

Going Green is Good for You: Why We Need to Change the Way We Think About Pro-Environmental Behaviour

Michael Prinzing
ORCID: 0000-0002-7879-7131
michael@prinzing.net

Abstract: Awareness and concern about climate change are widespread. But rates of pro-environmental behaviour are low. This is partly due to the way in which pro-environmental behaviour is framed—as a sacrifice or burden that individuals bear for the planet and future generations. This framing elicits well-known cognitive biases, discouraging what we should be encouraging. We should abandon the self-sacrifice framing, and instead frame pro-environmental behaviour as intrinsically desirable. There is a large body of evidence that, around the world, people who are living more environmentally lifestyles are happier than those not doing so. This is the message we should be spreading.

Keywords: climate change; consumer behaviour; happiness; subjective well-being

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1 Introduction

Developed countries consume an incredible share of the world's resources and are consequently responsible for the majority of global carbon emissions. North America, for instance, which makes up 5% of the global population produces 18% of global emissions (Ritchie, 2018). Roughly a third of emissions in rich countries are attributable directly to individual consumption (Vandenbergh et al., 2010). But, when indirect energy consumption is taken into account, household behaviour is the largest contributor to total energy use and carbon emissions in most developed countries (Hertwich, 2005; Hertwich & Peters, 2009). Thus, lifestyle changes in rich countries—particularly amongst their wealthier members—would make an enormous difference in ameliorating climate change (Dietz et al., 2009; Gardener & Stern, 2009; IPCC, 2007).

Unfortunately, current strategies for encouraging lifestyle change aren't working. The data show that people are increasingly convinced of, and concerned about, anthropogenic climate change—70% of Americans think climate change is happening (only 14% think it's not); 58% believe that it is human-caused; 62% are worried; and 63% say that it is personally important to them (Leiserowitz et al., 2018). However, few meaningful changes have been made to actual behaviour (National Geographic, 2014). Information campaigns consistently result in scant differences (Steg & Vlek, 2009, p. 313). And, though stronger environmental values do predict more pro-environmental behaviour (PEB)¹, this relationship is often weak (Gifford & Nilsson,

¹ I intend this to be a fairly broad category of actions that help a person to reduce or to maintain low levels of resource consumption and greenhouse gas emissions—e.g., recycling, buying used rather than new products, bicycling rather than driving, etc.

2014). In other words, there is a value-action gap. Even those who accept the scientific consensus and care about the future of the planet are motivationally deficient. I argue that this is partly because the way in which people, including environmentalists, typically think and talk about PEB actually discourages PEB. There are arguably a number of problems. But the one I focus on here is the ‘self-sacrifice framing’, according to which going green is a personal sacrifice or burden for the collective good. This paper argues that we should reframe PEB as *intrinsically* appealing, rather than a loss one must suffer to avert a distant disaster.

2 The importance of framing

The pioneering work of Amos Tversky, Daniel Kahneman and their colleagues made famous the ways in which framing can affect behaviour (Kahneman, 2011; Kahneman et al., 1991; Tversky & Kahneman, 1981). The basic idea is that the way in which we conceptualize something—such as a challenge like climate change—has a big effect on how we respond to it. Notice that I just called climate change a ‘challenge’—rather than a ‘problem’. That’s an example of a difference in framing.

2.1 The problem of psychological distance

The importance of framing in climate change communication has previously been recognized in the context of what I’ll call the psychological distance problem (Lindenberg & Steg, 2007; Morton et al., 2011; Moser & Dilling, 2011). ‘Psychological distance’ is the extent to which an object of thought feels far away from the self, or the here and now (Liberman et al.,

2007).² According to Construal Level Theory (Trope & Liberman, 2010), as psychological distance increases, construals (i.e., how things are perceived and thought about) become increasingly abstract. When people experience something directly, their cognitive representations of that thing tend to be concrete and detailed. When the object of thought is very psychologically distant, representations tend to be vague and abstract. Since the vividness with which an outcome can be imagined affects its weight in decision-making (Kahneman, 2011, pp. 326–328; Rottenstreich & Hsee, 2001), psychologically distant outcomes receive less weight in deliberation.

