

# Applying Behavioural Theory to the Challenge of Sustainable Development: Using Hairdressers as Diffusers of More Sustainable Hair-Care Practices

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**Abstract** The challenges presented by sustainable development are broadly accepted, yet resource use increases unabated. It is increasingly acknowledged that while technical solutions may play a part, a key issue is behaviour change. In response to this, there has been a plethora of studies into how behaviour change can be enabled, predominantly from psychological and sociological perspectives. This has resulted in a substantial body of knowledge into the factors that drive behaviour change and how they can be manipulated to achieve desired social goals. In this paper, we describe a study that draws on this body of knowledge to design an intervention to drive behaviour change across the hairdressing sector, and by the process of diffusion, across the vast social networks of this occupational group to influence domestic hair-care practices. The intervention was successful: hairdressers indicated positive intentions to adopt more sustainable practices within their salons and pass them onto their customers. The customer survey ( $N = 776$ ) confirms this: customers surveyed after their hairdresser attended the Green-Salon-Makeover intervention were significantly more likely to report that environmental issues had been considered in their salon visit and that they themselves would consider such issues in their hair-care practices at home than customers who were surveyed before the intervention.

**Keywords** Behaviour change · Diffusion · Hairdressers · Practice theory · Pro-environmental behaviour · Social networks · Social norms · Sustainable lifestyle

## Abbreviations

CSR	Corporate social responsibility
DEFRA	Department for Environment, Food and Rural Affairs
GSM	Green Salon Makeover
PEBs	Pro-environmental behaviours
PSS	Product-service systems
SMEs	Small and medium sized enterprises

## Introduction

The context of this paper is the ongoing search for solutions to our resource crisis. The challenges presented by sustainable development are well understood, yet despite numerous guidelines and top-down proclamations, resource use continues to increase. While a vast literature has emerged pertaining to theories of influences on behaviour and behaviour change strategies, there are currently few papers describing how these can be utilised to design an intervention within a specific context. Thus, the aim of this paper is not so much to test specific behavioural theories, but rather to demonstrate how the various theories can be drawn on and applied to address the challenges of sustainable development. In this paper, we present our results from a study that engaged hairdressers as diffusers of pro-environmental behaviours (PEBs). In the process, we consider the relevance of small- and medium-sized enterprises (SMEs) to issues of sustainable development, the role of influential individuals in setting the norms and habits of resource-intensive practices and contribute to the debate surrounding top-down versus bottom-up approaches to fostering sustainable practices.

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Many commentators argue that ‘weak’ forms of sustainable development that rely on technological innovation and voluntary market-based approaches are insufficient to counter institutional factors that perpetuate unsustainable consumption (Hobson 2013). However, ‘strong’ forms of sustainable development, as typified by the degrowth movement, have connotations of denial and lack of material comfort and are politically unpalatable (ibid.). The 10 Year Framework of Programmes on Consumption and Production Patterns’ developed at the 2012 Rio + 20 Summit acknowledges that only highly coordinated and multi-level concerted efforts have any chance of success in countering ongoing trends towards increasing resource use and consumption. Necessarily, this entails behaviour change to bring about more sustainable consumption patterns.

The traditional rational choice model (Becker 1976), assumes that people make decisions based on calculating the costs and benefits to themselves. Solutions using this approach would typically involve increasing the costs of unsustainable behaviour (e.g., legal sanctions, green taxes) and increasing the benefits of sustainable behaviour (e.g., positive reputation). The assumptions behind the rational choice model have been criticised on a number of fronts, such as ignoring the role of unconscious processes, habits and emotions, and in particular, failing to consider the social context of behaviour and decision-making (Jackson 2005).

Such arguments feed into a key debate relating to the relative efficacy of top-down versus bottom-up approaches. Much of this debate has focused on SMEs as SMEs are an important part of the economy, accounting for 99 % of European enterprises, and 67 % of total employment (Wymenga et al. 2012). SMEs are considered to be the largest contributors to pollution, carbon dioxide emissions and commercial waste (Williamson et al. 2006). It is, therefore, crucial to engage SMEs in making the transition to a more sustainable economy. In the UK, for example, local authorities, in partnership with organisations such as Energy Saving Trust and the Carbon Trust, try to encourage and engage SMEs towards a low-carbon economy through programmes such as the green deal certification, community energy schemes, energy and water refurbishment support and sustainable transport support for SMEs (EnergySavingTrust 2013). However, while all of these programmes are typical of a top-down approach to management, there is no concrete evidence to suggest their effectiveness in succeeding SMEs towards a low-carbon, green approach.

Further, the efficacy of regulation in driving SME environmental behaviour is contested (Kitching 2006; Williamson et al. 2006). Some studies indicate that it is a key driver (Tilley 2000); others have found that while

SMEs aim to be compliant, they may be unaware of their environmental obligations and are primarily driven by commercial factors (Patton and Worthington 2003). One study found a ceiling effect whereby top-down pressures undermined intrinsic motivation relating to environmental responsibility (Baden et al. 2009). This was explained in terms of self-determination theory which distinguishes between extrinsic sources of motivation (e.g., pay/punishment) and intrinsic sources of motivation, such as desire for autonomy and competence (Deci and Ryan 2002). In contrast to the predictions of rational choice theory, numerous experiments show extrinsic rewards/punishments can undermine intrinsic motivations, and so risk failing once the reward/punishment is withdrawn (Deci et al. 1999). A recent study found that more civil regulatory pressures on SMEs, for example from trade associations, professional organisations etc. can provide a useful adjunct to legal regulation, which may not trigger such counter-productive responses (Lynch-Wood and Williamson 2013). Softer top-down approaches also include information-intensive campaigns and media exhortations. However, McKenzie-Mohr (2000) claims top-down methods are ineffective and advocates a bottom-up approach like community-based social marketing that makes greater use of psychological knowledge.

