Making Change Easy Is Not Always Good

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Abstract: A first order law of behavioral change is to make change easy. Nevertheless, this recommendation can sometimes backfire, at least for some subgroups. We examine mechanisms which may cause application of this intuitively convincing rule to be counterproductive, namely lack of meaning, the moral licensing effect, and the boredom threat. We suggest a number of hypotheses, based on our review of the behavioral literature in this area, which could be empirically tested in future research. We also propose some practical ways to avoid the 'making things easy' trap and make environmental change more attractive.

Keywords: behavioral change; environment; goals; public policy; public strategies.

JEL codes: D91; Q50.

1. Introduction

Altering the behavior of consumers, citizens, employees, managers and public servants for the better is a fundamental goal of many public and private policies. A well-known recommendation for those seeking behavioral change is to make change easy for would-be adopters (Luna and Cohen, 2017; Tummers, 2019). For instance, change can be made easier for consumers by providing them with tips on how to lessen their environmental impact without sacrificing too much in terms of money, status, convenience or comfort (Grolleau et al., 2017). This well-intentioned and entrenched approach fits conventional wisdom and is intuitively convincing, but is not the whole story. Indeed, we argue that making things easy is not always the best strategy to prompt and maintain behavioral changes.

In some circumstances, increased difficulty can encourage and support behavioral change rather than discourage it. We are not the first to recognize the trap of automatically making things easy, but we go deeper by examining three mechanisms that can explain why making things easy can sometimes backfire and apply them to the environmental realm. Agents promoting behavioral changes would benefit from clear guidelines to advance their agenda, and better understanding how the easiness-difficulty continuum affects behavioral change can lead to better design and implementation of more effective interventions.

We outline three reasons why making change easy may be counter-productive: deprivation of meaning (Section 2); triggering a moral licensing effect (Section 3); and boredom and disengagement (Section 4). Section 5 introduces the concept of 'flow', which suggests people are more likely to engage in an activity if the challenge level matches their abilities. Section 6 presents illustrative examples and suggests practical ways to avoid the 'make things easy' trap. The final section concludes our discussion.

2. A behavioral change that is too easy can deprive the participants of meaning

A task that is too easy can deprive participants from ascribing value and meaning to it, and this problem can be exacerbated when pleasure is obtained from the activity.

Although counterintuitive, people can derive greater meaning from, and ascribe more value to, things for which they or someone else had to sacrifice personal pleasure, convenience and leisure (Olivola and Shafir, 2018). Olivola and Shafir (2013; and see Magrizos et al. 2021 about volunteer tourism) found that people may contradict classical economic and psychological theories by behaving more prosocially when the experience includes pain and effort. Rather than considering pain and effort as strong deterrents, the authors demonstrated that human motivation is more complex, especially for a cause that individuals believe in and care about. The prospect of enduring pain and effort for a charity, to reduce human suffering, led people to ascribe greater meaning to donating, which motivated them to donate more. The authors concluded that a contribution process that requires effort increases willingness to contribute prosocially, a phenomenon they called the 'martyrdom effect'.

This insight is in line with the attention of behavioral economists devoted to identity concerns, notably to explain puzzling behaviors where people bear costs as a result of their own actions that would otherwise seem irrational (see Akerlof and Kranton, 2000; 2005; 2010). This perspective is also supported by research of Burton et al. (2008), who found that by limiting the skill requirement for land management (in effect, making change easier), voluntary agri-environment schemes common in Europe "fail to allow farmers to perform identity-enhancing behavior (around which their self-identity and self-esteem are based) in any significant way, and fail to distinguish a cultural boundary between farmers and non-farmers…" (p27). This, the authors suggest, contributes to rejection of participation in such schemes, and to failure to induce permanent change in attitudes and behaviors of participating farmers.

Although it is somewhat conjectural and requires empirical testing, we argue that the pain and effort associated with some pro-environmental behaviors (such as enrolling in a conservation program, using public transportation, saving on pollutant raw materials, participating in beach clean-ups or turning down the heater when it is cold) could lead people to go beyond their comfort zones. They could reflect on how they view themselves and the world around them, which could make the experience more meaningful. If so, it points to the importance of checking whether the proposed changes could deliver meaning and calibrating difficulty accordingly.