Psychological distance can be created by perceptions of spatial, temporal, or social distance, as well as degree of uncertainty or hypotheticality (Trope & Liberman, 2010). For most people living in rich countries, the effects of climate change are distant in each of these ways. While some pernicious effects are already being felt in many places around the world, the most serious consequences will not arrive for years. This can be a problem because of the human tendency to engage in future discounting (Ainslie, 2001). People tend to prefer small gains now to larger gains in the future in predictably irrational ways. Moreover, many of the wealthy people whose lifestyles have the biggest impacts live in places that are not yet suffering from very serious problems. The physical proximity of environmental degradation is a strong predictor of

² There are some definitional difficulties here. For instance, one dimension of psychological distance is social distance (Liberman et al., 2007). Yet, while people clearly do feel “closer” to some than others, it’s unclear how this kind of distance is related to spatial or temporal distance. For present purposes, however, we needn’t delve into these complexities. (My thanks to an anonymous reviewer for bringing this to my attention.)

pro-environmental motivation (Scannell & Gifford, 2013). People respond more strongly when they feel that their own *local* environment is threatened. Because geographic distance entails cultural difference, there will also be significant *social* distance between heavy emitters and the people who will suffer the worst consequences of climate change (e.g., those living in small island communities). Another source of psychological distance comes from the fact that climate change is large in scale, difficult to understand, and uncertain in its effects. Most laypeople don't know the scientific evidence themselves, and must rely on experts (or putative experts) to summarize the evidence and its implications. This introduces greater uncertainty, particularly given the existence of high-profile climate change deniers.

Between these factors, the effects of climate change are very psychologically distant (Spence et al., 2012; Wang et al., 2019). This means that people are not highly motivated to adopt ameliorative responses. Since we have trouble imagining with any clarity or vividness how the global climate will change, whom will be affected, in what way, etc., our response to the problem is not as robust as it should be.

The solution, others have suggested, is to *reframe* climate change messages—i.e., change the way that we think and talk about it (Newell et al., 2014; Newell & Pitman, 2010). It's generally thought that we can motivate stronger responses to climate change by reducing the psychological distance: framing it as happening sooner, nearer, to people like you, and with more certainty. There is experimental evidence that this can indeed result in stronger pro-environmental attitudes and behaviour (Jones et al., 2017; Lee et al., 2018; Pahl & Bauer, 2013; Soliman et al., 2018). However, it can also do the opposite (McDonald et al., 2015). This may be partly because such framings can evoke fear or distress. Fear-inducing messages can 'distance or disengage individuals from climate change, tending to render them feeling helpless and

overwhelmed’, thereby reducing PEB (O’Neill & Nicholson-Cole, 2009, p. 375). It’s also been found that dire-sounding messages (*‘The end is near!’*) can reduce confidence in the reality climate change—perhaps by conflicting with implicit ‘just world’ beliefs (Feinberg & Willer, 2011). Environmentalists using distance-reducing frames can be seen as sensationalizing, or even manipulating people into responding in ways that they wouldn’t consider warranted if the problem were presented differently. Thus, while distance-reducing frames may be beneficial in some cases, their usefulness is limited.

2.2 The self-sacrifice framing

The psychological distance problem is a problem with how climate change itself is framed. Problems with how *PEB* is framed are less frequently discussed. But they are at least as important. Here, I focus on what I call the ‘self-sacrifice framing’, on which PEBs are seen as *personal sacrifices*—bad for the person performing them (compared with less environmentally friendly alternatives) but good for the planet and/or other people, including future generations. In both academic writing and the popular press, a green lifestyle ‘is usually portrayed as an onerous undertaking, one requiring personal sacrifice of the highest order. People... are being asked to give up a modern, high-technology existence for an austere, bleak but needed substitute’ (De Young, 1990, p. 216).³ As one commentator writes:

³ John Broome (2012) has offered what he calls a ‘sacrifice-free’ solution to climate change. I take no stand on the merits of his argument. But it’s worth mentioning because the fact that his argument is so-called, and so controversial (e.g., Lawlor, 2016) reveals how deeply the notion of sacrifice is entrenched in our ways of thinking and talking about PEB. Some researchers have suggested that not *all* PEBs involve sacrifices; some can be ‘win-wins’—i.e., good for the planet

Environmentalism has long preached sacrifice. Since its inception, it has counseled a type of restraint that requires foregoing certain immediate pleasures for the higher goal of ecological well-being. Environmentalism tells us... [to] hold ourselves back... in the interest of environmental protection. (Wapner, 2010, p. 33)

According to this received wisdom, an environmentally friendly lifestyle is not something that people *like* or that would be *good* for them, so much as something they have no choice but to accept. After all, people want to keep getting bigger houses, faster cars, and newer phones. But since that's not sustainable, they must settle for less. They will be made worse off by their new, austere lifestyle. Their fun will be over. But that's the sacrifice they have to make for the future of our planet and our species.

The so-called "techno-optimists" argue that these sacrifices will not actually be necessary; novel technologies will enable people to live high-consumption lifestyles without negatively impacting the climate (Shellenberger & Nordhaus, 2011). Others respond that this optimism is unjustified, and we cannot take such a dangerous gamble (Agar, 2016; Alexander, 2014). Yet both parties to this debate presuppose that environmentally friendly lifestyles would constitute sacrifices. The disputed question is whether these sacrifices are *necessary*.

This self-sacrifice framing naturally leads people to understand climate change as a collective action problem. In fact, this seems to be the default assumption, not just in popular perceptions, but in academic research (Bilandzic et al., 2017; Gardiner, 2006; Newell et al.,

and for individuals (Dietz et al., 2009). But, again, the fact that they claim to have found a few win-wins reveals that they think *most* PEBs are win-loses (i.e., sacrifices).

2014; Steg et al., 2014; Steg & Vlek, 2009). The idea is that, ‘collectively, we are better off if the environment is protected, but rational self-interest often dictates environmental exploitation’ (Karp, 1996, p. 111). The dangers of environmental catastrophe are enormous. But, since each individual is better off not going green, and will almost certainly not (by themselves) tip the balance, it’s in each person’s interest to free ride. While we each want *others* to go green, we don’t want to do so ourselves. In fact, climate change can seem like the ultimate bystander scenario. ‘The bystander effect’ refers to the fact that individual motivation to do something about a problem is inversely related to the number of people who *could* do something about it (Peter et al., 1972). Just about every person one knows could contribute comparably to ameliorating climate change. Hence, we’re all bystanders.

For those actually trying to encourage people to go green, the self-sacrifice framing is highly counterproductive. If one wants people to do something, the last thing one should do is frame that behaviour as a sacrifice. Human decision-making is loss-averse, and subject to the ‘endowment effect’ (Kahneman et al., 1991). That is, people treat losses as more important than equivalent gains (Baumeister, 2001), and value what they have more highly because it’s theirs. This means that people are very resistant to letting go of what they have become accustomed to. Indeed, many of the things that people are asked to change are important parts of their social identities. (For many rural American men, for instance, driving a big truck is a constituent of their sense of self and masculinity.) Studies have found that one of the strongest predictors of willingness to engage in PEB and support environmentalist public policies is the size of the perceived personal costs (Tobler et al., 2012). If PEB is framed as involving personal costs in the name of collective benefits, people will tend to see PEB as a (onerous) social or moral obligation, rather than something attractive for its own sake. This is discouraging since people

are often more motivated to pursue *ideals* than they are to live up to obligations (Does et al., 2011). Of course, people frequently do make personal sacrifices for the good of others, and live up to their perceived obligations. We are altruistically as well as prudentially motivated. The point is just that the self-sacrifice framing discourages what we should be encouraging.

