minimising some of the negative impacts we are having on the planet.

Appendix 8. Information statement for Phases 2 and 3

The world is experiencing climate change, and changes need to be made in order to avoid levels of global warming that would threaten the existence of human societies and the living planet. The Paris Agreement has set targets to achieve the positive change needed to avert crisis. In order to meet these goals, the models and future scenario pathways show that new technology and increased energy efficiency will not be enough to help change this. The target is to limit global warming to 1.5c, and this would require 'Aggressive emissions reductions', however, if we continue as we are now ('Business as usual') we are more likely to reach 3-5c, which scientists report to be catastrophic. We will need to reduce our consumption in order to help tackle this problem effectively as part of an 'Aggressive emissions reduction' strategy.



At the moment our consumption levels exceed the sustainable amount of resources the earth can provide. Research has shown that if everyone lived like we do in the U.K. we would need 4 planet Earths to use the resources sustainably. We only have one planet, with limited resources, therefore it is not feasible to maintain this level of consumption; to keep burning fossil fuels, or digging up natural resources and materials, or using more land for agriculture.



We now use 8 times as many resources compared to the start of the 20th Century and reducing this will be key to avoiding catastrophic climate change. Research has shown that we need to reduce our carbon footprint associated with clothing, packaging, electronics, appliances, vehicles, and buildings. High consumption lifestyles have been linked to a variety of problems such as depression, anxiety, and generally a lower sense of life-satisfaction or individual well-being. Therefore, not only is it better for society and the planet to consume less, it is better for our own state of health.

Appendix 9. Phase 2 Survey flow and full Qualtrics questionnaire

Survey Flow

Standard: Prolific ID (1 Question) Block: Informed Consent (1 Question) Standard: Socio Demographics (4 Questions)
BlockRandomizer: 1 - Evenly Present Elements
Group: Condition 1: No Norms
Standard: Information Statement w/o Social Norms (1 Question) Standard: Information Check (2 Questions)
Group: Condition 2: With Norms
Standard: Information Statement w/ Social Norms (1 Question) Standard: Norm Condition Information Check (4 Questions)
BlockRandomizer: 1 - Evenly Present Elements
Group: Advocacy No Hypocrisy
Standard: Advocacy Statement (1 Question) Standard: Policy Support Items (1 Question)
Group: Hypocrisy Condition
Standard: Advocacy Statement (1 Question) Standard: Behavioural Transgressions (3 Questions) Standard: Policy Support Items (1 Question)
Standard: Policy Support Items (1 Question)
Standard: Behavioural Intentions (1 Question) Standard: Info Check & Responsibility/engagement (3 Questions) Standard: Hypocrisy Check (1 Question) Standard: Debrief (1 Question)
EndSurvey: Advanced

Page Break

Start of Block: Prolific ID



What is your prolific ID?

End of Block: Prolific ID

Start of Block: Informed Consent

This study is being carried out as part of research based in the School of Psychology at Cardiff University. We are interested in lifestyle choices and people's perspectives on society. The study involves a 10 minute online questionnaire. Your answers will be recorded and used for the research project data. You do not have to answer any questions you don't want to, and are free to withdraw at any point.

I understand that the information provided by me will be held confidentially, and all of my responses will be anonymised after data collection. Once data is anonymised it will be impossible to trace this information back to me individually, and therefore once I have completed the survey I will not be able to withdraw my results. The anonymous data will be held indefinitely and may be used to produce reports, presentations, and academic publications.

If I have any questions or concerns I am free to ask questions to any of the researchers involved in the project. I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study. The information provided on the consent form will be held in compliance with GDPR regulations. Cardiff University is the data controller and Matt Cooper is the data protection officer (inforequest@cardiff.ac.uk). This information is being collected by Daniel Thorman. This information will be held securely and separately from the research information you provide. The lawful basis for processing this information is public interest. By continuing and completing this survey, I consent to participate in the study conducted by Daniel Thorman from the School of Psychology, Cardiff University with the supervision of Prof. Lorraine Whitmarsh and Dr. Christina Demski.

I accept the conditions and give my informed consent (1)

End of Block: Informed Consent

Start of Block: Socio Demographics

What is your Age?

18-24 (1)

25-34 (2)

35-44 (3)

45-54 (4)

55-64 (5)

65+ (6)

Prefer not to say (7)

What is your gender?

