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INTERVENTIONS TO ENCOURAGE SUSTAINABLE CONSUMPTION

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Abstract: Sustainable consumption is hampered by a discrepancy between consumers' attitudes and their actual behaviour in the market place. Psychological construal level theory provides an explanation for the attitude to behaviour gap as a motivational conflict between high and low level of mental construal. Based on self-determination theory it is argued that this motivational conflict presupposes extrinsic motivation for sustainable behaviour. Based on self-regulatory styles, the present paper identifies and illustrates four types of intervention strategies that can cater for extrinsic motivation for sustainable development among light users. The underlying mechanisms of these interventions suggest that the transition from external to internal regulation is catalysed by social feedback.

Keywords: Sustainable Consumption, Construal Level Theory, Self-Determination Theory, Intervention Studies, Economic Psychology

Introduction

In food consumption, like in many other domains of consumer behaviour, most consumers claim to consider sustainability issues important, but this does not necessarily translate into manifest sustainable consumer behaviour (Van Dam & Van Trijp, 2013). Awareness of the need for sustainable development has triggered changes in consumer attitudes, but not necessarily in consumer demand (De Barcellos, Krystallis, de Melo Saab, Kügler, & Grunert, 2011; Papaioikonomou, Ryan, & Ginieis, 2011; Vermeir & Verbeke, 2006). This discrepancy between stated importance and actual consumption confirms the need to integrate economic and psychological theories of consumer behaviour (Antonides, 1989) in order to understand the gap between sustainable attitudes and actual behaviour. As already shown in repair-or-replace decisions (Antonides, 1991), consumer behaviour is the outcome of multiple and potentially conflicting attitudes and/or goals (Laran & Janiszewski, 2009). This multitude of attitudes/goals implies that, like for almost any trait or state, people are found along a continuum of shades of green. For analytical clarity the end-points of the underlying continuum are used to denote the direction of relative differences.

Two segments in the consumer market seem hardly hindered by such goal conflicts with respect to sustainability. First, a small segment of committed sustainable consumers, responsible for the majority of sustainable consumption in the market, seems to have integrated sustainable development goals into their consumption patterns (Brown, Dury, & Holdsworth, 2009; De Ferran & Grunert, 2007; Fotopoulos, Krystallis, & Ness, 2003; Zander & Hamm, 2010). In any other context this segment could be labelled

as 'heavy users', but because curtailment of consumption is a significant indicator of sustainability (Verain, Dagevos, & Antonides, 2015a) the designation 'committed sustainable consumer' is more appropriate for this market segment than 'heavy user' (Verain, Dagevos, & Antonides, 2015b). The majority of research into the motives behind the consumption of sustainable food products has focused on the motives of these committed sustainable consumers. However, studying these committed sustainable consumers to increase consumer demand has its limitations. Apart from being only a minority of consumers these committed consumers already maintain a high level of sustainable consumption that is unlikely to increase much further. Opposed to these committed sustainable consumers one may find a segment of 'honestly disengaged' (defra, 2008) consumers who do not care at all for sustainable development and who only accidentally and unintentionally purchase sustainable products (McGregor, 2008). The size of this segment is difficult to estimate, because the denial of (responsibility for) sustainability issues may be a defence mechanism that is triggered by a goal conflict (Stich & Wagner, 2012). The committed consumers endorse sustainable development and act accordingly, whereas the opposed consumers do not endorse sustainable development and also act accordingly, but for both groups the behaviour matches their sustainability goals.