In 2003, Spence and Schmidpeter complained that the potential of SMEs’ social and environmental contributions was under-researched. Since then, several studies have focused on the distinct nature of SMEs to ascertain their motivations towards more socially responsible practices. Gadenne et al. (2009) find that environmental legislation increases environmental awareness among SMEs, but SMEs typically fail to realize the benefits of more environmentally responsible practices in terms of cost-reductions or marketing opportunities. In contrast, Murillo and Lozano (2006) report that socially responsible types of activities are typically driven by owners’ values, but the owners show awareness of associated potential business benefits. Boiral et al. (2014) also report that the values and levels of consciousness development in SME top managers are paramount in terms of the commitment to environmental leadership. This is supported by Arend (2013), who find sincere motivations to be a key factor in the success of green activities engaged in by SMEs.

Researchers are agreed that there are major differences in the way in which micro, small, medium and large businesses approach corporate social responsibility (CSR), with micro businesses tending to adopt informal measures such as eco-efficiency that impact the bottom line, while larger firms tend to adopt more formal policies, and report upon them externally (Baumann et al. 2011; Russo and Tencati 2009). Russo and Perrini (2010) go on to conclude that SMEs are concerned primarily with social capital, adopting

a more informal trust-based approach within a context of networks of personal relationships. In their analysis of 689 SMEs, Uhlaner et al. (2012) report that larger SMEs and more innovative SMEs are most likely to adopt environmental management practices. Also that the greater the perceived benefits of resource conservation, the more likely SMEs are to engage in eco-efficiency practices. Parker et al. (2009) make the point that a ‘one size fits all’ approach can’t work as SMEs differ not just by sector, but also by attitude, for example, compliance driven, advantage driven, environment driven and profit driven. Thus, a diverse toolkit of approaches ranging from regulation, voluntary standards, education, advice and support are necessary to reach the broad spectrum of SME types. On a global level, Ely et al. (2013) reflect on the new hybrid pathways to sustainability that aim to link global top-down methods that provide economic and regulatory incentives for sustainability with ‘Local Agenda 21’ which promotes a more community-led approach to sustainable development.

In this paper, we present results of an intervention which involved working with hairdressers to promote more sustainable hair-care practices within their salons and to their clients. We adopted a bottom-up approach, utilising insights from the literature on behaviour change (McKenzie-Mohr 2000).

### Literature on Fostering Sustainable Practice

In the UK, DEFRA has built an evidence base to better understand how to foster more sustainable behaviour, culminating in the Sustainable Lifestyle Framework (Defra 2011). This drew on research carried out since the 2008 framework in order to summarise insights on factors affecting behaviour and best practice approaches towards fostering sustainable lifestyles. One key change since 2008 has been a shift in focus from ‘pro-environmental behaviour’ to behaviours that constitute a ‘sustainable lifestyle.’ This distinction reflects the insight that not all sustainable behaviours are motivated by environmental concerns, for example minimising resource use may be related to dislike of waste, need to save money etc. (Eppel et al. 2013).

A distinction can be drawn between psychological perspectives that emphasise individual behaviour, typified by the Theory of Planned Behaviour (Ajzen 1985), and sociological perspectives that focus on routine practices that are embedded in cultural norms and reproduced collectively by individuals (Boldero and Binder 2013). In terms of the former, the Theory of Planned Behaviour posits that behavioural intentions are predicted by attitudes, which in turn are influenced by knowledge, beliefs and awareness. Another important predictor is normative influence i.e., perceptions of what relevant others think about the

behaviour. The final predictor is perceived behavioural control, a similar concept to self-efficacy, which reflects beliefs about the ease or difficulty in performing the behaviour. Thus sustainable behaviour is more likely if the individual has positive attitudes to sustainability, believes others do too, and believes it is relatively easy to act sustainably. There has also been evidence that the predictive utility of the model is increased by the inclusion of identity variables, both self-identity and social-identity (Terry et al. 1999). For example, while those who identify themselves with the green movement may hold positive attitudes to PEBs, this may not be the case for those whose self-image is bolstered by more conspicuous consumption (Gabriel and Lang 2006).

However, many studies report that there is an attitude-behaviour gap whereby consumers stated intentions differ greatly from their actual practices (Auger et al. 2007; Bray et al. 2011; Carrigan et al. 2011; d’Astous and Legendre 2009; Papaoikonomou et al. 2012). A meta-analysis of 422 studies indicate that changing conscious intentions accounts for just 28 % of the variance in behaviour change (Sheeran 2002). Indeed, several studies find that consumers engage in a variety of neutralization techniques that reconcile their positive environmental attitudes with their failure to adopt PEBs such as placing responsibility elsewhere, typically the government, or seeing social/environmental exploitation as the price of development (Chatzisarantis et al. 2004; d’Astous and Legendre 2009; Gruber and Schlegelmilch 2014). Yeow et al. (2013) discuss the factors underlying the attitude-behaviour gap in the context of understanding why the sustainable practice of a ‘bag for life’ has failed to catch on, despite heavy promotion of the concept. They conclude that the involvement of institutions, in this case business, is needed to close the intention-behaviour gap. This conclusion is supported by the case-study of Modbury, a UK town, where local businesses worked together to completely ban disposable bags throughout the town, in order to embed the more sustainable practice of using reusable bags (Carrigan et al. 2011).