- Male (1)
 - Female (2)
 - Other (3)
 - Prefer not to say (4)
-

What is your personal annual income?

- Up to £15,599 (1)
 - Between £15,600 and up to £25,999 (2)
 - Between £26,000 and up to £36,399 (3)
 - £36,400 and above (4)
 - Prefer not to say (5)
-

In politics people sometimes talk of "left" and "right". Please indicate on the scale below where you consider yourself to be on the left-right political spectrum, where 0 means extreme-left and 10 means extreme-right.

0 1 2 3 4 5 6 7 8 9 10



End of Block: Socio Demographics

Start of Block: Information Statement w/o Social Norms

Please read the following information carefully. You will be asked questions on some of the details to test your knowledge at a later stage. The world is experiencing climate change, and changes need to be made in order to avoid levels of global warming that would threaten the existence of human societies and the living planet. The Paris Agreement has set targets to achieve the positive change needed to avert crisis. In order to meet these goals, the models and future scenario pathways show that new technology and increased energy efficiency will not be enough to help change this. The target is to limit global warming to 1.5c, and this would require 'Aggressive emissions reductions', however, if we continue as we are now ('Business as usual') we are more likely to reach 3-5c, which scientists report to be catastrophic. We will need to reduce our consumption in order to help tackle this problem effectively as part of an 'Aggressive emissions reduction' strategy. At the moment our consumption levels exceed the sustainable amount of resources the earth can provide. Research has shown that if everyone lived like we do in the U.K. we would need 4 planet Earths to use the resources sustainably. We only have one planet, with limited resources, therefore it is not feasible to maintain this level of consumption; to keep burning fossil fuels, or digging up natural resources and materials, or using more land for agriculture. We now use 8 times as many resources compared to the start of the 20th Century, and reducing this will be key to avoiding catastrophic climate change. Research has shown that we need to reduce our carbon footprint associated with clothing, packaging, electronics, appliances, vehicles, and buildings. High consumption lifestyles have been linked to a variety of problems such as depression, anxiety, and generally a lower sense of life-satisfaction or individual well-being. Therefore, not only is it better for society and the planet to consume less, it is better for our own state of health.

End of Block: Information Statement w/o Social Norms

Start of Block: Information Check

Now please answer a couple of questions about what you've just read. How many planet earths would we need if everyone in the world consumed like the average UK citizen currently does?

1 (1)

4 (2)

8 (3)

Since the start of the 20th Century we have increased our use of resources by...

two times (1)

eight times (2)

twelve times (3)

End of Block: Information Check

Start of Block: Information Statement w/ Social Norms

Please read the following information carefully. You will be asked questions on some of the details to test your knowledge at a later stage. The world is experiencing climate change, and changes need to be made in order to avoid levels of global warming that would threaten the existence of human societies and the living planet. The Paris Agreement has set targets to achieve the positive change needed to avert crisis. In order to meet these goals, the models and future scenario pathways show that new technology and increased energy efficiency will not be enough to help change this. The target is to limit global warming to 1.5c, and this would require 'Aggressive emissions reductions', however, if we continue as we are now ('Business as usual') we are more likely to reach 3-5c, which scientists report to be catastrophic. We will need to reduce our consumption in order to help tackle this problem effectively as part of an 'Aggressive emissions reduction' strategy. At the moment our consumption levels exceed the sustainable amount of resources the earth can provide. Research has shown that if everyone lived like we do in the U.K. we would need 4 planet Earths to use the resources sustainably. We only have one planet, with limited resources, therefore it is not feasible to maintain this level of consumption; to keep burning fossil fuels, or digging up natural resources and materials, or using more land for agriculture. We now use 8 times as many resources compared to the start of the 20th Century, and reducing this will be key to avoiding catastrophic climate change. Research has shown that we need to reduce our carbon footprint associated with clothing, packaging, electronics, appliances, vehicles, and buildings. High consumption lifestyles have been linked to a variety of problems such as depression, anxiety, and generally a lower sense of life-satisfaction or individual well-being. Therefore, not only is it better for society and the planet to consume less, it is better for our own state of health. A recent survey found that the majority (72%) of people in the U.K. realise our consumption levels are too high, and of those people, 45% are already taking steps to live more sustainably by buying less. On the graph below, we can see that only a minority think we don't have a problem.