Environmentalists looking to persuade large numbers of people to modify their lifestyles need a new rhetorical strategy—one that bypasses the problems associated with psychological distance as well as loss aversion and the endowment effect. As things stand, the perceived costs of profligate consumption are psychologically distant (and so motivationally anaemic), and the perceived benefits are immediate and personal (and so motivationally robust). This is a deadly combination. People will be averse to suffering the perceived costs. And they will lack a clear sense of payoff—indeed they are likely to doubt that there will be any payoff, for themselves at any rate.

3 How self-interest can power green lifestyle change

There has been growing interest, in recent years, in the ‘co-benefits’ of PEB and public policies (Bain et al., 2016; Elliott, 2014; Walker et al., 2018). A co-benefit is a positive, non-environmental outcome of pro-environmental actions (whether collective or individual). For instance, many PEBs and green policies benefit human health (Thurston, 2013; West et al., 2013). Reduced pollution improves air quality, and more environmentally friendly modes of transportation (e.g., walking, bicycling) involve increased exercise. It’s been found that emphasizing the co-benefits of pro-environmental action increases pro-environmental values and motivation (Maibach et al., 2010).

One particularly important reason to adopt co-benefit framings is that they can appeal to broad audiences. The topic of climate change is heavily politicized—a part of the “culture wars”

(Bliuc et al., 2015; Hornsey et al., 2016). Efforts to educate climate change deniers are often futile (Hoffman, 2011; Whitmarsh, 2011). It's been remarked that the odds of changing a climate change denier's mind are about as high as the odds of changing a conservative Christian's mind on abortion (Bain et al., 2012, p. 600). Politically charged beliefs are influenced primarily by emotions, group membership, and worldview (Haidt, 2012; Kahan, 2010; Lewandowsky & Oberauer, 2016)—not an impartial consideration of evidence. However, even climate change deniers can be brought to favour PEBs and policies with the right framing (Bain et al., 2016). One proven strategy is to emphasize how PEBs and environmentalist policies can lead to greater societal flourishing and economic or technological development (Bain et al., 2012). And there is no correlation between political affiliation and attitudes towards PEBs perceived as involving small personal costs and large environmental benefits (Tobler et al., 2012). In other words, if you want deniers to go green, don't try to convince them of the reality of anthropogenic climate change. Instead, convince them that—for reasons independent of the environment—behaviours and policies that happen to be green are independently good.⁴

⁴ There is some debate as to whether it's more effective to combine co-benefit and environmental frames, or to appeal solely to co-benefits (Elliott, 2014). It seems clear that this will depend on the audience. For those convinced of anthropogenic climate change, the combined appeal will probably be better. Two reasons are greater than one. For climate change deniers, however, the environmental appeal will be, at best, a distraction. For them, it will probably be more effective to appeal solely to the co-benefits (Bain et al., 2012). Designing audience-specific messages is an interesting avenue for further empirical research.

One seldom discussed co-benefit of PEB is individual well-being. The vast majority of people—regardless of whatever else they care about—are strongly motivated by their own good. It would be immensely effective, then, if we could convince people that—far from being a sacrifice—going green is actually *good for them* (De Young, 2000; Jackson, 2008). In this way, individual self-interest could be directed towards the promotion of the common good. Reframing PEB as good for personal well-being would simultaneously eliminate multiple barriers to ameliorating climate change. It would make (at least some of) the perceived costs of green lifestyles disappear, thus avoiding loss aversion and the endowment effect. It would also allow us to dodge the psychological distance problem, as the reasons to engage in PEB would no longer have to do with averting some distant disaster. Thankfully, promoting this belief would not involve any deception or bad faith. (I take no stand here on whether it would be justified to promote this message if it *weren't* true.) It may come as a surprise to many, but there is strong evidence that green lifestyles do not generally make people less happy. Quite the opposite, PEB comes with greater happiness and well-being. Thus, we should abandon the rhetoric of personal sacrifice because, in addition to being counterproductive, *it's not even true*.