Testimonials and narratives of individuals who support proposed environmental changes and draw status and identity from their efforts can prompt similar responses in others. Several studies showed that individuals who are aware that their work has a meaningful, positive impact on others were not only happier than those who are not but also significantly more productive (see, for example, Grant, 2008). This insight can be applied to pro-environmental changes by emphasizing that difficulty can be meaningful, for example, by humanizing the beneficiaries of clean water or clean air. Allowing would-be polluters to see and hear citizens enjoying the environmental benefits deriving from their (the polluters') behavioral changes can give sense and meaning to these changes. In the case of agri-environmental schemes, policy designers can reframe pro-environmental behaviors as a new form of production, as desirable commodities in their own right and not simply as by-products of a 'multi-functional-agriculture' (Wynne-Jones, 2013). This redefinition can help to give more meaning to agri-environmental efforts.

3. A behavioral change that is too easy can prompt a detrimental moral licensing effect

Making small and inexpensive environmental changes can unfortunately license undesirable behaviors in the environmental and other domains, and empirical evidence suggests that this

moral licensing effect can be sizeable (Mazar and Zhong, 2010; Tiefenbeck et al., 2013; Grolleau et al., 2017; Hope et al., 2018).[1] The moral credit model argues that performing a 'good' act earns credits for a moral account that can reduce the discomfort of performing a 'bad' act afterwards. Similarly, people may perform 'good' acts to atone for a 'bad' deed (Dolan and Galizzi, 2015).[2]

A small change performed (or just anticipated) by the considered individuals (Tiefenbeck et al., 2013; Catlin and Wang, 2013; Cascio and Plant, 2015) or even by someone close to them (Meijers et al., 2019), such as a family member, can make individuals feel good and so act in ways that are much more detrimental to the environment, producing a negative net effect overall. In one study of moral licensing, for example, apartment residents who were persuaded to decrease their water consumption subsequently increased their electricity consumption (Tiefenbeck et al., 2013).

In some cases, the adopted behaviors are symbolic, having no direct impact on the alleged external target, but can potentially generate a moral licensing (Soyer et al., 2013). These symbolic acts can be directly or only vaguely related to the pursued goal(s). If perceived as 'good deeds', these actions can trigger a moral licensing effect. For instance, an individual in a developed country practicing a 40-hour fast will not directly save poor people

[1] Our discussion about the moral licensing effect may seem linked to the rebound effect. An important difference between these two is that the rebound effect is subconscious –individuals can afford to drive fuel-efficient vehicles more because they pay less for fuel. Moral licensing, however, means individuals feel morally justified in relaxing on some behavior because they have acted well. For a more complete discussion, see Greening et al. (2000), Binswanger (2001) and Dütschke et al. (2018).

[2] A counterintuitive point is that there can be benefits from improving people's understanding of how much they degraded the environment. Encouraging 'green guilt' can lead individuals to adopt more challenging efforts in favor of the environment (see Graton and Mailliez, 2019 for a recent review). Nevertheless, given that guilt is a negative emotion that could cause damage to people experiencing it, this multidimensional toll (e.g., psychological, emotional) should count in calculus about what types of interventions are ultimately prosocial.

from starvation. Similarly, virtue signaling stickers on cars such as 'There is no Planet B' or email sign-offs saying 'We All Live Downstream' will not directly improve the state of the planet or water cleanliness respectively. While these actions may not directly materially move the dial on the alleged goals, they can activate a moral licensing process and lead to people feeling authorized to engage in behaviors they may not perform otherwise, such as (subconsciously) giving less to a (hungriness-related) charity, driving their cars more or increasing their use of the automobile air conditioning (see e.g., Tiefenbeck et al., 2013). Such actions are done by the actors for themselves (i.e., to support their own self-image or affirm their beliefs, and/or shore up their status in the group), rather than for the cause, even if they themselves may reject that interpretation. Based on two experimental studies, Soyer et al. (2013, p. 244) conclude that "…having the opportunity to express one's support or positive intentions symbolically may have adverse effects on 'real' contributions made. This effect is especially likely to produce for individuals who care relatively more about their image in the eyes of others."

When the initial behavior is perceived as too easy, Truelove et al. (2014) suggest that it will be seen to be less reflective of one's motivations and so be more likely to generate negative spillovers. If a change that is too easy prompts more detrimental behaviors, the initial environmental gain can be outweighed by the subsequent environmental loss.

One way to reduce the likelihood of the moral licensing effect is to consider the degree to which the individual identifies with proposed changes. Research shows that participants with strong pro-environmental identities tend to behave consistently, whereas participants with weaker pro-environmental identities exhibit moral licensing (van der Werff et al., 2014). People prefer to behave in ways that align with important social identities, even if these actions involve some costs or inconvenience (van Dijk et al., 2016). They interpret the difficulty as an indicator that the behavior is important.