Page Break

End of Block: Information Statement w/ Social Norms

Start of Block: Norm Condition Information Check

Now please answer a couple of questions about what you've just read.

How many planet Earths would we need if everyone in the world consumed like the average UK citizen currently does?

1 (1)

4 (2)

8 (3)

Since the start of the 20th Century we have increased our use of resources by...

two times (1)

eight times (2)

twelve times (3)

How many people agreed that the UK has a problem with over-consumption?

15% (1)

58% (2)

72% (3)

Of those people, how many were starting to reduce their consumption?

10% (1)

45% (2)

62% (3)

End of Block: Norm Condition Information Check

Start of Block: Advocacy Statement

As part of this project we are creating a petition for you to sign. This is a way for you to show your support, and encourage members of the public and government policy makers to reduce consumption levels.

This petition will be published online and sent to your local MP. Should you wish to, you can share this petition on your social media, links will be provided at the end of the study.

This is not linked to your other answers in this survey, and will not be stored by prolific.

I believe we need to reduce our consumption. We should change the way we live our lives in order to be more sustainable and prioritise our own physical and mental health. We must use our resources within the planetary limits and provide the best living conditions for ourselves and the rest of the world. We should reduce our use of materials and should not be wasteful with our natural resources.

At the individual level, **I am helping this cause by consuming less.**

This means: I'm not buying things I don't need
 I'm avoiding single use plastics
 I'm repairing and fixing existing products instead of replacing them with new things

Please add **your name** in the box below to show your **public support** for this claim.

Page Break

We would like to know how much support there is for different policy options.	Completely oppose (1)	Strongly oppose (2)	Slightly oppose (3)	Neither oppose nor support (4)	Slightly Support (5)	Strongly Support (6)	Completely support (7)
Please rate how much you would support or oppose the following government policy.							
Government policy should introduce an individual consumption budget where calculations are made around the impact of the things you buy and you are individually responsible for your consumption footprint. You would have a limit to how much, and what you can buy. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government should introduce a tax on activities and products that are damaging to the environment or people. This would make it more expensive to produce and buy products that are environmentally or socially damaging but they would still be available. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government policy should regulate businesses to produce and sell only sustainable and ethical products. For example, cheaply produced clothes and electronics will be banned. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There should be a reduction in working hours. This would mean we have more time to spend with family, and actively engaging in more activities (making things and growing food etc.). This would also mean we have less money to spend, and we wouldn't be able to buy as many things. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business should be given more freedom from government to meet demand. Products would only become more environmentally-friendly if people chose greener products. This 'de-regulation' doesn't guarantee a reduction in consumption. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Local community groups should have support from the government to set up 'repair cafes' and 'library of things' so we can be better equipped to fix things we have, and share appliances and products we don't need to own. This would be cheaper but less convenient than owning them ourselves. (6)



Start of Block: Behavioural Transgressions

All of your responses from this point onwards will be completely anonymous and will not be linked to the name you provided for the petition. Please answer honestly.



How many times in the past week have you bought...?

	Not at all (1)	Once (2)	A few times (3)	Often (4)	Every day (5)	More than once a day (6)	Don't Know (7)
An item made of (or packaged in) single use plastic (1)	<input type="radio"/>	<input type="radio"/>					
A product that is not ethically produced (2)	<input type="radio"/>	<input type="radio"/>					
Food that you have ended up throwing away (3)	<input type="radio"/>	<input type="radio"/>					
Something that you didn't really need (4)	<input type="radio"/>	<input type="radio"/>					



How many times in the past year have you bought...?

	Not at all (1)	Once (2)	A few times (3)	Every few months (4)	Once a month (5)	More than once a month (6)	Don't Know (7)
A new replacement product, instead of repairing an old one (1)	<input type="radio"/>	<input type="radio"/>					
An expensive luxury item (2)	<input type="radio"/>	<input type="radio"/>					

Start of Block: Behavioural Intentions



Think about the **next month**, and your intentions regarding the following actions. How often will you?