Those two segments of consumers represent two distinct regulatory styles in self-determination theory (Deci & Ryan, 2000; Ryan & Deci, 2000). In terms of self-determination theory (Deci & Ryan, 2000; Vansteenkiste, Soenens, & Vandereycken, 2005) the committed sustainable consumers are intrinsically motivated by a sense of trying to do (what they perceive to be) the right thing, or by the rejection of

consumerism and capitalism (McDonald, Oates, Alevizou, Young, & Hwang, 2012). One way or another these committed sustainable consumers have adopted sustainability as 'a process of change' (WCED, 1987) in their way of life (Black & Cherrier, 2010; Verain et al., 2012). At the other end of the motivational continuum are the a-motivated consumers (Deci & Ryan, 2000; McGregor, 2008), who see no benefit at all in sustainable development. The behaviour of these a-motivated consumers can be influenced by intervention strategies that aim to increase the probability of accidental sustainable purchases, like nudging techniques (Van Kleef, Otten, & Van Trijp, 2012), or upgrading the supply through the voluntary adoption of sustainable standards by actors in the value chain (Sutton & Wimpee, 2008; Van der Linden, 2012).

Though research into sustainable consumption usually differentiates between intrinsically motivated committed sustainable consumers and a-motivated 'grey' consumers (McDonald et al., 2012), the vast majority of the market consists of light users of sustainable products who only incidentally choose sustainably (Eckhardt, Belk, & Devinney, 2010). It is particularly among this majority segment of light users of sustainable products that goal conflicts with respect to sustainable consumption manifest themselves.

Being neither intrinsically motivated nor a-motivated, this majority of consumers therefore is extrinsically motivated to pursue sustainable development (Ryan & Deci, 2000). These consumers focus on the goal of 'future generations having the ability to meet their needs' (WCED, 1987) and perceive sustainable behaviour as a necessary way to attain that goal. This goal of attaining a sustainable future is unrelated to their consumption goals. Their consumption goals are economic and typically related to hedonic and self-enhancement values (Grunert & Juhl, 1995). These consumers shop for a range of contextualised and low construal motives (Buttle, 1992), but not for the abstract and high construal motive to save the world. When they experience a conflict between sustainability goals and consumption goals (Laran & Janiszewski, 2009) the low construal motives behind their consumption determine their choice (Van Dam & Van Trijp, 2013). The interventions aimed at increasing sustainable consumption among these light users should facilitate them to cope with this conflict between economic-rational and sustainability-related goals in their consumption.

Construal level theory of psychological distance

An early study into sustainable marketing has suggested that informational ambiguity and socio-temporal dilemmas are key barriers that hinder sustainable development of global food markets (Van Dam & Apeldoorn, 1996). Construal level theory has proposed since that these barriers are different indicators of psychological distance (Liberman, Trope, & Wakslak, 2007; Trope & Liberman, 2010). Originating from research into time-dependent changes in values and expectancies (Antonides & Wunderink, 2001; Liberman & Trope, 1998), construal level theory has evolved into a

general framework that forges relations between psychological distance, perception, abstraction, language, evaluation, and behaviour (Fiedler, Jung, Wänke, Alexopoulos, & de Molière, 2015).

People only can directly perceive and experience what is actually present. Thinking and feeling beyond this actual reality is possible by construing and maintaining a mental image of reality (Antonides, De Groot, & Van Raaij, 2011; Trope & Liberman, 2010). The primary function of mental construal is the creation of a mental substitute to the lack of immediate perception of a person, an object or an event. This mental construal is central to human social, emotional, and cognitive development (Bergman, 1993; Dumas & Doré, 1991; Lillard & Woolley, 2015; Peskin & Ardino, 2003). Once this function is established mental construal develops by including higher levels of abstraction into cognitive reasoning, thus allowing belief formation, categorisation, and the development of abstract, counterfactual, and moral reasoning (Fischer, 1980; Kato, Kamii, Ozaki, & Nagahiro, 2002; Marini & Case, 1994; Perry, Samuelson, Malloy, & Schiffer, 2010; Von Helversen, Mata, & Olsson, 2010). Mental construal therefore allows one to transcend the actual situation and to manipulate concepts rather than objects. Thus, people can remember the past and make predictions about the future, people can expect the actions of others and speculate how things might have been and – though none of these actually can be perceived – people can act upon psychologically distant events.