From a sociological perspective, practice theorists understand behaviour in terms of the way in which practices emerge and evolve (Röpke 2009). Evans (2011, p. 110) makes the point that “ecologically damaging patterns of consumption cannot be reduced to a problem of human behaviour because individual acts of consuming certain things and in certain ways need to be contextualized in relation to the ordering of social practices.” Actions are proposed to derive from shared social conventions, for example accepted conventions relating to cleanliness practices both legitimise and demand accelerating consumption of water and energy as conventions are reinforced each time a practice is reproduced (Shove et al. 2012). Jack

(2013) describes an intervention that attempts to shift collective conventions of laundry routines towards less resource-intensive practices. Jack asserts that “collective conventions are at best tenuously related to demonstrable efficiency or aesthetic standards, nevertheless they appear to be highly prescriptive” (p. 407). Jack highlights the lack of considered reflection implicit in the escalating adoption of automatic high consumption laundry practices. She discusses how the routinized habits and practices of unnecessary laundry that have developed from an escalating culture of cleanliness cost unnecessary time, money, energy, water and chemicals yet offer no clear associated increases in well-being.

Practice theory thus helps to explain why greater awareness of environmental issues has not yet translated into more sustainable practices and can give rise to pessimism about the efficacy of many interventions designed to create more positive attitudes regarding sustainable consumption. However, one solution is to tackle the way in which habits and practices originate and are perpetuated, how social norms are established in the first place and who our chief role models and educators are when it comes to resource-intensive domestic practices such as cleanliness.

### Normative Influence

Social norms are the unwritten rules of behaviour, our beliefs regarding others' views and attitudes towards such behaviour (Cialdini 2003). Many studies provide overwhelming empirical support for the influence of social norms on behaviour. For example, normative beliefs have been found to be the greatest predictor of energy conservation behaviour (Nolan et al. 2008); also in relation to towel re-use in hotels (Goldstein et al. 2008); recycling (Cialdini et al. 2006); energy conservation (Gockeritz et al. 2010) and water consumption (Corral-Verdugo et al. 2002). Social norms can be seen as emergent properties of social networks, resulting from large numbers of individual actions and interpersonal interactions (Deroian 2002). Based on a summary of the literature on social influence and the emergence of social norms, Friedkin (2001) proposes that behaviours acquire normative value once they have been externally validated, i.e., approved of or adopted by influential group members. Therefore, it is worth making the extra effort to uncover means by which influential individuals can be encouraged to adopt sustainability practices and provide a behavioural model for others to follow.

Social network analysis examines the different roles individuals within networks can play by virtue of the nature of their connections with other network members, enabling

greater understanding of how social change can be diffused through these networks (Rogers 2003). Granovetter (1973) finds that most novel information is transmitted through social networks via weak ties i.e., acquaintances outside of one's core circle. ‘Influential individuals’ play a key role in the diffusion of novel behaviours in these networks (2007). Watts and Dodds (2007) equate social influence with acquaintance volume. Similarly, Krebs and Holley (2006) claim that “influencing a small number of well-connected nodes often results in better outcomes than trying to access the top person or calling on random players in the policy network” (p. 3). Valente and Pumpuang (2007) conducted a meta-analysis of behavioural change interventions that used opinion leaders to increase the diffusion rate of social innovations. They found that programmes that use peer opinion leaders are more effective than those that do not. They concluded that opinion leadership is a function of three main qualities: leaders' traits and values, competence or expertise and their social position—how many people they are in a position to influence.

Social network analysis can also explain the limitations of some community-based sustainability initiatives by looking at the nature of the structural relationships involved (Holman 2008). For example, one of the most widespread community-based sustainability initiatives in the UK is the Transition Town Movement. However, the drawback is that transition groups tend to be dominated by individuals who are seen by others (and indeed see themselves) as counter-cultural—i.e., in opposition to the prevailing attitudes and norms of the majority (Seyfang and Haxeltine 2012). Thus, although transition members may be very well-networked within niche green groups, their influence is often confined to such groups, limiting their ability to affect mainstream contexts.

A study into the role of influential individuals in the diffusion of PEBs (Brook Lyndhurst 2009) concludes by recommending a programme that “would comprise identifying catalytic individuals in specific social networks; persuading them of the benefits of the particular behaviour to members of their social group; providing them with tailored support material; and then allowing them the freedom to do what they do” (p. 140). They acknowledge that while this is a resource-intensive approach in terms of recruitment, engagement and support, their findings support the conclusion that such an approach is likely to prove effective and value for money.

Similar networking processes occur at the company level, for example a study of how CSR practices are diffused to companies found that ‘connectors’ (i.e., companies, employees, leaders) and expert organisations (industry associations, academics, consultants, NGOs) influence each other and contribute to CSR trends (Vidal et al. 2010). Several studies on SMEs highlight the

important role of social influence variables (i.e., attitudes and norms) on sustainable decision-making, diffused through informal networks made up of other companies, key stakeholders and trade associations (Cordano et al. 2010; Fuller and Tian 2006; Graafland et al. 2003; Jenkins 2006). Carrigan et al. (2011) contend that SMEs can play a major role in facilitating change in individual behaviour towards sustainability through influencing social norms. They present a case-study showing how small firms can influence communities to adopt more sustainable practices by adopting upstream and downstream approaches (Verplanken and Wood 2006). Downstream interventions provide informational cues at key points when habits are vulnerable to change, for example, exhorting customers to wash at lower temperatures at the point of purchase of laundry detergents. Upstream interventions are designed to disrupt existing habits and replace with more pro-environmental practices—in the case-study presented by Carrigan et al. (ibid.) this involved shop keepers no longer providing disposable plastic bags.