	Not at all (1)	Once (2)	A few times (3)	Often (4)	Always (5)	Don't Know (6)
Buy something that you don't really need (1)	<input type="radio"/>					
Buy excess food so that you end up throwing it away (2)	<input type="radio"/>					
Repair or fix an old product instead of buying a new one (3)	<input type="radio"/>					
Purchase (something packaged with) single use plastic (4)	<input type="radio"/>					
Buy an expensive luxury item (5)	<input type="radio"/>					
Buy a product that is ethically produced (6)	<input type="radio"/>					
Travel by foot, bike, bus or train instead of by car or plane (7)	<input type="radio"/>					
Choose to eat vegetarian / vegan meals and cut down on meat (8)	<input type="radio"/>					



Think about the information you were given about consumption and climate change at the beginning of this survey. To what extent do you agree that...?

	Completely Disagree (1)	Strongly disagree (2)	Slightly disagree (3)	Neither agree not disagree (4)	Slightly Agree (5)	Strongly Agree (6)	Completely agree (7)
The information was overblown or exaggerated (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The statistics were trying to manipulate my attitudes (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The statistics were accurate (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Compared to people you know (e.g. friends, family), how would you describe the amount of action you take to help on environmental issues? Compared to most people I know, I do...

- A lot less (1)
- A little less (2)
- About the same (3)
- A little more (4)
- A lot more (5)

To what extent do you feel that your personal contribution to improving the environment is sufficient?

- I do much less than is sufficient (1)
- I do a little less than is sufficient (2)
- I do about the right amount (3)
- I do a little more than is sufficient (4)
- I do much more than is sufficient (5)

End of Block: Info Check & Responsibility/engagement

Start of Block: Hypocrisy Check



At the moment, to what extent do you feel...

	Does not correspond to what I feel 0 (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (6)	Completely corresponds to what I feel 6 (7)
Disappointed in myself (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disgusted in myself (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uncomfortable (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bothered (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stressed (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Content (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Happy (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hypocritical (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Hypocrisy Check

Start of Block: Debreif

THIS IS NOT THE LAST PAGE. YOU MUST READ THIS AND CONTINUE TO THE NEXT PAGE TO COMPLETE AND RETURN TO PROLIFIC!

Thanks so much for your time and thoughts!

Purpose of the research study

This study is being carried out as part of research based in the School of Psychology at Cardiff University. The title of the research project is “Public acceptability of low consumption lifestyles and policy support: Effects of social norm framing and hypocrisy inducement”. We are investigating the types of lifestyle choices that people make with regards to their consumption practices and the potential support for solutions that governments might be able to implement to be more environmentally friendly.

If you were asked to sign a petition, please know that this will in fact NOT be published online, or sent to your MP. This personal information will remain unused and completely anonymous, and you are reminded that this information is subject to GDPR regulation. This was a deception to create the belief you were making a public commitment to the pledge, and our study will explore the effect this has on your answers. Thanks for your understanding and co-operation regarding this.

Additionally, some participants in this study were shown research involving some statistics that were not true. The statement below details this. All other facts reported in the initial information statement about climate change and consumption were indeed true, and reported from existing literature from academic research. If you did not see the message below and its accompanying graph, then all statistics and facts in the information were true.

“A recent survey found that the majority (72%) of people in the U.K. realise our consumption levels are too high, and of those people, 45% are already taking steps to live more sustainably by buying less.”

Some participants were shown this information to illustrate a social norm, as this has been shown to influence people. A proportion of the participants were asked about recent consumption behaviours to see if this made them feel hypocritical, which might in turn influence their support for policies to tackle consumption.

This was included in order to test how influential social norms are to policy acceptance and behavioural intention. We do not have data on these statistics and created them in order to assess their influence. This will help us learn more about the topic and inform future research and policy.

The information you have provided will be held confidentially, such that only the research team can trace this information back to you individually. You should understand that my data will be anonymised and that nobody will be able to trace your information back to you. The anonymous data will be held indefinitely and may be used to produce reports, presentations, and academic publications.

The information provided on the consent form will be held in compliance with GDPR regulations. Cardiff University is the data controller and Matt Cooper is the data protection officer (inforequest@cardiff.ac.uk). This information is being collected by Daniel Thorman. This information will be held securely and separately from the research information you provide. The lawful basis for processing this information is public interest.

If you have any questions or concerns you are free to ask questions to any of the researchers involved in the project. Or if you have concerns or complaints, please contact the ethics department at Cardiff University.