In a similar vein, one way to reinforce the relationship between identity and desired changes may be to frame the proposed changes as behaviors that were performed by previous generations. This framing seeks to harness the complex relationship between history and identity. Beck (1990) posits that the identity of individuals depends on their past, and these concerns with their past become more prevailing when current identity seems threatened. For instance, farmers may be reluctant to consider innovative green practices because they are attached to conventional practices. Framing these green practices as the rediscovery of ancient practices historically performed by in-group members (i.e., previous generations of farmers or even parents or grandparents) that meet contemporary needs can be identity-enhancing (Lequin et al., 2019; Warren et al., 2016) and can limit the likelihood of a moral licensing effect.

4. A behavioral change that is too easy can lead to boredom and disengagement

Desired environmental behavioral change is frequently presented to people in terms of goals they are invited to attain. Goals that are either too challenging or too easy can result in boredom and disengagement. Chin et al (2017) found, for example, high prevalence of boredom in situations involving both monotonous and difficult tasks, as well as in contexts where the individual's autonomy might feel constrained (such as time spent at work). This can be an impediment to achieving pro-environmental behavioral change.

According to Isham and Jackson (2022, p. e67), boredom is likely when an individual skill is far above what is required by the considered change. Evaluating individuals' skills in relation to the considered change can allow change promoters to anticipate and avoid generating boredom among the targeted population, at least for some subgroups. In this situation, where boredom is likely and the change desired, it makes sense to transform the change into something that reduces potential boredom. While this might be by introducing

elements of entertainment and fun, sometimes this result can be obtained by increasing difficulty.

For instance, a recurrent stereotype associated with a greener lifestyle is that going green is somewhat easy but involves a certain level of boredom. Many green tips are easy to implement but also boring because they may require giving up enjoyable things and replacing with activities that appear unlikely to be as fun and interesting. This easiness of going green frequently corresponds to a language of 'don't' (don't take long showers[3], don't consume meat, don't use toxic home cleaning products) that can come at the price of generating a lack of excitement and even boredom and/or among would-be adopters (Visser, 2013). Reframing something that seems too easy as something that is more difficult and engaging (e.g., by using a language of progress and innovation) may be a part of the solution (e.g., time your shower on day 1, then attempt to progressively reduce your shower time for the next 7 days, cook with plant-based foods instead of meat, Do-It-Yourself projects, such as replacing toxic home cleaning products with homemade non-toxic alternatives).

The sense of accomplishment and interest in goal (re-)engagement are influenced by the perceived attainability and challenge of the goal (Scott and Nowlis, 2013). Anticipation of affective outcomes constitutes a powerful motivator or impediment for pro-environmental behaviors. When people believe that engaging in a given change will make them feel interested and excited (rather than bored and indifferent), they are more likely to make the change. Kraft et al. (2005), for example, showed that anticipated affective outcomes (such as

[3] One may argue that the example of taking shorter showers does not necessarily illustrate well the boredom effect. In fact, some people, such those with some physical disabilities or even those with long hair to wash, would find it challenging to only ever take short showers. It is not boredom, but discomfort or even risk of injury from increased speed in the shower that is being asked of them in this campaign. This insight points to the importance of understanding the heterogeneity in the population regarding whether the solicited change could be boring or not.

'recycling is boring/interesting') can be better predictors of recycling intentions than anticipated instrumental outcomes (such as 'recycling is harmful/beneficial').

Discussing workplace pro-environmental behaviors from a sociological perspective, Kennedy et al. (2015, p.366) explained that difficulty can help employees to be more engaged in finding innovative solutions. They reported that "engineers, for example, get excited by a technical challenge. Motivate them with an ambitious sustainability problem to solve and provide them with the time and resources to do it. They love toys (or machines) to play with. When people are given a great challenge, they can be inspired to come up with ground-breaking solutions". However, this needs to be balanced with the skill level of targeted individuals, as explained in Section 5 below.

5. The Goldilocks principle: matching skills with the challenge

Performing activities that match skills to challenges can help increase people's engagement with the activity, leading to greater satisfaction and intrinsic rewards from behavioral change (Moneta and Csíkszentmihályi, 1996). Thus Nakamura and Csíkszentmihályi (2002) argue that people are more likely to engage in an activity when the challenge level matches their abilities.