In this paper, we present the results of our study that explored the effectiveness of engaging hairdressers who could be deemed ‘influential’ by virtue of their large number of weak ties (Granovetter 1973) to ‘norm’ PEBs. Indeed, it is hard to think of an occupation which involves more general conversation with a wide variety of people, and which involves resource-intensive behaviours so relevant to people’s everyday routines (e.g., water, energy and chemical use) than hairdressing. Hairdressers take on the role of both teachers, in terms of showing and advising clients on aspects of hair care such as styling, and also as salespeople by recommending and selling hair-care products. Our pilot research (Eustace 2010) found no examples of hairdressers taking the lead on sustainability innovations. But if hairdressers do not consider the environmental impacts of hair-care, both in terms of the practices and products they recommend, this sends a powerful normative message to their customers, all of whom are individual consumers of water, chemical products and energy in their personal lives.

This study has three key objectives: (1) to encourage more PEBs in the hairdressing sector; (2) to ‘norm’ PEBs by enabling hairdressers to serve as a positive role model and a source of information for PEBs to their clients and (3) to assess the effectiveness of a bottom-up social marketing methodology using ‘influential individuals’ to norm PEBs. In the following sections, we describe how the behavioural theories discussed have informed our intervention to promote more sustainable practices across the hairdressing sector and the population as a whole. In the process, we hope to contribute to a wider understanding of how behavioural theory can be utilised to design effective interventions.

## Rationale for Methodology

The study is in the form of action research, with the methodology informed by the literature on community-based social marketing (McKenzie-Mohr 2000). This approach identifies the barriers to the activity to be promoted, and draws on the literature on behaviour change to devise interventions to overcome such barriers.

Barriers to PEBs emerging from our pilot study with hairdressers (Eustace 2010) were lack of awareness and insufficient motivation, in part due to lack of self-efficacy in the domain of PEBs. These are consistent with the predictions and literature relating to the Theory of Planned Behaviour (Ajzen 1985) which emphasises the contribution of positive attitudes, subjective norms and self-efficacy to behaviour. The methodology incorporated critiques of models based on the dominant paradigm of ‘attitude, behaviour choice’ i.e., that they place too much focus on individual agency and thus marginalise the cumulative and interacting effects of contextually mediated practices (Shove 2010) by making ‘practices’ (relating to hair-care specifically, and water, energy and chemical use more generally) the focus of attention.

The strategy adopted to overcome these barriers was to invite hairdressers to an event—the Green Salon Make-over (GSM) to raise awareness of PEBs in their work and encourage them to come up with their own ideas to reduce environmental impacts. This was followed three months later by a follow-up event to share information on what worked and to gain environmental certification.<sup>1</sup> This strategy was informed by discussions with hairdressers and hairdressing bodies, and by the social psychology motivational literature (Jackson 2005) in order to maximise the participants’ motivation to adopt PEBs. For example, based on the Theory of Planned Behaviour (Ajzen 1985), we used an inspirational speaker to inform hairdressers about the challenges of sustainability, thus increasing their knowledge and awareness of the issues and creating positive attitudes towards adopting more sustainable practices. The speaker drew on many examples of business to highlight how many were addressing these challenges. A key point made was that businesses were not waiting for their customers to ask for sustainable products, but assumed their customers expected them to care without being asked and were taking the lead. The removal of patio heaters from B&Q’s product range, and their sourcing of wood solely from FSC certified forests were given as an example. This point ‘normed’ the idea that businesses are ahead of their customers on

<sup>1</sup> The follow-up event was hosted in conjunction with ‘Steps Towards Environmental Management’ a new environmental certificate designed for small business.



sustainability issues. This was important as our pilot study indicated that few hairdressers reported that customers ask them about environmental issues. The speaker also increased self-efficacy by giving many examples of how businesses were adopting more sustainable practices; choosing cases where the relevant issues (e.g., choice of what products to sell) were easily transferable to the hairdressing sector. By giving examples of successful businesses and also many small businesses, hairdressers gained knowledge about how to be sustainable thus creating positive control beliefs that more sustainable practices were possible.

Motivation involves steering a course between accepting the logic of the rational choice model that people will behave ways that promote their self-interest, and acknowledging contexts where it does not apply. In particular, self-determination theory (Deci and Ryan 2002) states that extrinsic motivators can reduce intrinsic motivation and that people have intrinsic needs for autonomy, competence and relatedness. The project applies these insights by asking hairdressers to develop their own ideas for increasing their PEBs, after having been primed by our inspirational speaker. Thus, rather than telling hairdressers what to do, which risks reducing their sense of self-determination, autonomy and competence, we provided them with all the ingredients to devise their own PEBs, such as relevant examples, on-hand experts, information on eco-friendly products and interaction with others in the same industry. By not paying them for their time, but providing an immersive experience which is stimulating and enjoyable, we encouraged them to frame their motivations in terms of their personal and business values.

Before the GSM, hairdressers were given a collection box and batch of mini-surveys and asked to request their customers to complete the survey before leaving the salon. The survey was brief to encourage a high response with four questions:

- (1) Does the customer consider environmental issues in relation to hair-care such as energy use in drying/styling hair, water consumption or toxicity of hair-care products?
- (2) Was there any indication of such issues being considered in their visit to the hairdresser?
- (3) Are practices relating to hair-care at home influenced by experiences at the hairdresser e.g., in terms of how long to dry/rinse hair, what hair products to use etc.?
- (4) Would customers like hairdressers to consider such issues?