PhD Student: Daniel Thorman – ThormanD@cardiff.ac.uk

Supervisor: Prof. Lorraine Whitmarsh – WhitmarshLE@cardiff.ac.uk

Secretary of the Ethics Committee

Tel: 029 2087 0360

Email: psychethics@cardiff.ac.uk

End of Block: Debrief

Appendix 10. Phase 3 Survey flow and full Qualtrics questionnaire

Start of Block: Prolific ID



Q52 What is your prolific ID?

End of Block: Prolific ID

Start of Block: Informed Consent

Q2 This study is being carried out as part of research based in the School of Psychology at Cardiff University. We are interested in lifestyle choices and people's perspectives on society. The study involves a 10 minute online questionnaire. Your answers will be recorded and used for the research project data. You do not have to answer any questions you don't want to, and are free to withdraw at any point. I understand that the information provided by me will be held confidentially, and all of my responses will be anonymised after data collection. Once data is anonymised it will be impossible to trace this information back to me individually, and therefore once I have completed the survey I will not be able to withdraw my results. The anonymous data will be held indefinitely and may be used to produce reports, presentations, and academic publications.

If I have any questions or concerns I am free to ask questions to any of the researchers involved in the project. I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study. The information provided on the consent form will be held in compliance with GDPR regulations. Cardiff University is the data controller and Matt Cooper is the data protection officer (inforequest@cardiff.ac.uk). This information is being collected by Daniel Thorman. This information will be held securely and separately from the research information you provide. The lawful basis for processing this information is public interest. By continuing and completing this survey, I consent to participate in the study conducted by Daniel Thorman from the School of Psychology, Cardiff University with the supervision of Prof. Lorraine Whitmarsh and Dr. Christina Demski.

If you do not wish to participate in this study, please return your submission on Prolific by selecting the 'Stop without completing' option.

- I accept the conditions and give my informed consent (1)
- I do not consent, and wish to stop this survey now (2)

Page Break

End of Block: Informed Consent

Start of Block: Does not consent

Q65 *"As you do not wish to participate in this study, please return your submission on Prolific by selecting the 'Stop without completing' button."*

End of Block: Does not consent

Start of Block: Socio Demographics

Q37 What is your Age?

- 18-24 (1)
 - 25-34 (2)
 - 35-44 (3)
 - 45-54 (4)
 - 55-64 (5)
 - 65+ (6)
 - Prefer not to say (7)
-

Q38 What is your gender?

- Male (1)
 - Female (2)
 - Other (3)
 - Prefer not to say (4)
-

Q39 What is your personal annual income?

- Up to £15,599 (1)
- Between £15,600 and up to £25,999 (2)
- Between £26,000 and up to £36,399 (3)
- £36,400 and above (4)
- Prefer not to say (5)

Q40 In politics people sometimes talk of “left” and “right”. Please indicate on the scale below where you consider yourself to be on the left-right political spectrum, where 0 means extreme-left and 10 means extreme-right.

0 1 2 3 4 5 6 7 8 9 10



End of Block: Socio Demographics

Start of Block: Information Statement w/o Social Norms

Q16 Please read the following information carefully. You will be asked questions on some of the details to test your knowledge at a later stage. The world is experiencing climate change, and changes need to be made in order to avoid levels of global warming that would threaten the existence of human societies and the living planet. The Paris Agreement has set targets to achieve the positive change needed to avert crisis. In order to meet these goals, the models and future scenario pathways show that new technology and increased energy efficiency will not be enough to help change this. The target is to limit global warming to 1.5c, and this would require 'Aggressive emissions reductions', however, if we continue as we are now ('Business as usual') we are more likely to reach 3-5c, which scientists report to be catastrophic. We will need to reduce our consumption in order to help tackle this problem effectively as part of an 'Aggressive emissions reduction' strategy. At the moment our consumption levels exceed the sustainable amount of resources the earth can provide. Research has shown that if everyone lived like we do in the U.K. we would need 4 planet Earths to use the resources sustainably. We only have one planet, with limited resources, therefore it is not feasible to maintain this level of consumption; to keep burning fossil fuels, or digging up natural resources and materials, or using more land for agriculture. We now use 8 times as many resources compared to the start of the 20th Century, and reducing this will be key to avoiding catastrophic climate change. Research has shown that we need to reduce our carbon footprint associated with clothing, packaging, electronics, appliances, vehicles, and buildings. High consumption lifestyles have been linked to a variety of problems such as depression, anxiety, and generally a lower sense of life-satisfaction or individual well-being. Therefore, not only is it better for society and the planet to consume less, it is better for our own state of health.