Isham et al. (2019) connect achieving the 'just right' degree of challenge with the concept of *flow*, a state in which people are so involved in an activity that they will continue to do it even at great cost, for the enjoyment that activity provides. If the proposed changes are well beyond individuals' abilities (too hard), they will be stressed, discouraged and more likely to not try at all or to give up. If they are too far below their abilities (too easy), individuals will be bored, and again be more likely to give up (Isham and Jackson, 2022).

Loewenstein's analysis of why extreme mountaineers choose to engage in activities despite extremely high risk of serious injury and death found skill matching was a critical

factor. Loewenstein contended that a prime reason why mountaineers climb is that they are good at it – their skill levels in this domain are high. This, he suggested, leads to a high level of pleasure derived from completing goals unattainable by most others but which match their level of skill. Loewenstein posited that undertaking challenges that match skill can result in benefits from a sense of control and mastery: the ability to signal worth to one's self and others; and a sense of enhanced insight into life's meaning. He observed that these important influencers of human behavior are often overlooked because they are "difficult to formalize in decision-theoretic terms" (Loewenstein, 1999, p. 317).

Isham et al. (2019) recognize that skill sets are not static; they can be acquired and improved over time. When trying something for the first time, individuals may feel a lack of competence and an excess of challenge relative to skill. However, if the relevant skills are developed (such as the ability to grow one's own food or repair broken items rather than simply purchasing a new item), they can deliver optimal experiences.

A few studies support the potential for pro-environmental behaviors to be good facilitators of flow experiences. Yasué et al. (2020, p. 274), for example, report that landowners "… frequently spoke about experiencing a sense of timelessness, a positive flow state (…), when immersed and engrossed in conservation activity on their property." De Young (2000) highlighted that pro-environmental behaviors can be intrinsically rewarding in the same way that flow experiences are. Seligman et al. (1981) stated that individuals can become challenged by and interested in the goal of lowering their energy consumption, which may correspond to the flow characteristics of absorption and challenge. However, understanding and considering the flow requirements of environmental changes are rare among promoters of environmental progress (e.g., policy-makers, environmental, unions).

We propose explicitly examining *ex ante* whether the proposed changes exhibit the desired levels of attainability and challenge and then adapting them to suit the targeted

audience such as public servants, citizens or farmers. Sometimes a tailored approach may be more appropriate than a one-size-fits all approach. Mastering a skill to achieve a challenging pro-environmental activity and delivering measurable environmental results can constitute a reward in itself, such as farmers successfully switching to organic farming or passionate ornithologists contributing to bird conservation. Changes proposed to would-be adopters, such as farmers in agri-environmental programs, could be designed not only to address environmental issues and deliver environmental outcomes but also *to fit the flow requirements* to transform the adoption of environmental practices into an optimal experience. Public or private designers of environmental programs may not have considered whether the proposed changes allow the would-be adopters to reach a state in which their challenges and skills are well matched with unambiguous performance feedback. Reaching this state can deliver 'intrinsic rewards' that encourage adopters to pursue the activity for its own sake. Redesigning some environmental approaches, for example by switching (at least partly) from action-based to result-based approaches, can help to achieve positive flow effects.

As noted above, different people can have differing skill levels. And people's skills can change over time. So, it may be necessary to increase the challenge over time and to anticipate this evolution in the initial design. A practical way to account for differences and change is to propose high–low range goals rather than single number goals (Scott and Nowlis, 2013). This tactic exploits the best from two seemingly opposite worlds. A single number goal provides a unique reference point that can present the proposed change as either (too) easy and attainable at the expense of the challenging dimension or (too) challenging and exciting at the expense of the attainability dimension. Using a high–low range goal gives two reference points, with the low range indicating what is attainable and the high range indicating what is challenging. Although we are not aware of any study directly examining this insight in an environmental policy (the original evidence was related to weight-related goals), we

contend that designing environmental approaches integrating this simple nudge (Thaler and Sunstein, 2008) can satisfy both less and more demanding agents. In some cases, the progress made above the minimum threshold can be rewarded thanks to symbolic awards (e.g., Medford Green Awards[4], or at a higher level, the Dutch Order of the Golden Ark[5]), which may save public funds.

6. Illustrative applications

In the following, we present two illustrative examples that suggest practical ways to avoid the 'too easy' trap. Both point to the need for additional research, laboratory and field experimentation and evaluation to test the effectiveness of the approaches. To date, there is a paucity of such work.

6.1. The Melbourne water saving scheme

More efficient water use can provide more water for the environment and improve water security for households in times of drought. Applying insights from behavioral economics can help identify opportunities to improve policy development and implementation.

