Chapter 18: Achieving Lasting Behavior Change

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Sustainable happiness and the wellbeing of all life forms is a goal that all of humanity can surely agree on. Cross-cultural research suggests that people from diverse cultures and nations value happiness, and that most rate themselves as at least moderately happy (Diener and Diener, 1996; Veenhoven, 2010). Views differ on which specific forms and pursuits of happiness are the best ones, and to what extent it is good for individuals or collective agencies to pursue happiness explicitly. However, few would argue against the belief that it is good for all to experience their lives as both enjoyable and valuable.

It is impractical to try to achieve a positive societal change without balancing 'external' changes (in the conditions for wellbeing) with 'internal' transformation (in people's mental appreciation of the world around them). Thus we must proceed by combining 'outside-in' with 'inside-out' transformations, looking to ameliorate both external conditions and internal mental conditions. Making this combination more explicit should bring practical benefits in the form of citizen engagement with policy processes (desiring happiness, citizens will gladly cooperate with agencies that take this desire seriously) and more efficient strategies (less wasteful expenditure on factors that are bad or irrelevant for happiness).

Since happiness derives from interactions between our minds and our environments, policies aimed at increasing happiness must attend to those interactions. In practice, focusing on the external (rearranging our societies and applying science to as to manipulate resources and environments) tends to proceed separately from focusing on the internal (strengthening our mental abilities to achieve happiness by appreciating our social and physical environments). Throughout human existence, deliberate development has been mainly about removing discomforts and providing tangible 'objective' goods, particularly the material infrastructures and consumption practices associated with good living. Despite several centuries of astonishing global progress in life extension and in the provision of comfort and security, even today conventional public policy approaches do not rise to the parallel challenge of mental development. Governments, businesses, schools, and community organizations typically do not recognize any formal responsibility for helping people to experience and appreciate their lives as enjoyable and valuable or meaningful. So these psychological dimensions are typically addressed at relatively private and interpersonal levels, often helped by parents, teachers and counselors,

rather than made explicit at higher institutional levels in public planning and policy-making.

To summarise, we can attempt to enhance happiness in two ways, firstly, by focusing on the internal, one's state of mind, and secondly, on the external, environmental and relational factors.Recommendations throughout this report keep this duality in mind. Unfortunately, however, even the most advanced set of public policy recommendations is unlikely to have any impact unless these recommendations are endorsed both by policymakers and by target populations and are actually implemented both at the policy and individual level. The best information on the positive effects of happiness-conducive habits, such as mindfulness, minimising TV watching or exercise, will only have a very limited effect on the subsequent behaviour change at the population level. For instance, we may be impressed with studies demonstrating that exercise is more effective than medication as a depression cure (e.g. Babyak et al, 2000), yet again, this knowledge alone offers insufficient motivation for making a change happen. Partly, this is due to the fact that what is conducive to sustainable happiness may not be immediately perceived as pleasant. Largely though, research demonstrates that despite all expectations human do not often weight the costs and benefits of actions in a logical way, therefore not necessarily choosing and acting upon what can be seen as a rational choice (Dolan et al, 2010).

While the current blueprint may indicate areas for individual and collective behavior change, this may not be sufficient to achieve the desired objectives. Therefore, we would like to pay some attention to the problem of behaviour change, drawing on the latest research from the fields of psychology and behaviour economics (Dolan et al, 2010). Rather than a list of specific recipes concerning the possible ways to influence the behavior of individuals and communities, the ideas in the next two sessions will offer a wider outlook at the possibilities that can be considered when implementing policy.

Levels of information processing

A view of humans as rational beings that emerged during the Enlightenment era implies that providing reasonable arguments in favour of proposed change is sufficient to convince people to adopt new ways and thus to change their behavior. However, research shows that this is not always the case.

Firstly, people do not always process incoming information in a completely rational way. Cognitive and social psychologists distinguish between two levels of information processing as presented in Table 7 below.