Before surveying the evidence for this claim, I should mention some qualifications. First, even those highly motivated to adopt a green lifestyle will face obstacles and barriers. People don't always do what they believe is best for themselves. Think of how difficult it can be for some people to eat a healthy diet—even though they know that it's in their interest to do so. Old habits can make change difficult (Klößner, 2013). There are also situational factors that can block or discourage PEB (e.g., a lack of public transport). Second, my proposed reframing is meant as a supplement to, not substitute for, public policy. Public incentives for PEBs should still be encouraged, and pro-environmental 'nudges' are highly advisable (Sunstein & Thaler,

2008).⁵ So, in short, I'm not claiming that busting the sacrifice myth would leave nothing standing in the way of pro-environmental lifestyle change. The claim is that it would be a very useful step in the right direction.

4 Environmentalism and subjective well-being

'Subjective well-being' (SWB) refers to the psychological components of human flourishing (Diener, 2012; Diener et al., 2002). It encompasses a range of psychological constructs, including: positive emotional states, life satisfaction, and feelings of social connection, meaningfulness, and purpose.⁶ There is a great deal of evidence for a positive relationship between SWB and environmentalism. As Tim Kasser wrote in a recent review, 'findings from 13 different studies spanning several nations and tens of thousands of subjects reveal a consistent significant positive correlation between [SWB] and their engagement in [PEBs]' (2017, p. 3). In this section, I'll review some highlights of recent research and explore some theoretical explanations for the findings.

⁵ People incentivized to engage in certain PEBs (like using public transport rather than driving) will sometimes persist in those behaviours even after the incentives are removed (Fujii & Kitamura, 2003), suggesting that they have realized the PEB is not a (significant) sacrifice. Incentives programs could thus be used to kick-start green habits, without needing to continue for long periods, thereby ringing up large taxpayer bills.

⁶ For convenience, I sometimes use 'happiness' in place of 'SWB'. I mean them to be synonymous.

One of the earliest studies, conducted by Kirk Brown and Tim Kasser (2005), aimed explicitly to see whether individual and ecological well-being are compatible. The authors summarize their findings thus:

In a sample of adolescents and again in matched, demographically diverse national samples of adults differing in lifestyle... personal well-being and ecologically responsible behaviour were complementary. That is, happier people were living in more ecologically sustainable ways... These results weigh against the oft-stated belief that personal well-being and ecologically supportive behaviour are necessarily in conflict... (Brown & Kasser 2005, 360)

These are correlational data. They don't show that going green *causes* people to become happier. But, as Brown and Kasser note, they do bust the myth that a green lifestyle is typically a personal sacrifice.

One might suspect that this relationship only holds for some small portion of the population. Perhaps it's just the wealthy, or the WEIRD (Henrich et al., 2010), for whom personal and planetary well-being are complementary. Or perhaps a green lifestyle is associated with happiness only when one already values the environment, or when one's peers generally consider PEBs virtuous. While there is some evidence that social norms can play a moderating role in the PEB-SWB relationship (Welsch & Kühling, 2018), this suspicion is not supported by the data. Brown and Kasser's findings have been repeatedly replicated across cultures. A study using data from approximately 24,000 people around the world found a positive and significant

relationship between PEB and SWB (Welsch & Kühling, 2010).⁷ This relationship is significant even controlling for nationality, socioeconomic status, and differences in personal attitudes towards consumption. Numerous studies around the world have corroborated this finding (Corral-Verdugo et al., 2011; Jacob et al., 2009; Kaida & Kaida, 2016; Welsch & Kühling, 2011; Xiao & Li, 2011). This shows that a green lifestyle is not associated with happiness only for the special few who are Western, rich, or who happen to care about the environment.