Psychological distance is the subjective experience that something is in one's proximity (proximal) or far removed (distal). Psychological distance is therefore egocentric in the most literal sense: the reference point of psychological distance is the actual self and the individual 'here and now' (Trope, Liberman, & Wakslak, 2007). Psychological distance relative to this central self is experienced along several different dimensions that have highly similar effects on mental construal (Nussbaum, Liberman, & Trope, 2006). Something or someone can be proximal or distal in a spatial, temporal, social, or certainty dimension (Todorov, Goren, & Trope, 2007). As psychological distance increases mental construal becomes more abstract or high-level, and conversely more abstract or high-level construal increases the experienced psychological distance. Therefore psychological distance tends to spill-over into other dimensions and when distance on one dimension increases the perceived distance on the other dimensions also increases (Trope & Liberman, 2010).

Mental construal is instrumental to individual reasoning and therefore implies a functional, goal congruent process of abstraction (Trope & Liberman, 2010). In this process of abstraction those features that are essential to the goal are stressed, whereas features that are incidental or irrelevant to the goal are ignored. In this way mental construal affects perception and evaluation simultaneously (Antonides, Verhoef, & Van Aalst, 2002). Mental construal determines how reality is experienced and therefore determines how someone cognitively understands and motivationally reacts to this reality. A distant outcome is, cognitively and motivationally, represented more abstract and idealistic compared to the

immediacy and feasibility of actual consumer choice. The practical differences between experiencing abstract, distant outcomes and concrete, immediate outcomes have been extensively studied in socio-temporal dilemmas, like Prisoner's Dilemma games and temporal discounting (Antonides, 1994; Antonides & Wunderink, 2001). Personal involvement with an issue or with a product by definition is incompatible with high psychological distance (Van Beek, Antonides, & Handgraaf, 2013). Therefore the effects of psychological distance only manifest themselves at low levels of personal involvement (Park & Morton, 2015; Wang & Lee, 2006) and therefore construal level theory implies strategies to increase sustainable consumption among light users in particular.

Principles of psychological distance in sustainable consumption

Sustainable development refers to possible consequences of consumption that may impact all of humanity sometime in the future, which reinforces the psychological distance and the high construal level. The informational ambiguity and the socio-temporal dilemmas that are inherent to sustainable development (Hilpert, Kranz, & Schumann, 2013; Van Dam & Apeldoorn, 1996) in terms of construal level theory cover at least three of the four dimensions of psychological distance, as they refer to uncertainty respectively to social and temporal distance (Trope & Liberman, 2010; Trope et al., 2007). Sustainable development therefore easily is experienced as psychologically distant, which raises the construal level of its mental representation into a highly abstract and elusive concept (Proulx, 2013). At this high level of abstraction sustainable development, or 'sustainability', is an umbrella construct that subsumes a variety of products and behaviours under a common goal (Van Dam & Van Trijp, 2011; Verain, Sijtsema, & Antonides, 2016). A majority of people perceive sustainable development as an abstract and distant goal that may be desirable and relevant in general, but that does not determine the immediate feasibility of their behaviour (Van Dam & Van Trijp, 2013). The acknowledgement of the distant sustainability goal does not reduce the pleasure or convenience of existing consumption patterns, nor does it reduce the sacrifice of giving up those consumption patterns. This suggests that the crux of the attitude-to-behaviour gap in sustainable consumption may not be the elusive goal of sustainable development, but the process of changing established routines that is required to reach the goal (Vansteenkiste et al., 2005). Viewing sustainable development as an abstract societal goal implies a high construal cognitive representation and high construal motivational factors. Viewing sustainable development as a process of behavioural changes requires a focus on the low construal proximal activities that lead towards that abstract goal. The cognitive and motivational differences between high construal representation and low construal representation (Table 1) result in marked shifts in perception, understanding and preference between sustainable development as a goal and sustainable development as consumer behaviour.