Deep level of information processing	Surface level of information processing
Content of the message is considered	Form of the message and its emotional overtones are important
Rational arguments are analyzed and evaluated in a thorough and logical way	Heuristics are used to evaluate the message, such as reliance on its length or credibility of its source
Is more likely to happen when recipients are interested in the message	Is more likely to happen when recipients are indifferent
Is more peculiar to people with critical thinking skills	Is more peculiar to people low in critical thinking
Requires a large amount of attentional resource	Is likely to happen when recipients are tired or unwilling to devote attention to the message

Table 7. ***Deep and surface levels of information processing***

This well-documented distinction between two different levels of information processing (Craik & Lockhart, 1972; Chaiken, 1980; Myers, 2010) suggests that policymakers and individuals who are the addressees of the new paradigm's policy recommendations are likely to perceive information differently, and the messages addressed to these audiences need to be constructed in different ways. For instance, in order to be more persuasive to policymakers, the recommendations need to make use of rational arguments with reference to existing evidence base, demonstrating both the benefits and the possible drawbacks and reservations associated with the proposed policies, discussing possible difficulties and cultural differences in implementation. Conversely, for instance, messages addressed to individuals in the electronic mass media are likely to be more effective when they are short, emotionally charged, and provide a brief easy-to-understand rationale without necessarily discussing the opposite position.

Secondly, *people do not always behave in line with the ideas that they rationally endorse*. Even if we achieve a change in a person's attitude towards a certain idea or action, this change does not guarantee at all that the person will subsequently behave in accordance with the newly adopted views. For instance, in a classical study by Darley & Batson (1973), divinity students, who were hurrying to give a lecture on the Good Samaritan, encountered a person in need of help on their way to another building. Contrary to the common sense expectations, the students were unlikely to help, even when a person exhibited obvious signs of distress. This study shows that even intense ethical training may provide little protection against unethical behavior in an everyday challenging situation.

In order to help people enact the values and attitudes that they endorse, situational factors can be adapted in ways that facilitate pro-social action. For instance, placing a charity donation box by a cash register where customers receive their change increases the amounts donated to charities by means of reminding people of the opportunity to donate and by providing such an opportunity within close reach.

To summarize, in order to develop policies that are both attractive and effective, we must take into account two different levels:

1. To address the *level of policymakers*, public policy recommendations have to be stated in ways that are effective to persuade policymakers and stakeholders, which is largely the position adopted by this report so far;
2. To address the *level of individuals targeted by the public policy*, the recommendations may benefit from making use of the existing knowledge of the different mechanisms of human behavior and of the ways it can be influenced in subtle but non-coercive ways.

The first level concerns the form that policy recommendations are to be presented in, in order to be attractive to politicians. There is a wide body of literature on the methodology of effective communication available on this question (e.g., Levine, 2006; Myers, 2010; Pratkanis & Aronson, 2001). As the current report mainly addresses this level, this issue does not require any further consideration. The second level concerns the content of policy recommendations, touching directly on the mechanisms of human behavior that become pathways of behavioral change, which is what will be discussed below.

Mechanisms of human behaviour

Economic models of human behavior have long relied on the assumption that people behave in rational ways. However, a wide body of research undertaken during the last 30 years has shown this not to be the case (Ariely, 2008). The process of behavioral decision-making (choosing between specific alternatives in specific situations) has been studied relatively well, with results that clearly show the influence of heuristics and cognitive biases (Kahneman, 2011), emotional processes (Ariely, 2008), and individual differences in attitude to choice (Schwartz, 2004) on economic decisions and on other choices that people make in the course of their daily activities. These behavioral economics models outline situational factors that underlie everyday consumer choices made during shopping, or media choices made while watching TV. However, the explanatory power of these models is generally limited to the context of a specific activity or situation, as they do not answer a more fundamental question concerning human motivation, *why people do what they do*? Why a specific person goes shopping at all on a specific day, instead of spending this

time learning something new, interacting with significant others, or helping someone in need?

These issues have been explored in psychological research of the principles of human behavior regulation. Psychologists have identified and described several different mechanisms that explain human behavior. These mechanisms appear interrelated and may function simultaneously, although some of them may prevail over others in specific situations or in certain individuals. These mechanisms are summarized in a model of multiple regulation by Leontiev (1999), who presented them as different possible answers to a question "Why did you do this?". These mechanisms are:

1) Needs ("Because I needed it"). Needs are powerful drivers of human behavior. Some needs are thought to be universal to all human beings, although the objects that satisfy them may differ, depending on situational or social context. Needs are usually classified into three groups: biological needs (such as the needs for food, sexual satisfaction, and shelter), social needs (such as the needs for belonging to a group, self-esteem, and being respected by others), and psychological needs that are peculiar to human beings. Theorists mostly differ in the definitions of the needs in the latter group, which includes, for instance, needs for self-actualization (Maslow, 1970), cognitive activity (symbolization, imagination, judgment; Maddi, 1998), having a frame of orientation and identity (Fromm, 1955), acting in self-determined ways (autonomy, competence; Ryan & Deci, 2000), being related to other people and the world (relatedness, rootedness; Fromm, 1955; Ryan & Deci, 2000), etc. Human needs are not fixed: they evolve as societies create new ways in which needs can be satisfied. They also evolve in the course of socialization and individual development.