Participating hairdressers were requested to bring their completed customer surveys to the GSM event and at the GSM were given a new batch of surveys to hand out to their customers over the following months and to be

returned at the follow-up event. As a reward for gathering customer surveys and completing questionnaires, participants received a selection of eco-friendly hair products donated by suppliers (extrinsic motivator).

The follow-up event allowed attending hairdressers to gain environmental certification specifically designed for SMEs (extrinsic motivator). At the end of the event, participants completed a feedback form expressing their feelings about the day, expectations about their future practices, whether they would be likely to discuss event or issues with customers, colleagues, etc. The researcher also circulated to talk to the hairdressers to get more qualitative informal feedback.

## Methodology

In total, we recruited 41 hairdressers, 19 of which attended the GSM (some salons sent more than one hairdresser to the event). Twenty-eight were sole/joint owner or founder, 10 were managers and three clicked other. Eighteen were a sole proprietorship, 18 were a limited company and five were partnerships. The number of employees in the salons ranged from one to 21 (Mean = 7.85, SD = 4.77). The number of years the business had been established ranged from two to 60 years (Mean = 12.23 years, SD = 11.7). Twenty had an annual turnover of less than £250,000; five had an annual turnover between £250,000 and £499,999; one had an annual turnover between £500,000 and £749,999 and one had an annual turnover between £875,000 and £999,999 (15 didn't respond).

## Analytic Approach

The data gathered during this project comprises a number of forms:

Pre-event interviews with randomly sampled local hairdressers ( $N = 14$ ). Responses were very similar to most questions and we were happy that we had achieved saturation (Corbin and Strauss 2008).

Pre-event survey with randomly sampled local hairdressers ( $N = 31$ ).

Data gathered during the GSM and follow-on event comprising of quantitative data from surveys and qualitative data from interviews (recorded and transcribed) and notes taken during group discussions: sample = 19 hairdressers and 5 trainers from hairdressing colleges.

Customer surveys ( $N = 776$ ) completed before ( $N = 474$ ) and after ( $N = 302$ ) their salons attended the GSM.

**Table 1** How do you think hairdressers can best be encouraged to be environmentally friendly ( $N = 31$ )

	Strongly agree (%)	Slightly agree (%)	Neutral (%)	Slightly disagree (%)	Strongly disagree (%)	Mean score (%)
By regulation/law	23	45	10	16	6	2.39
By pressure from customers	35	45	16	3	0	1.87
By pressure from suppliers	13	71	13	0	3	2.10
By voluntary efforts from the salons themselves	23	58	13	6	0	2.03

In the first section, all the data relating to the hairdressers are pooled together and discussed. Our analytic method for the qualitative data was content analysis to identify recurrent themes and discourses (Eriksson and Kovalainen 2008). In order to make sense of the qualitative data, we began with a first ‘pass’ reading through all responses in order to provide greater sensitivity to the data and potential categories. Particular attention was given to results and outcomes that contribute to our understanding of behaviour change and the potential of the results to inform future interventions. Subsequent iterations of reading, sorting and coding the responses through this focussed interpretive lens resulted in ‘clusters’ of categories emerging, informed by the key behaviour change theories (i.e., Theory of Planned Behaviour and practice theory) discussed in the literature review. The initial section presents the results of our study by combining both quantitative data and qualitative data under the key themes that emerged from this analysis relating to motivation, practices, awareness, attitudes and is discussed in relation to the success of the project in terms of how effectively hairdressers diffused more pro-environmental social norms and practices relating to hair-care to their customers.

### Motivation

When asked how salons can best be encouraged to be more environmentally friendly, the most popular response based on the pre-event survey (see Table 1) was from customer pressure, followed by voluntary efforts from the salons themselves and pressure from main suppliers. The least popular response was from regulation/law, although all possibilities achieved a mean of above the midpoint of 2.5 signifying agreement.

The pre-event interview data allowed a more open response, and when asked how salons can best be encouraged to be more environmentally friendly, the interview responses were varied:

Should be voluntary

In order to be more environmentally aware we would need government support, bursaries, input and funding

Regulation. Do not feel that salons would do it otherwise, think people are aware but that they just won’t be bothered

If there is customer demand to become more environmental then we will follow

Creating more awareness

### Motivation to Participate

When asked what motivated hairdressers to attend the GSM event, the most prevalent response was related to being receptive to opportunities to learn. The next most prevalent response was for the opportunity to network and meet others, confirming the literature cited earlier indicating that SMEs like to network and learn from their peers (e.g., Jenkins 2006). The belief that being green may be good for business was also chosen as a reason by some. However, the free lunch, an intrinsic caring about the environment and the opportunity to gain environmental certification were less often listed as motivators for attendance. These findings confirm the predictions of self-determination theory (Deci and Ryan 2002) as desire for competence and relatedness appeared to be the dominant motivators as opposed to the more extrinsic rewards (e.g., free lunch and samples).

### PEBs Within Salons

In the pre-event interviews, in an open-ended question about what environmentally friendly practices salons currently engage in, the most common was recycling. Also common was the use of energy efficient light bulbs. Just two interviewees mentioned turning taps off between shampoos but one simply stated: “I am a hairdresser I do not conserve water.” Using organic products was mentioned by two interviewees, and ammonia-free products by another. The results from the pre-event survey confirm that recycling and energy efficiency behaviours are the most common (see Table 2).