End of Block: Information Statement w/o Social Norms

Start of Block: Information Check

Q35 Now please answer a couple of questions about what you've just read. How many planet earths would we need if everyone in the world consumed like the average UK citizen currently does?

- 2 (1)
- 3 (2)
- 4 (3)

Q36 Since the start of the 20th Century we have increased our use of resources by...

- 7 times (1)
- 8 times (2)
- 9 times (3)

End of Block: Information Check

Start of Block: Advocacy Statement

Q5 As part of this project we are creating a petition for you to sign. This is a way for you to show your support, and encourage members of the public and government policy makers to reduce consumption levels.

This petition will be published online and sent to your local MP. Should you wish to, you can share this petition on your social media, links will be provided at the end of the study.

This will not be stored by prolific.

I believe we need to reduce our consumption. We should change the way we live our lives in order to be more sustainable and prioritise our own physical and mental health. We must use our resources within the planetary limits and provide the best living conditions for ourselves and the rest of the world. We should reduce our use of materials and should not be wasteful with our natural resources.

At the individual level, **I am helping this cause by consuming less.**

- This means:
- I'm not buying things I don't need
 - I'm avoiding single use plastics
 - I'm repairing and fixing existing products instead of replacing them with new things

Please add **your name** in the box below to show your **public support** for this claim.

Page Break

Start of Block: Behavioural Transgressions



Q8 How many times in the past week have you bought...?

	Not at all (1)	Once (2)	A few times (3)	Often (4)	Every day (5)	More than once a day (6)	Don't Know (7)
...something made of, or packaged with, single use plastic (e.g. plastic wrapped salad/vegetables, crisp packets, soft drinks bottles) (1)	<input type="radio"/>	<input type="radio"/>					
...a product that is not ethically produced (e.g. made with cheap labour, conflict metals, damaging to the environment) (2)	<input type="radio"/>	<input type="radio"/>					
...excess food so that you end up throwing some away (3)	<input type="radio"/>	<input type="radio"/>					
...something that you don't really need (4)	<input type="radio"/>	<input type="radio"/>					



Q14 How many times in the past year have you bought...?

	Not at all (1)	Once (2)	A few times (3)	Every few months (4)	Once a month (5)	More than once a month (6)	Don't Know (7)
...a new product instead of fixing an old one (e.g. repairable shoes, electronic devices) (1)	<input type="radio"/>	<input type="radio"/>					
...an expensive luxury item (2)	<input type="radio"/>	<input type="radio"/>					

Start of Block: Hypocrisy Check



Q51 At the moment, to what extent do you feel...

	Does not correspond to what I feel 0 (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (6)	Completely corresponds to what I feel 6 (7)
Disappointed in myself (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disgusted in myself (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uncomfortable (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bothered (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stressed (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Content (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Happy (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hypocritical (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: Policy Support Items



Q41 We would like to know how much support there is for different policy approaches to reduce overall consumption in the UK. Please rate how much you would support or oppose the following policy approach for the government to adopt in their approach to tackling over-consumption.

	Completely oppose (1)	Strongly oppose (2)	Slightly oppose (3)	Neither oppose nor support (4)	Slightly support (5)	Strongly support (6)	Completely support (7)
There will be more control over businesses to produce and sell only sustainable, easily repairable and ethical products. (e.g. cheaply produced clothes and single use plastics will be banned). Making these products unavailable is the best way to ensure we can reduce our material consumption. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business will be given more freedom to meet consumer demand. Products will become more environmentally-friendly if people buy more 'green' products and don't buy harmful or unsustainable products. If people don't want environmentally damaging products, they won't buy them. People can be trusted to make informed decisions about what they buy. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There will be an increase in local community led projects where people can borrow tools and appliances from a 'library of things', instead of individually owning products we don't use all the time. There will be more space made available for allotments and community growing. People will work fewer days a week, allowing for more time to be spent with friends and family, and making or repairing their own products instead of buying new things. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: Behavioural Intentions



Q43 Think about the **next week**, and your intentions regarding the following actions. How often will you buy?