Another line of evidence comes from research on materialism (Kasser, 2002). Materialistic people are those who highly value money and material possessions, and who see these as indicators of success and social status (Richins & Dawson, 1992). Unsurprisingly, materialism is a strong predictor of environmentally unfriendly attitudes and behaviours (Hurst et al., 2013). Of course, high levels of consumption are not identical with materialism (there are other reasons why one might have a large environmental footprint). But materialism is rampant in rich countries, and a major cause of over-consumption. Since reducing consumption generally

⁷ In this study, life satisfaction correlated with engagement in PEB at $r = .21$. For comparison, the correlation between life satisfaction and household income was only $r = .17$. Kasser (2017) reports standardized regression coefficients for specific PEBs. These range from $\beta = .05$ (for, e.g., using recycling bins) to $\beta = .12$ (for, e.g., trading or sharing products rather than buying). The PEBs with the strongest relationships to SWB have been found to be those involving more personal effort, such as making things for oneself, and more social interactions, such as cohabitating (Schmitt et al., 2018). Self-determination theory (discussed below) may explain why this.

has a far larger impact than stereotypical PEBs like recycling (Gardner & Stern, 2002), materialists should be a primary target-audience for environmentalist campaigns.

Multiple meta-analyses, encompassing hundreds of studies, have found a strong and negative relationship between materialism and SWB (Dittmar et al., 2014; Wright & Larsen, 1993). Materialistic people experience fewer positive emotions and more negative emotions, are less satisfied with their lives, and find their lives to be less meaningful. This finding is remarkably stable across demographics. Even business students, whose social circles one would expect to be supportive of materialism, are less happy when they are more materialistic (Kasser & Ahuvia, 2002; Vansteenkiste et al., 2006). Higher levels of materialism even predict more physical ailments like headaches and faintness (Kasser & Ryan, 1993). The relationship between materialism and reduced SWB appears to be causal. For instance, in one study, participants who were primed with materialistic cues (e.g., ads for luxury goods) scored higher on materialism and consequently higher on depression, anxiety and shame, than participants primed with control images (Bauer et al., 2012). Longitudinal studies (covering one half, two, and twelve years) have found that changes in a person's level of materialism lead to corresponding changes in SWB, and interventions that decrease materialism also help to improve SWB (Kasser et al., 2014).

This negative materialism-SWB relationship is mediated by several factors. First, much of the relationship is explained by changes in gratitude (Tsang et al., 2014). People who are less materialistic are more grateful, and gratitude is itself a strong predictor of SWB (Frost et al., 2007). Additionally, those who think that possessions are a sign of success tend to have a negative self-image (Frost et al., 2007), a common source of unhappiness. These findings complement Brown and Kasser's (2005) observations in the study mentioned above. They found that the relationship between environmentalism and SWB is mediated by the adoption of

‘intrinsic values’ (Brown & Kasser, 2005, p. 361)—e.g., personal growth and achievement, and close social relationships (as opposed to ‘extrinsic values’ like physical appearance, social status, or prestige). The satisfaction of intrinsic values does not typically require much in the way of material resources. Thus, people who pursue these goals consume less and engage in more PEBs (Unanue et al., 2016). In fact, an orientation towards intrinsic values is actually a much stronger predictor of PEB than pro-environmental values (Unanue et al., 2016). As Brown and Kasser write, ‘people holding more intrinsic values are unlikely to be very interested in large “trophy” homes or gas-guzzling vehicles that often reflect ostentatious displays of wealth or image enhancement’ (2005, p. 361). Things like personal growth and close relationships are well-known contributors to SWB (Baumeister & Leary, 1995; Mehl et al., 2010; Nelson et al., 2016; Ryff, 1989; Ryff & Keyes, 1995)—as well as physical health (Cohen, 2004; Holt-Lunstad et al., 2010).

Self-determination theory, a prominent explanation for variation in SWB, posits that people have three main psychological needs: competence, autonomy, and relatedness (Ryan & Deci, 2000). To be happy, in other words, people need to feel: (1) capable, and able to handle life’s challenges; (2) free to make their own decisions; and (3) that they belong, and have good relationships (Ryan et al., 2013). Many PEBs directly or indirectly contribute to the satisfaction of these needs (Kasser, 2009). For instance, finding new uses for old items or ways of improving one’s energy efficiency can make one feel particularly competent.⁸ Taking control of one’s consumption and spending promotes a sense of autonomy (Boujbel & d’Astous, 2012).