The differences between the high construal level

representation of 'sustainable development as a distal concept' and the low construal level representation of 'sustainable consumption as an actual choice' easily cause a discrepancy between sustainable attitudes and actual behaviour. High construal attitudes towards sustainable development are general, gain oriented, promotion focused, and extrinsic. Low construal motives for consumption are situational, loss oriented, prevention focused, and intrinsic. People may have a coherent understanding of the broad category of sustainable products at high construal level, that does not match the complex variety of narrowly defined sustainable products at low construal level. People may hold positive attitudes towards the desirable distal goal of sustainable development at high construal level and seriously intend to act sustainably in general, while being deterred from any specific sustainable choice by the less feasible proximal implications at low construal level.

Table 1: Differences between low and high construal level representation (source: Van Dam, 2016)

Construct	Low construal	High construal
Sustainability	Process of change	Societal goal
Psychological distance	Proximal	Distal
Temporal distance	Present	Remote past or future
Hypothetical distance	Certain	Possible
Social distance	Family and friends	Strangers
Physical distance	Here	Far away
Representation	Cognitive Factors	
	Concrete, detailed, complex	Abstract, simple, coherent
	Idiosyncratic	Prototype and/or Stereotype
Reasoning	Pragmatic	Idealistic
Classification focus	Differences	Commonalities
Categorisation	Narrow	Broad
Evaluation of outcomes	Feasibility	Desirability
Evaluation of actions	Motivational Factors	
	Process focus (How)	Outcome focus (Why)
Goal focus	Situational, context-based, means	General, primary, ends
Goal pursuit	Loss oriented, prevention	Gain oriented, promotion
Motivation	Intrinsic	Extrinsic

Interventions for motivating sustainable consumption

Construal level based interventions to increase the sustainability of consumer behaviour are focused on the less involved, light user, consumers. These light users are externally motivated to behave sustainably, and (at least

partially) intrinsically motivated to consume. The extrinsic motivation for being sustainable is reinforced because, rather than as an end in itself, sustainable consumption mostly is promoted as a means to an end (De Koning, 1998). Sustainable consumption is a means to reach ecological and/or social sustainability. These light users therefore experience a dilemma between the high construal desirability of (extrinsic) sustainable development goals and the low construal (lack of intrinsic) feasibility of sustainable consumption. Various intervention strategies aim at resolving this dilemma by bridging the distance between high and low construal. These different interventions strategies are based on different (possibly implicit) assumptions about consumer motivation and have different consequences for consumer behaviour.

Extrinsic motivation explains the perceived relevance of a goal and why a goal is pursued, but it does not explain the determinance of how a goal is pursued in actual behaviour (Van Dam & Fischer, 2015; Van Dam & Van Trijp, 2013). The perceived causality of this actual goal congruent sustainable behaviour can be located outside or inside the individual. When the goal pursuit is extrinsically motivated, goal congruent behaviour can be explained by different regulatory styles (Ryan & Deci, 2000). It is generally agreed upon that these regulatory styles differ in perceived locus of causality (Deci & Ryan, 2000; Ryan & Deci, 2000; Schöslér, de Boer, & Boersema, 2014; Vansteenkiste et al., 2005). External regulation and introjection are entirely or mainly dependent on external control, whereas identification and integration are mainly or entirely dependent on internal autonomy (Schmeichel & Vohs, 2009). The different regulatory styles, ranging from external regulation to internal integration, will be illustrated with four recently published intervention studies. The different assumptions about the social impact on sustainable behaviour (Culiberg & Elgaaied-Gambier, 2016; Onwezen, Antonides, & Bartels, 2013) suggest that they can be classified on a second dimension ranging from individual to social (relational) incentives (Figure 1). External regulation and integration are responses to individual rewards or punishments that reinforce overt behaviour. Introjection and identification are responses to social norms, with implications for perceived appropriateness of behaviour and self-perception respectively (Higgs, 2015; Verlegh & Candel, 1999).