2) Reactions to stimuli ("Because I was provoked"). Reflexes, or quick and involuntary reactions to stimul, are the basic mechanism of human nervous system. Although some of these reactions are inborn (e.g., sneezing, coughing), humans, just like higher animals, can be conditioned (by reinforcement providing reinforcement or punishment) to form new reactions. Early behaviorists believed that conditional reflexes were the principal mechanism of human behavior, suggesting therefore, that human behavior could be completely shaped and controlled from without (Skinner, 1938).

3) Habits, or dispositions ("Because that's what I always do"). The power of habit in driving our behavior was first described by James (1890). Most of the time humans act in habitual ways, relying on unconscious mechanisms to reduce the cognitive load, so that consciousness is only involved in difficult, new or particularly important situations. Habits are learned dispositions to behave in certain ways in specific situations. Habits can be modified either by

the person itself (which requires conscious effort), or by changes in the situation (old habits become inappropriate). Habits, together with biological givens (such as temperament), are the basis of personality traits (individual ways of behavior that are not specific to particular situations – Alport, 1961).

4) Social norms ("Because that's what I was supposed to do"). Like other social animals, humans are capable of imitating each other's behavior. But humans are also capable of acting in ways that conform to expectations of other members of the group, or society as a whole. Expectations shared by all the group members are called social norms, and a membership in a group is often contingent upon following its norms (Myers, 2010). Humans often act in line with the outside expectations out of fear of being rejected by referent groups or by significant others.

5) Personal meaning / values ("Because it was important for me"). In the course of individual development, a human being is able to transcend biological needs and social norms, arriving at the fundamental question of what's really important in life for him/her specifically (Frankl, 1988). Culture provides possible ways to answer this question in the form of values that are evaluated, chosen, and integrated by each person to become flexible and hierarchically structured guiding principles of behavior (Frankl, 1998; Maslow, 1970).

6) Free choice ("Because I simply chose to do it"). Although freedom of choice is, ontologically, a philosophical issue, many psychologists agree that human behavior is not always deterministic and cannot be exhaustively described by reference to the five above mechanisms. Freedom can be described as "our capacity to pause between the stimulus and response" (May, 1975, p. 100) and make one's own choice, rather than follow current needs, circumstances, or social norms. Capacity for freedom requires courage to confront uncertainty and to take responsibility for one's action (Maddi, 1998), and is based on ability to pause, focus, and integrate one's experience, or mindfulness (Langer, 1989).

The first three mechanisms are biologically based and work in an automatic fashion. Social norms are enforced upon all members of any specific social group, and are not flexible either. Needs, habits, reflexes, and social norms can explain human behavior in a majority of life situations where we act in an automatic fashion and our behavior is predictable. It is relatively rare that we use more flexible, higher mechanisms that allow us to transcend our needs, habits, reflexes, and social norms to act in individually specific ways. For some people, it may be possible to live completely within the logic of biological needs and social norms (a conformist lifestyle – Maddi, 1998), escaping from freedom (Fromm, 1941), because acting in more deterministic, conformist ways is psychologically easier (it allows to reduce responsibility) and less resource-

demanding. Stage theories of moral development in philosophy (Kohlberg, 1973) and ego development in psychology (Loevinger, 1976) describe personality development as the process of advancement from being driven by reactive mechanisms towards social conformity, and further on to autonomous responsibility. Higher developmental stages are associated with higher cognitive complexity and better self-control; however, these stages are not attained by all adult individuals.

Clearly, different interventions may be developed to address different principles of behavior regulation. The reward and punishment approach can be very effective, particularly, in populations with lower levels of ego development and lower capacity for self-control (such as preschool children, psychiatric inpatients, prison inmates), where other interventions may fail. However, empirical findings show that environments controlling people in this way tend to undermine intrinsic motivation (Ryan & Deci, 2000), and people lose incentives to continue the desired activity once external rewards and punishment cease. Conversely, environments that support autonomy by providing people freedom of choice (albeit limited by certain reasonable rules, or structure) promote ego development (Allen, Hauser, Bell, & O'Connor, 1994). Therefore, the reward and punishment approach to behavioral change has to be used only as a last resort. In populations with medium levels of ego development behavioral change can be more effectively achieved by setting social norms or providing examples. In turn, individuals at the higher levels of ego development can be effectively addressed by offering opportunities and valid reasons to adopt new ways of behaviour, without external enforcement. Specific intervention approaches will be described in the next section.