⁸ They can also just be fun, like solving a puzzle. This is an instance of the ‘hedonic benefits of thrift’ (Chancellor & Lyubomirsky, 2014).

Frugality—defined as ‘behaviour geared towards the voluntary restriction of consumption and the resourceful use of available resources’—has been found to predict both a greater sense of autonomy and improved relationship quality (Muiños et al., 2015). Living with others, which reduces one’s ecological footprint, also leads to improved social support, which is enormously important for all aspects of well-being. For instance, lack of social integration is as detrimental to one’s *physical* health as smoking and obesity (Holt-Lunstad et al., 2010). Now, obviously there are also ecologically unfriendly ways of satisfying these same needs. But a green lifestyle naturally includes a lot of higher need satisfaction, thus making it an effective route to happiness—and one which is likely to be far more accessible to most people than less environmentally friendly alternatives.

Under conditions of scarcity, more is better. But for those living in conditions of abundance, such as contemporary developed economies, more is often *worse*—not just for our planet, but for ourselves. More food often means worse health; more square-footage means more rent or mortgage, and more cleaning; and more gadgets mean more frenetic distractions (Naish, 2008). When we buy new things, we quickly adapt to them and lose interest through a process called ‘hedonic adaptation’ (Lyubomirsky, 2012). Humans have an incredible ability to adapt to their circumstances. Thus, higher rates of consumption (above subsistence level) fail to make lasting contributions to people’s happiness because people quickly adapt to them. Indeed, because we adapt so quickly to both good *and bad* things, we can expect that, even if some lifestyle changes feel like losses at first (e.g., it’s less convenient to ride the bus than drive), it won’t affect one for long. In other words, we can expect hedonic adaptation to absorb negative effects of reduced consumption.

In summary, there is strong evidence that environmentally friendly lifestyles do not commonly involve sacrifices to (i.e., net negative effects on) happiness and well-being. Rather, they typically come with *greater* well-being. This is true for many or most people, not just environmentalists living in rich countries. (Though now that the positive SWB-PEB relationship has been established, future research might productively focus on *who* benefits the most from *which* PEBs under *what* conditions, etc.) Once one's basic physical needs are met, the things with the biggest impact on happiness—e.g., close relationships, personal growth, a sense of purpose—don't require a significant ecological footprint. Indeed, the overconsumption of resources can easily get in the way of satisfying these higher needs. Thus, the suggestion that going green is bad for you is not only counterproductive rhetoric, it's false.

5 Voluntary simplicity

The voluntary simplicity movement nicely illustrates the kind of rhetoric I'm recommending environmentalists adopt. Voluntary simplifiers are people who choose to work and consume less, and to do both more thoughtfully (Alexander, 2011; Elgin, 2010; Gambrel & Cafaro, 2010). There are a number of very similar movements going by other names, including: minimalism (Millburn & Nicodemus, 2014), enoughism (Naish, 2008), and 'downsizing' or 'downshifting' (Juniu, 2000). Indeed, the basic premise of living simply has been around for almost all of historical time, and has figured prominently in practically every religious and spiritual tradition (Vanenbroeck, 1991; Xenos, 2017).

As with all social movements, there is incredible variety in the forms that voluntary simplicity takes, and in the motivations behind it. According to a multi-national survey of simplifiers, motivations range from decluttering to living mindfully/spiritually to making time for oneself and one's family (Alexander & Ussher, 2012). The most commonly cited motivation

(mentioned by over 80% of respondents) was ‘environmental concern’. However, the movement is not primarily an environmentalist one.⁹ It’s driven by a rejection of consumer culture and a concern for personal well-being. Here are some representative statements:

[The lifestyle] involves... minimizing expenditure on consumer goods and services, and directing progressively more time and energy towards pursuing non-materialistic sources of satisfaction and meaning. This generally means accepting a lower income and a lower level of consumption, in exchange for more time and freedom to pursue other life goals, such as community or social engagements, more time with family, artistic or intellectual projects, more fulfilling employment, political participation, sustainable living, spiritual exploration, reading, contemplation, relaxation, pleasure-seeking, love, and so on...