**Table 2** Current (pre-event) PEBs of hairdressers ( $N = 31$ )

	1. Yes (%)	2. Somewhat (%)	3. A little (%)	4. No (%)	Mean score (%)
Does your salon employ any energy efficient practices?	19	29	32	19	2.52
Does your salon store and dispose of leftover chemicals safely?	23	10	3	65	3.10
Does your salon employ and water efficiency measures?	19	19	29	32	2.74
Does your salon undertake sustainable office management such as recycling?	29	32	10	29	2.39

### Awareness and Attitudes

In the pre-event survey, 58 % recognised the impact that hairdressers had on the environment, with over a quarter (26 %) not recognising the impact. Similarly, pre-event interviews with hairdressers indicated little awareness of environmental issues. In the interviews, when asked what comes to mind when talking about environmental issues in the hairdressing sector, most hairdressers mentioned waste and/or recycling. Electricity use and energy efficiency was mentioned by about a third of the interviewees, products (e.g., organic, natural etc.) were mentioned a couple of times, but it was surprising that water use was only spontaneously mentioned by one interviewee. Several admitted that they "...have never really considered these things before."

Further analysis revealed a statistically significant, strong positive correlation between awareness of environmental impact and adopting water conservation measures ( $r = 0.47, p < 0.01$ ), implementation of sustainable office management ( $r = 0.68, p < 0.01$ ) and the safe storage and disposal of leftover chemicals ( $r = 0.53, p < 0.01$ ). With the proviso that this is a small sample, these positive correlations suggest that salons that are more aware of their environmental impact are more likely to adhere to more sustainable practices than those which are unaware.

### Awareness and Practices: After the GSM

It was clear from the interviews after the event that the GSM had been a positive learning experience for the attendees and had affected their awareness and attitudes:

...hearing so many people actually doing positive things. I'm a bit of an environmental sceptic in a way, but I'm beginning to broaden my views

I now feel it should be a mandatory part of new businesses starting up and refits to follow/apply a lot of the simple steps like light sensors, boiler systems, correct ways to recycling, eco towels, eco alternatives, organic products

All of speakers were very good. Gentleman who did first talk was very good, he took us through why we

were doing this. Then information on how you can help your own business by putting things in place and it can save you money

I absolutely loved the event, enjoyed it a lot. This is a much needed topic for hairdressers, there are so many issues that need to be told/addressed at all levels

### Impact on Customers

Apart from one organic salon, none of the hairdressers prior to the GSM appeared to be aware of how they might be affecting their customers' domestic hair-care practices and of the impact they could have as a result of educating their customers. Also, apart from a few enquiries about products in terms of causing allergies, hairdressers said it was rare for customers to enquire about eco-friendly or ethical products/practices. Nevertheless, we were surprised to find that the interviewees all said they would be happy to talk to their customers about environmental issues. Below are some typical responses to the question: 'would you consider talking about these topics (re: PEB) to your customers?'

Yes of course. For example, after this meeting with you I could tell a client that we are taking part in this university project with hairdressers. But I'd be lying if I said I always talk about it or talked about it in the past Yes, probably not for each but definitely into the conversations. When you make changes, they see changes and start asking us questions

When specifically asked if they would encourage their clients to be more environmentally friendly, all the interviewees were agreeable within limits:

Yes – if it came in conversation and we talk about it, and say this is what I do at home, but I'm not the kind of person who can force something on someone It's part of coming to a salon, people talk a lot, all my clients do, if it's part of conversations I'm sure I can say things like look I'm recycling this and this Yes why not. They could bring their bottles back in rather than throwing them away, mainly the liquids such as shampoo, we could recycle the bottles



The survey during the GSM indicated that most (72 %) did not think that their current hairdressing practices (e.g., how much water, energy, product used) set a good example to customers in terms of environmental impact. However, there was optimism that this could be changed with 78 % believing it would be easy to model more PEBs to their clients and 75 % believing it would be easy to talk to their clients about more environmentally friendly ways to care for hair.

Data gathered during the follow-up event indicated that the biggest change was in how hairdressers related to clients, with the majority saying they had now started to talk to their clients about hair-care practices that are less energy intensive, for example advising using less shampoo and conditioner, advising clients to let hair dry naturally, and just blow dry once most of moisture has gone, talking about ammonia free or organic products etc. One salon was in the process of designing an eco-friendly discount card. It is notable in the illustrative quotes below that many do not frame their advice in terms of the environment, but rather in terms of cost savings or hair condition:

Possibly do a questionnaire with the clients, about 60 % of our clientele have organic, rest 40 % have chemical treatments. We might be able to change that proportion by informing them of the benefits

There will always be some customers who won't be interested, but I've found there are even more who like that you talk about these things – they also have water and energy bills to think about and they care about their hair.

Yes we've talked to clients already, tell them about keeping overheads down and pass on the discounts to them

We are specific with advice, encouraging them to use less product not at all looking for fast sales, but with kids products we advise always to use much less all the time as it will result in product overload

## Intentions

In the pre-event interviews, when asked if they would consider implementing energy/water saving measures the most common response was yes, but only if it was cost-effective. Most hairdressers believed that cost savings could be made by reducing energy/water consumption, but some measures such as new equipment entail up-front costs which were a barrier for some. When it came to environmentally friendly products, those who chose organic products often did so for health reasons as they cause less irritation for customers and staff. One salon owner reported that since he changed to organic his staff's dermatitis

problems had cleared up completely and staff no longer needed to wear gloves. However, most salons wanted high quality products but were not prepared to pay the premium for the organic products:

Yes I would like to go for good quality, not the most expensive ones. The more expensive ones such as Aveda who are very environmentally friendly are also very expensive so we went for mid range

The survey conducted during the GSM indicated a high level of self-efficacy from hairdressers in terms of their perceptions of their ability to improve their environmental practices, with almost all agreeing it would be very easy (11 %) or quite easy (72 %) to improve their salon's environmental impact.