On the basis of these considerations, we would like to put forward following general recommendations for implementation of social policies:

1) The need to acknowledge widespread irrationality. Simply providing new, more beneficial options for conscious choice does not guarantee that these options will be chosen by a majority of the population. Indirect, situational manipulations (such as placing unhealthy food on the far side of the counter) can often be more effective on a large scale.

2) The need to acknowledge individual differences (the diversity of regulatory mechanisms and ego developmental stages) that exist in populations. A range of measures can be applied simultaneously, addressed at different levels of information processing (e.g., combining rational arguments with heuristics) or at different developmental stages.

3) The need to take into account cultural and social differences. Autonomy-supportive policies providing choices will be more effective in democratic societies with higher levels of education, whereas in other societies external incentives may be more useful. People in individualistic cultures can be more effectively addressed by emphasis on individual choice, whereas in collectivistic cultures the importance placed on group identity and social norms can be more efficient pathways to behavior change.

Approaches to changing behavior

This section provides some examples of possible policy measures that can bring about changes in individual and/or group behaviors. These examples are placed in approximate order from least autonomy-supportive to most autonomy-supportive.

- **Legal proscription and prescription**, such as banning the use of automobiles with emissions above a certain threshold. This is a controlling approach, involving a threat of punishment (e.g. a fine). It may undermine intrinsic motivation to act in a desired way if the goal of the intervention is not clear enough to the people it targets. However, controlling approaches may be effective in settings where irrational or automatic actions prevail.
- **Financial incentives, tax cuts or benefits**, such as progressive car tax scale depending on the engine power, state subsidies for solar panel installation, parking fees in cities.
- **Introducing competition**, whereby people or organizations that are most effective in suggesting innovations or in implementing desired changes are rewarded.
- **Creating environments that support desired behaviour by modifying default options or 'nudging' people** (Thaler & Sunstein, 2009) without changing the overall range of opportunities. Examples would include placing healthy foods at eye level in stores or limiting the sale of alcohol to specialized shops only.
- **Cognitive framing by means of anchoring, priming, heuristics.** This is a variety of 'nudging' in the sense that it targets people who act automatically. For example, placing some money in a donation box increases the amount donated, compared to when the box is initially empty (Oppenheimer & Olivola, 2010).
- **Establishing social norms**, like introducing courses that teach desired behavior at school, or creating environments that suggest that desired behavior is the existing norm (e.g., absence of visible litter in the street discourages littering – Schultz et al., 2013).

- **Propaganda**, including warning labels and scary pictures on cigarette packs, public social advertisements that appeal to emotions, facilitating the creation of communities by people who adopt behavior change.
- **Providing positive role models** that exemplify the desired behavior. Examples would include Mahatma Gandhi drinking milk to encourage Indians to follow him or Angelina Jolie publicizing her mastectomy.
- **Public messages** that provide rationale for new behavior, clarify its value and consequences. These messages are particularly effective if they come from a person who has moral authority within a specific community. Even when controlling measures (e.g., legal) are used, providing rationale reduces their detrimental effects on intrinsic motivation for desired behavior in target populations.

These approaches can be used in combination and implemented across institutions of legal systems, mass media, educational or work institutions.

Ethical considerations

Social psychological studies show that the influence of situational factors on human behavior can be very strong, to the extent of inducing actions that people would not wish to perform if they had taken time and effort to make conscious choice. For instance, Stanford Prison experiment demonstrated that perfectly normal individuals placed in a setting with no clear rules and with opportunity to exercise power over their fellows can start acting in ways that are cruel, degrading, and inhuman; the findings of this study were later confirmed by real-life events in the Abu Ghraib prison (Zimbardo, 2007). Whenever someone aims to manipulate situational factors in order to change human behavior, even for a good purpose, an ethical issue inevitably arises, whether this manipulation is ethically permissible. One possible view of the ethical limitations of behavioral change interventions and of steps that can be taken to ensure these limitations are not transgressed is proposed below.