Melbourne is Australia's fastest growing city, with the population predicted to almost double to 9 million people by 2050 (DELWP, 2019a). A drying, warmer climate and more frequent and severe droughts are creating greater pressure on the city's water supplies.

In 2016, the Victorian government reintroduced a voluntary target of 155 liters/person/day. Victorian water bills include information about the household's average daily consumption and a comparison with the daily target. This target builds on water saving rules, introduced in 2011, and progressively tougher restrictions that are imposed during

[4] https://medfordenergy.org/gogreen/medford-energy-committee/medford-green-awards/

[5] https://www.identifymedals.com/database/medals-by-country/netherlands/the-order-of-the-golden-ark/

drought (DELWP, 2019b). The government's 'Target 155' website includes tips to reduce water use around the home such as water efficiency videos, a Home Water Calculator, information sheets and posters, and a 'plant finder' (to find plants suitable for the climate, soil type and maintenance level). The website connects water usage reductions to broader environmental issues, asserting that cutting back on water use can also save water, energy, money, and the environment.

Residential water use across Melbourne was 154 liters/person/day in 2019/20, only a liter more than in 2017/18 and less than the 2016/17 average of 161 liters/person/day despite drier conditions in those years (Melbourne Water, 2020). This indicated good progress on reducing household water use. However, applying our insights suggest several ways to improve the gains. Although this remains to be tested, our reflection illustrates concretely the rationales developed above.

First, by setting a high reference point, we observe that the target provides a challenging aspiration. The initiative accounts for variance in household sizes and decentralized administration to twelve water agencies to account for regional variation (DELWP, 2019c). Nonetheless, a single averaged target for everyone could lead to boredom and complacency from those already consuming less than the target. Instead, a multi-level ladder of achievement could account for varying 'easiness' requirements by creating a range of targets that are both challenging and attainable. Awarding households status indicating high level achievement (for example, through 'gold' or 'platinum' or other such status-conveying labels) could also contribute to pro-environment identities, mitigating the moral licensing effect. Ferraro and Price (2013) in a study of a large-scale intervention in a water utility in the USA found that social comparisons were more effective than information-based treatments such as technical advice and general moral appeal. Additionally, tangible incentives could be associated with attaining an achievement tier, as the existence of more complex motivations

opens up the possibility of government policies beyond traditional economic incentives (the application of which may be limited by political will and concerns over equity (Ferraro and Price 2013), or by availability of public funds. However, experimental evidence related to interaction of financial compensations with other motivations suggests the impact on pro-social action can be positive, neutral or negative (Ferraro and Price 2013), so *ex ante* research is recommended to detect and avoid detrimental interactions.

Second, the initiative could be integrated with a household's social network. Households, for example, could be invited to post their achievements on social media. This could be part of a gamified application similar to the 'Reduce Your Juice app' used to target energy consumption in low-income households in Queensland (Swinton et al., 2017). Game design elements such as point scoring, rewards and competition with other players could stimulate a state of flow, increasing engagement in pro-environment behaviors.

Third, the target could be varied depending on environment conditions. More difficult savings targets could be implemented during severe drought, for example.

6.2. Play&Go, promoting a sustainable mode of travel

One way to avoid boredom can be to gamify the environmental issue to provide challenge. Such games may also introduce a social influence component, where people are invited to compare their efforts or performances to a group of relevant peers.

Play&Go, for example, is an urban game used in Trento (Italy) to promote sustainable mobility. The application notably combines thematic weeks with personalized challenges and rewards (e.g., 'Do at least 30 km by bike during the current week to earn 200 Green Leaves'). This combination aims "… to find a good balance between the best choice for the player – i.e., requesting something that was challenging enough, but not impossible to do – and the

administration of Trento promoting the initiative – which defined the thematic weeks" (Ferron et al., 2019).

Play&Go pits individuals against themselves. But sometimes individuals can be more motivated to perform better than others in a relative sense rather than performing better in an absolute sense. Strategies to reduce energy consumption can take advantage of this motivation by gamifying consumption levels. For example, interested individuals can try to outperform others in a relative sense by competing against an average household of similar size in the local area.