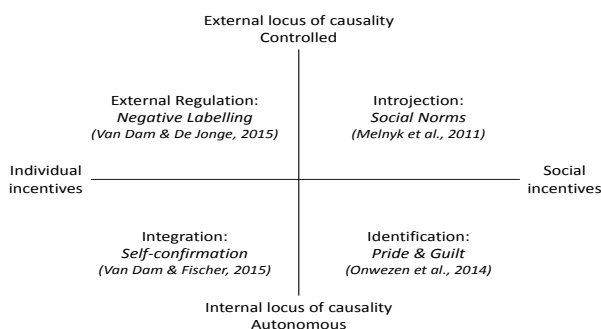


Figure 1: Regulatory styles and matching interventions classified by locus of causality and source of incentives

The four regulatory styles and matching interventions of Figure 1 are all embedded in the general assumption that consumers are extrinsically motivated to behave sustainably. The interventions therefore are aimed at consumption, in particular the purchase of sustainably or ethically produced (food) products. It should be noted that in this analysis the extrinsic motivation to behave sustainably is given and not part of the framework. Therefore an intrinsic motive for sustainable meat consumption should be based on the joy of consuming this meat e.g. for its taste. An extrinsic motive should be based on separate outcomes of the consumption, e.g. saving on a price discount or impression management.

External Regulation

External regulation of sustainable behaviour is a regulatory style where consumer behaviour is subject to an external locus of causality, and where consumers are moved by personal incentives. Consumers need external regulation of their consumption because they lack the self-control to take the distant consequences of their behaviour into consideration. They evaluate products in terms of immediate and personal incentives. Negative labelling and (the red side of) traffic light labelling are interventions that match this regulatory style. Negative labelling manipulates the reward/punishment structure of product choice in favour of sustainable choice (Van Dam & De Jonge, 2015). This intervention assumes that even though these consumers acknowledge the relevance of sustainable consumption, their choices are dependent on external cues that trigger their personal interest. Various ways of emphasising the non-sustainable character of the least sustainable product in a choice set appear to be sufficient to deter the consumer. As a result consumer preference shifts away from the most non-sustainable product and overall consumer choice becomes more sustainable (Heinzle & Wüstenhagen, 2012; Van Dam & De Jonge, 2015).

Introjection

Introjection of sustainable behaviour is a regulatory style where consumer behaviour is subject to an external locus of causality, and where consumers are moved by social incentives. Like in external regulation consumers need external regulation because they lack the self-control to take distant consequences of their behaviour into consideration. But compared to external regulation they evaluate their choice in terms of immediate social incentives. Providing information about (alleged) social norms is an intervention that matches this regulatory style. Social norms manipulate perceived social approval of product choice in favour of sustainable choice (Melnik, Van Herpen, Fischer, & Van Trijp, 2011). Given favourable social norms consumers could increase their social status through conspicuous sustainable consumption (Griskevicius, Tybur, & Van den Bergh, 2010). Depending on the likelihood of cognitive deliberation descriptive or injunctive norms are more effective, but overall perceived social norms shift consumer choice towards more sustainable

consumption (Culiberg & Elgaaied-Gambier, 2016; Melnyk et al., 2011).

Identification

Identification with sustainable behaviour is a regulatory style where consumer behaviour is subject to an internal locus of causality, and where consumers are moved by social incentives. Contrary to the previous two styles consumers can control their immediate consumption urges in favour of distant sustainable incentives, but like introjection consumers use social comparison to evaluate their choice. The activation of guilt and pride is an intervention that matches this regulatory style. Manifest social norms activate guilt associated with non-sustainable product choice and pride associated with sustainable product choice (Onwezen, Bartels, & Antonides, 2014). Given the appropriate social norms consumers are motivated to avoid non-sustainable choices out of anticipated guilt or shame and (to a lesser degree) find pride in sustainable consumption.