	Not at all (1)	Once (2)	A few times (3)	Often (4)	Every Day (5)	More than once a day (6)	Don't know (8)
...something made of, or packaged with, single use plastic (e.g. plastic wrapped salad/vegetables, crisp packets, soft drinks bottles) (4)	<input type="radio"/>	<input type="radio"/>					
...a product that is not ethically produced (e.g. made with cheap labour, conflict metals, damaging to the environment) (3)	<input type="radio"/>	<input type="radio"/>					
...excess food so that you end up throwing some away (2)	<input type="radio"/>	<input type="radio"/>					
...something that you don't really need (1)	<input type="radio"/>	<input type="radio"/>					

Q58 Think about the **next year**, and your intentions regarding the following actions. How often will you buy?

	Not at all (1)	Once (2)	A few times (3)	Every few months (4)	Once a month (5)	More than once a month (6)	Don't know (7)
...a new product instead of fixing an old one (e.g. repairable shoes, electronic devices) (1)	<input type="radio"/>	<input type="radio"/>					
...an expensive luxury item (2)	<input type="radio"/>	<input type="radio"/>					

Display This Question:

If Now please answer a couple of questions about what you've just read. How many planet earths wou... , 4 Is Displayed



Q48 Think about the information you were given about consumption and climate change at the beginning of this survey. To what extent do you agree that...?

	Completely disagree (7)	Strongly disagree (6)	Slightly disagree (5)	Neither agree not disagree (4)	Slightly agree (3)	Strongly agree (2)	Completely agree (1)
The information was overblown or exaggerated (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The statistics were accurate (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q49 Compared to people you know (e.g. friends, family), how would you describe the amount of action you take to help on environmental issues? Compared to most people I know, I do...

- A lot less (5)
- A little less (4)
- About the same (3)
- A little more (2)
- A lot more (1)



Q50 To what extent do you feel that your personal contribution to improving the environment is sufficient?

- I do much less than is sufficient (5)
 - I do a little less than is sufficient (4)
 - I do about the right amount (3)
 - I do a little more than is sufficient (2)
 - I do much more than is sufficient (1)
-



Q63 To what extent do you agree that your personal efforts to reduce consumption can make a difference?

- Strongly disagree (5)
 - Somewhat disagree (4)
 - Neither agree nor disagree (3)
 - Somewhat agree (2)
 - Strongly agree (1)
-



Q62 Which of these three statements about the Earth's temperature comes closest to your view?

- The Earth is getting warmer mostly because of human activity such as the burning of fossil fuels. (1)
- The Earth is getting warmer mostly because of natural patterns in the Earth's environment (2)
- There is no solid evidence that the Earth is getting warmer (3)

End of Block: Info Check & Responsibility/engagement

Start of Block: Debrief

Q53 THIS IS NOT THE LAST PAGE. YOU MUST READ THIS AND CONTINUE TO THE NEXT PAGE TO COMPLETE AND RETURN TO PROLIFIC!

Thanks so much for your time and thoughts!

Purpose of the research study

This study is being carried out as part of research based in the School of Psychology at Cardiff University. The title of the research project is "Public acceptability of low consumption lifestyles and policy support: Effects of hypocrisy inducement". We are investigating the types of lifestyle choices that people make with regards to their consumption practices and the potential support for solutions that governments might be able to implement to be more environmentally friendly.

If you were asked to sign a petition (not everyone was, so don't worry if you didn't!), please know that this will in fact NOT be published online, or sent to your MP. This personal information will remain unused and completely anonymous, and you are reminded that this information is subject to GDPR regulation. This was a deception to create the belief you were making a public commitment to the pledge, and our study will explore the effect this has on your answers. Thanks for your understanding and co-operation regarding this.

The information you have provided will be held confidentially, such that only the research team can trace this information back to you individually. You should understand that your data will be anonymised and that nobody will be able to trace your information back to you. The anonymous data will be held indefinitely and may be used to produce reports, presentations, and academic publications.

The information provided on the consent form will be held in compliance with GDPR regulations. Cardiff University is the data controller and Matt Cooper is the data protection officer (inforequest@cardiff.ac.uk). This information is being collected by Daniel Thorman. This information will be held securely and separately from the research information you provide. The lawful basis for processing this information is public interest.

If you have any questions or concerns you are free to ask questions to any of the researchers involved in the project. Or if you have concerns or complaints, please contact the ethics department at Cardiff University.

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End of Block: Debrief