(Alexander, 2011, p. 2)

It’s a way to escape the excesses of the world around us—the excesses of consumerism, material possessions, clutter, having too much to do, too much debt, too many distractions, too much noise. But too little meaning. [This] is a way of eschewing the non-essential in order to focus on what’s truly important, what gives our lives meaning, what gives us joy and value. (Babauta, n.d.)

⁹ Juliet Schor (1992), who might be seen as the social scientist representative of this movement hardly discusses environmental motivations for cutting back on work and consumption. Thus, her writings may exemplify the kind of message that will be most compelling for conservatives and climate deniers (see note 3).

As these quotes illustrate, voluntary simplifiers not only deny that there is a conflict between well-being and reduced consumption, they take reduced consumption to be an effective means to well-being.

A number of empirical studies have confirmed that voluntary simplifiers have a smaller ecological impact, and are indeed happier than non-simplifiers (Boujbel & d'Astous, 2012; Brown & Kasser, 2005; Kennedy et al., 2013; Rich et al., 2017). While these are correlational data, which don't license causal conclusions, there are longitudinal data showing that those who adopt a lifestyle of reduced consumption are subsequently happier. In a study looking at 2,268 simplifiers from around the world (concentrated in North America), fully 87% said that they were happier (with almost half of respondents reporting being 'much happier') as a result of simplifying their lives (Alexander & Ussher, 2012). While this is a self-selected sample, this goes some way towards establishing a causal relationship.

Given the diversity within the movement, there are many explanations for why voluntary simplicity might promote well-being. The focus on non-material values and higher psychological needs is an obvious route from simplicity to well-being (Kasser, 2009). Indeed, Rich and colleagues (2017) found that the relationship between a simple lifestyle and SWB was mediated by the satisfaction of the needs for autonomy, competence, and relatedness. Another route is financial (Alexander & Ussher, 2012, p. 76). American households collectively bear over \$13 trillion in debt (Federal Reserve Bank, 2018). Even excluding home mortgages, the figure is almost \$4 trillion. For many, borrowing is the only way to sustain the lavish consumption promoted by the advertising industry and consumer culture. Debt is, naturally, a major source of stress and anxiety. Since reduced consumption means reduced spending, becoming a simplifier can get one out of debt and moving towards financial freedom.

Reduced spending also means that simplifiers can work less, which will tend to make them happier. The average number of work-hours per week has nearly doubled since the 1970's (Bunting, 2004; Kuhn & Lozano, 2008; Schor, 1992). For many people, working long hours means lower SWB (Bonebright et al., 2000; Rich et al., 2017). And, given that material goods affect happiness so much less than experiences (Gilovich et al., 2015), the things one can buy with the extra money are less impactful than the experiences one gives up by working more. 'Time affluence', the feeling of having plenty of time and not being rushed, is positively associated with SWB (Hershfield et al., 2016; Kasser & Sheldon, 2009; Whillans et al., 2016). This is unsurprising as time pressure is a common source of stress, and people tend to spend their free time doing things they enjoy or consider meaningful. Moreover, time affluence, unlike monetary affluence, doesn't come with (rapidly) diminishing marginal value. The wealth-SWB relationship is curvilinear and asymptotic (Diener & Seligman, 2004). The time affluence-SWB relationship, on the other hand, is linear. Since consuming less gives one the freedom to work less, simplifiers have (at least the option of) greater time affluence. And, given their emphasis on pursuing meaningful activities, they are likely to spend that time in beneficial ways.

6 Conclusion

We live at a crucial moment in human history. We know beyond reasonable doubt that human activity is damaging our planet. Yet, we don't act like we care. I argued that this is due partly to the counterproductive way in which green lifestyles are framed as sacrifices. But we can fix this problem. The message that consuming more very likely won't make you better off, and that people are generally happier living eco-friendly lifestyles may be one of our most powerful tools. Let's abandon the rhetoric of self-sacrifice, which is both unhelpful and untrue. Instead, spread the word: going green is good for you!

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