Integration

Integration of sustainable behaviour is a regulatory style where consumer behaviour is subject to an internal locus of causality, and where consumers are moved by personal incentives. Consumers can control their immediate consumption urges in favour of distant sustainable incentives, and this control is subject to personal reinforcement. The activation of personal ethical norms is an intervention that matches this regulatory style. The appropriate personal norms activate intrinsic self-confirmation motives that stimulate the consumer to consume sustainably (Van Dam & Fischer, 2015). This intervention assumes that consumers endorse sustainable consumption, and that their self-control is related to their self-concept. As long as a sustainable or ethical self-concept is activated consumers reinforce their self-esteem through ethical and sustainable product choice. This reinforced self-esteem in turn may enhance their self-control, so that rather than ego-depletion successful self-control leads to ego-fulfilment (Schmeichel & Vohs, 2009).

Conclusions

Extrinsically motivated sustainable consumption covers a broad range of regulatory styles bordered by a-motivation and intrinsic motivation. Early studies into cognitive evaluation show that in many instances the use of external control to regulate behaviour undermines or prevents intrinsic motivation (Deci, 1975; Ryan & Deci, 2000). External control easily reduces a sense of autonomy and then produces counter-effective results both among intrinsically motivated and a-motivated people. When consumer autonomy is reduced this may lead to cognitive reactance, evasive behaviour, or creative compliance (Braithwaite, 2002; Brehm & Brehm, 1981; Mazis, Settle, & Leslie, 1973). Tangible rewards – but also other manifest attempts to control behaviour – diminish

the autonomy and the intrinsic motivation for the desired behaviour (Deci, Ryan, & Koestner, 1999). Bad motives drive out good, and external control nurtures bad motives (Goodin, 1976; Plant, Lesser, & Taylor-Gooby, 1980).

The interventions discussed here show that external control of behaviour is not necessarily counterproductive to behavioural change. Negative labelling (Van Dam & De Jonge, 2015) and descriptive social norms (Melnyk, van Herpen, Fischer, & van Trijp, 2013; Stok, De Ridder, De Vet, & De Wit, 2014) can cause a shift towards more sustainable consumption without reducing the perceived autonomy of the consumer. Negative labelling is an effective form of external control that maintains consumers' autonomy and actually contributes to increased internal motivation and self-control for sustainable consumption, whereas positive labelling only affects intrinsically motivated committed sustainable consumers. Likewise perceived social norms of relevant social groups are effective (Culiberg & Elgaaied-Gambier, 2016), whereas general injunctive norms ('thou shalt ...') are more likely to provoke reactance and therefore may have counterproductive effects (Stok et al., 2014).

The common presentation of self-determination theory places the four regulatory styles of extrinsic motivation on a single continuum (Vansteenkiste et al., 2005). The 'external regulation' end of the continuum is most external and adjacent to a-motivation, whereas the 'integration' end is most internal and touches upon intrinsic motivation. Though the original authors of self-determination theory explicitly deny that the continuum represents stages of change (Ryan & Deci, 2000), the two dimensional representation of Figure 1 suggests that social feedback may act as a catalyst for the internalisation of regulatory styles. Adding a personal-social 'locus-of-reward' dimension reveals that the continuum from external personal regulation to internal personal integration passes through two intermediate styles that depend on social incentives. The social regulatory styles result in adapting behaviour to perceived appropriateness (introjection) due to social judgement, and aid in changing self-perception (identification) due to internalisation of social norms (Higgs, 2015). The modest impact of sustainability on consumer behaviour thus may reflect the absence of strong social norms concerning sustainable consumption. Whether behavioural economics and economic psychology are twins or stepchildren (Fetchenhauer et al., 2012), they clearly can benefit from a close friendship with economic sociology (Granovetter, 2002). The addition of a social dimension to self-regulation suggests that the subsequent regulatory styles represent increasing levels of internalisation that link a-motivation before external regulation to intrinsic motivation beyond integration.

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