An increasing number of applications are using this feature to make environmental challenges more attractive and compelling (Douglas and Brauer, 2021; Ouariachi et al., 2020; Huber and Hilty, 2015) but many knowledge gaps remain (Douglas and Brauer, 2021). A higher level of difficulty or cost can decrease the risk of being bored and make the relevant behavior more likely to deliver status and reinforce identity of individuals who seek to occupy the top of the green ladder (Griskevicius et al., 2010). For instance, Noppers et al. (2014) argued that "while these instrumental drawbacks [such as a higher price, or reduced convenience] may on the one hand inhibit adoption of sustainable innovations, such drawbacks could ironically at the same time stimulate adoption by making the symbolic attributes more impactful (…)". Nonetheless, increased difficulty or cost can also act as a barrier to participation. A gamification approach is not without downsides and raises some concerns, including those related to its psychological consequences, privacy considerations and sustainability. Given the remaining knowledge gaps, we recommend more attention to this area, including evaluations of the effectiveness of existing applications in achieving their objectives as well as examining any unintended consequences.

7. Conclusion

An easy-to-understand prescription such as ‘making change easy’ seems intuitively convincing and promising. However, ease is not always the best strategy. Sometimes, it can backfire by depriving targeted participants of significance and meaning, creating a detrimental moral licensing effect, and generating boredom among them, undervaluing their skills.

Making change easy remains a good recommendation in many situations. However, easiness is not a one-size-fits-all solution. We are neither easiness advocates nor unconditional supporters of increasing difficulty as a way to promote environment-related changes. Rather, we argue it is the dose that makes the poison. Moreover, the ‘dose’ is not the same for person or subgroup and can change over time. That is, things that are too easy or too difficult or costly have also consequences, such as provoking a deterrence effect (Norton et al., 2012).

We suggest here a number of conjectures that need to be empirically tested in future research. The relationship between easiness-difficulty and behavioral change can be considered as an inverted U curve. More intense activities (e.g., conservation, conversion to organic farming, beach clean-ups) are intuitively more likely to be associated with difficulty issues than other activities (signing a petition, for example, or reducing paper use by printing double-sided). Distinguishing agents according to their need for finding meaning, being involved and challenged or feeling that their skills and efforts are adequately valued can help develop a tailored approach. The first step could be, for each environmental domain/subset, to estimate the proportions of people in the targeted population who need a hard task to motivate their behavior. This could determine the preferred approach: a one-size-fits-all (easy versus hard change) option or a policy tailored to various subsets of the whole population (based on cost-effectiveness). These insights can be considered at the level of public managers, employees and/or policy targets. Although some policies and strategies vary depending on assets, income, and sometimes age, most government or private programs do not consider the

likely benefits from ‘discriminating' between groups of people who respond differently to the difficulty.

If easy change facilitates a counterproductive moral licensing impact that outweighs the environmental gain (such as turning off lights when leaving a room to save power and feeling authorized to keep air conditioning on all night), it could make sense to leave things as they are and maybe even increase difficulty. Beyond conventional cost-benefit analysis, our discussion highlights the potential need to design changes that are conducive to flow for would-be adopters. Sometimes, a given degree of difficulty can help to reach flow requirements and further work is required to understand this effect.

To facilitate implementation in real-life contexts, we have some additional suggestions. First, we encourage change seekers such as public or private regulators to conduct pilot studies to understand how stakeholders actually perceive a given change and any salient differences among the group. It is crucial to examine whether (*i*) the proposed changes are positive and attractive, not boredom-conveyers, but are attainable and challenging, *(ii)* they are designed to deliver sense and meaning for the targeted individuals and contribute positively to their identity, and (*iii*) their adoption activates a detrimental moral licensing effect. In some cases, reframing the environmental changes could contribute to change perceptions and place the difficulty cursor at an adequate position.

Second, we point to the importance of understanding flow requirements. Many environmental changes are based on incentive schemes that are more action-based than results-based. This orientation reflects measurement difficulties, but frequently ignores the flow requirements to transform a change into an optimal experience. These flow requirements often assume that quasi-immediate feedback is feasible and can lead to redesigning environmental programs to address these needs and adjusting incentive schemes. For instance, some farmers may derive great utility from expressing their skills and performing better than

other farmers (for example, if higher yields are viewed as status and identity markers), incentive schemes could reward better performance in achieving the desired environmental outcomes. This logic may require deep change from a binary frame (achieving a given action or not) to a progressive one that values and rewards better environmental outcomes.

Third, we suggest experimental studies to test the effects of new or redesigned schemes before their generalization to the whole targeted population. As a possible departure point, Brent et al. (2017) summarize recent literature on the use of field experiments in environmental economics, and point to the need for additional research.

Rather than closing the debate, our analysis is a call to not automatically apply ready-made conventional wisdom but to examine and question its application in light of recent research to achieve better results and avoid potentially large mistakes.

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