The roundtable discussions at the GSM and the availability of information and suppliers led to all hairdressers coming up with concrete plans how to improve their environmental practices in the salons. All said they were very (43 %) or quite (57 %) likely to take up these ideas and 93 % were confident of success. Attendees also discussed how to engage with clients on such issues and 92 % said they were very/quite likely to promote greener practices to their clients and all were confident of success.

Feedback from the hairdressers at the follow-on event revealed that the ability and/or cost of recycling various materials depended upon local authority policies which made it difficult to provide guidance that is equally relevant to everyone. However, most had introduced or improved their practices relating to energy use and water use:

I have been a total convert to organic products. I am starting a new salon in December and will be able to implement everything we talked about at the event and I feel very excited about it

We are going to go in for an environmental policy which will be on display

We had a staff meeting since taking part in your project so everyone knows about this. Staff had their own tips to reduce waste, water use and electricity ...attachments on shower heads, will investigate pressure reducers, kettles/usage in kitchen/kitchenette, easy rinse shampoos, tap aerators

Be a little frugal with stock, it's not only better for the environment but will save money. Two squirts of shampoo won't give a better coverage than one

## Environment versus Profit

Several hairdressers made the point that their first priority was customers and their hair-care, and also costs and that these would always come before the environment:

On colouring hair, use of colours, etc., I would use my experience as a hairdressers to advise clients. I may not necessarily think about the environment at that point

Hairdressers believed a key part of the service they provided was to introduce a little luxury and pampering and this was seen as incompatible with reducing product use. However, in discussions in the GSM, the hairdressers themselves could see ways to resolve this dilemma, for example, by substituting the second shampoo with a longer massage time of conditioner into the scalp. Further, as discussions progressed, it was apparent that what was good for the hair was the same as what is good for the environment and utility bills. For example, chemicals, water and heat, as well as being bad for the environment can strip oils from the hair, cause irritation and negatively affect hair condition. Therefore, framing PEBs in terms of improving hair condition and also saving money taps into both hairdressers' and their customers' key concerns. Attendees were, therefore, happy to talk to their customers about these issues as part of their role as hair-care professionals:

Talking to clients which I do talk a lot about what benefits their hair, now I could extend that to beneficial effects to looking after their hair, number of shampoos, perhaps techniques of blow drying

Similarly, the most sustainable solutions to the problem of achieving clean dry hair also present a number of benefits beyond their environmental credentials. In particular, encouraging the use of dry shampoo allows individuals to achieve the desired result—clean, dry hair in the most resource efficient way possible—as hair doesn't get wet, it, therefore, does not need to be dried. However, hairdressers in our sample saw the main benefit of dry shampoo being that it is easier to style hair that has been dry shampooed than hair that has been washed and dried. Mention was also made of the benefits of dry shampoo in terms of speed of use and the advantage of not having to wait in line to use the bathroom when several members of a household all want to wash their hair at the same time.

### Professional Identity

A couple of quotes suggested that a key factor for some was how they saw themselves and their role. This came through particularly in a lively debate about how hairdressers should advise clients with progressively greying hair. Some thought it was their role simply to apply colour as their client expects as this both satisfies the customer and also contributes to profits. However, two hairdressers disagreed and said that they saw themselves

predominantly as hair consultants and would take time to talk to older clients to discuss the risks to hair condition of over-frequent dyeing and discuss options for making a gradual transition to grey if they desired that. This approach surprised some of the attendees, but also made them think about what their role should be as hairdressers—sellers of products/services or professional hair-care consultants? It appeared that this switch of professional identity triggered a shift in attitude for a couple of attendees, as illustrated by the feedback from one hairdresser about her responses to the GSM:

So the question for me came down to did I want to be part of the solution and not part of the problem? Taking that approach has given me more pride in my work and in my profession as a whole. I no longer feel like 'a blonde with scissors', I feel like a professional who is making a difference

### Training

Although the hairdressers that participated in the project all showed increased enthusiasm for sustainability practices, many commented on the need to integrate such issues into hairdresser training:

We need to train the apprentices they tend to leave water running and we have to knock out four years of their training and start fresh here

If all hairdressers turn off their taps when washing/shampooing hair, imagine how much water we can save. I'm very surprised how little the apprentices understand, it is all about the education really

It is very important for colleges to teach the students about these good behaviours, less waste, less use of products, colour mixing etc.

### Survey of Customers

The feedback from the hairdressers at the GSM indicates that their experiences at the GSM gave rise to intentions to promote more sustainable hair-care practices to their customers, and this was confirmed by feedback at the follow-on event that they had indeed managed to do so. In this section, we present evidence from the perspective of the attending salons' customers who were surveyed about their experiences at the hairdressers in relation to PEBs before and after the salons attended the GSM. The results from all the customers are presented in Table 3.