"With our iron hand we will drive humanity to happiness" – this slogan was popular in Russia after the 1917 revolution, and, most famously, it used to hang in the Solovki Camp, one of the cruelest institutions within Gulag. It is probably fair to note that history has shown empirically that the end does not always justify the means. Discussing this phenomenon, a Russian philosopher said that devil often takes its beginning in the wrath of angels fighting the battle for a just and holy cause (Pomerants, 2004). Because behavioral change interventions target people, they can only be enforced with respect for human freedom, in order not to undermine human development. Political ethics can be based on similar principles to those used in medicine or in research with human subjects.
Freedom of will is often thought of as an essential characteristic of human beings. However, based on the research findings presented earlier, we can argue

that although freedom is an essential characteristic of humankind, it is only a possibility for every individual. Freedom can be defined as personal autonomy, or ability to act independently, in self-determined ways, rather than automatic ways determined by spontaneous impulses or external stimuli. Freedom only emerges at advanced stages of individual development, as a human being gains increasing mastery over his/her body and mind. In this sense, we are condemned not to freedom itself, as Sartre used to say, but to the possibility of freedom.

This possibility can be either used or refused. We use it by making conscious decisions that take into account the complexity of our inner selves and of the situation we find ourselves in. We refuse freedom by refraining from taking responsibility for making our choices (Fromm, 1941; Frankl, 1988), leaving the course of our lives in the hands of the situation, society, other people, etc. When people refuse their freedom, their behavior can be more easily influenced or manipulated from outside, either with ethical or unethical intentions (for instance, individuals with lower self-control are more susceptible to becoming corrupt in corrupt settings – Ashforth, Gioia, Robinson, Trevino, 2008).

As a result, some politicians may find it easier to manage non-autonomous people and may even be tempted to undermine human autonomy in populations by creating controlled environments and supplanting democratic institutions. This is often done under the pretext that 'excessive' freedom is dangerous, as it makes individuals and society as a whole unpredictable and harder to control. However, the history of the Western world shows that this is not the case: as long as democratic institutions function properly, a society of autonomous individuals is more sustainable in the long term, because it adapts more flexibly to changing circumstances, provides more opportunities for human development, and makes a better use of human potential than a society of total control. Human development is only possible in autonomy-supportive conditions, where clear rules exist that protect fundamental human rights and freedom of every individual.

We propose the following distinction between ethical and unethical behavioral change interventions. *Unethical interventions are those that achieve their ends by means of reducing the possibility for free choice in the individuals that they target.* For instance, a con artist can manipulate unsuspecting victims by persuading them to act immediately and preventing them from taking a pause to reflect on the situation and make a conscious decision. But even if the same approach was used for ethical means (e.g., to trick people into donating to charities), it would still be unethical and it would be detrimental in the long term for both the victims of manipulation (who would experience distress and lose the motivation to donate) and the society at large. Similarly, forced labour as a state

policy is not only unethical, but is also not rational economically, because of extremely low productivity.

In turn, *interventions that have ethical goals and treat humans as free agents, taking care to ensure that the desired behavior is based on conscious and responsible choice, are always ethical.* This point seems clear enough. For instance, organ donation that harms the donor is justified, as long as donation is a free (conscious) and responsible (taking into account the consequences) decision. Similarly, an appeal to citizens to reduce consumption or to donate to a good cause is justified if it has ethical goals and if citizens are free to adopt or to refuse from adopting the new behavior.

Between these two extremes are *interventions that have ethical goals, but do not rely on free agency*. In the course of such interventions, the state may modify the environment to change the behavior of individuals to make it more conducive to well-being, but this modification is enforced, rather than freely adopted. In this case, the society functions as a paternalistic agent that enforces its decision on individuals. We can find many examples of paternalism in democratic countries, for instance, laws that enforce mandatory wearing of seatbelts by car drivers and their passengers by means of heavy fines. Such paternalistic interventions can be deemed *ethical as long as they have ethical goals and target people who refrain from making voluntary decisions* so that people are free to opt out of the default arrangement provided to them by the state (such as pension or health insurance contributions). Varieties of this approach are called 'soft paternalism' (Feinberg, 1986), 'asymmetric paternalism' (Camerer et al., 2003), or 'libertarian paternalism' (Thaler & Sunstein, 2003; Sunstein & Thaler, 2003). However, libertarian paternalism may not be feasible in all situations (for instance, seatbelt laws exemplify 'hard' paternalism, as they do not have an opt-out option, which would render the whole mechanism impractical). Policy interventions that limit the freedom of individuals in this way can still be deemed *ethical, as long as they have ethical goals, are adopted by means of a universal agreement or a democratic procedure, and can be revoked at any time* by means of the same procedure.

These issues of ethical paternalism can only be briefly outlined in a few paragraphs. In general, development and introduction of paternalistic policies requires great care consideration, and public discussion. Because coercion undermines human development, it has to be avoided, whenever possible. Older, coercive reward-and-punishment policy approaches can be replaced with nowadays better-researched 'nudge'-type interventions that foster responsible human autonomy.

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