**Table 3** Survey of salon customers ( $N = 776$ )

	1. No (%)	2. A little (%)	3. Somewhat (%)	4. Yes (%)
Do you consider environmental issues in relation to hair-care such as energy use in drying/styling hair, water consumption and toxicity of hair-care products?	18	40	35	8
Was there any indication of such issues being considered in your visit to the hairdresser today?	32	38	23	7
With respect to hair-care at home, are your practices influenced by your experiences at the hairdressers e.g., in terms of how long to dry/rinse hair, what hair products to use etc.?	14	34	43	9
	1. No	2. Probably not	3. Probably	4. Definitely yes
Would you like the hairdresser to consider such issues?	10	18	61	11

For all questions, there were significant differences between the responses of customers who completed the survey before their hairdresser had attended the GSM to the responses of customers after the event, indicating that the hairdressers stated intentions to model more sustainable practices and where possible discuss with their clients had happened in practice. An ANOVA revealed that customers who completed the survey after the intervention were significantly more likely to report that environmental issues had been considered in their visit ( $M = 2.19$ ,  $SD = 0.79$ ,  $N = 302$ ) than customers completing the survey prior to the intervention ( $M = 1.97$ ,  $SD = 0.97$ ,  $N = 470$ ):  $F(1, 770) = 11.02$ ,  $p < 0.001$ .

This appeared to translate into customer awareness and attitudes as an ANOVA revealed that customers who completed the survey after the intervention were significantly more likely to consider environmental issues in relation to hair-care ( $M = 2.57$ ,  $SD = 0.62$ ,  $N = 302$ ) than customers completing the survey prior to the intervention ( $M = 2.18$ ,  $SD = 0.94$ ,  $N = 474$ ):  $F(1, 774) = 40.52$ ,  $p < 0.001$ .

Only 14 % of customers said that their hair-care practices are not influenced by their experiences at the hairdressers, which supports our proposal that hairdressers are influential individuals in relation to such practices. An ANOVA revealed that customers who completed the survey after the intervention were significantly more likely to report that their haircare practices were affected by their experiences at the hairdressers ( $M = 2.61$ ,  $SD = 0.68$ ,  $N = 302$ ) than customers completing the survey prior to the intervention ( $M = 2.35$ ,  $SD = 0.93$ ,  $N = 472$ ):  $F(1, 773) = 16.97$ ,  $p < 0.001$ . Normative influences are often undetected, as we typically absorb practices unconsciously (Nolan et al. 2008), and may only appreciate we may have been influenced if advice is explicitly given. Thus, this result suggests that advice on sustainable hair-care practices may have been more explicitly given after the GSM.

Most (72 %) of the customers surveyed reported that they probably or definitely would like environmental issues

to be considered by their hairdressers. An ANOVA revealed that customers who completed the survey after the intervention were significantly more likely to say that they would want hairdressers to consider environmental issues ( $M = 2.97$ ,  $SD = 0.50$ ,  $N = 302$ ) than customers completing the survey prior to the intervention ( $M = 2.57$ ,  $SD = 0.90$ ,  $N = 469$ ):  $F(1, 771) = 50.86$ ,  $p < 0.001$ . Bearing in mind, the increased number of customers reporting environmental issues had been raised in the salon visit after the GSM, this suggests that customers' experiences of discussing sustainable hair-care practices had been generally positive.

### Discussion

In the literature review, a distinction was made between psychological and sociological approaches to behaviour change. The psychological perspectives, typified by models such as the Theory of Planned Behaviour (Ajzen 1985), highlight the role that increasing awareness and knowledge and self-efficacy can have on creating more positive pro-environmental intentions. This was the approach we applied with the participating hairdressers in this project. Our procedures were designed to increase awareness of environmental issues, provide information relating to more eco-friendly products and hair-care practices, and encourage conscious reflection by hairdressers on how they can use this increased awareness and information to devise more pro-environmental practices in their salons, and pass on relevant advice to their clients.

The significant positive correlation between awareness of their salon's environmental impact and engagement in actual PEBs such as energy/water saving is consistent with the proposal that increasing hairdressers' awareness of the environmental impacts of their practices will give rise to more PEBs. 'Creating more awareness' came up in the suggestions made by the hairdressers themselves on how to motivate more PEBs. It was also clear from the comments

and feedback from attending hairdressers that the GSM gave rise to more positive attitudes and intentions with respect to adopting more PEBs and passing them onto their clients.

However, the impact of individual salons is small in relation to the potential impact hairdressers have by virtue of helping to set the domestic hair-care practices of their clients. As discussed in the literature review, such practices tend to be routinized, automatic and embedded in cultural norms. As such practices are mostly habitual rather than consciously considered, they can be resistant to interventions that focus on changing conscious beliefs and attitudes. Therefore, one way to tackle such embedded practices is to target those that help determine these practices in the first place. In the case of domestic hair-care practices, a key role model and influencer are hairdressers. For example, our survey of salon customers indicated that the majority of customers believed that their hair-care practices at home were influenced by their experience at the hairdressers.

Results from the customer survey indicate that the intervention was successful in its second objective to enable hairdressers to serve both as a positive role model to their customers and a source of information for more sustainable hair-care practices. Customers who completed the survey after their hairdresser had attended the GSM were significantly more likely to report that such issues had been considered in their visit to the hairdresser and that they themselves would consider such issues in their hair-care practices at home than customers who completed the survey before their hairdresser had attended the event. Not all hairdressers were sure that their customers were interested in talking about environmental issues; therefore, it was reassuring that the majority of customers reported that they would like hairdressers to consider environmental issues related to hair-care such as water, energy and product use. It was beyond the scope of this study to follow customers up to determine if and how their domestic hair-care practices actually changed, but this may be an interesting avenue to explore in further research.

A prevalent theme in the discussions was that hairdressers are predominantly driven by cost, and another important driver is customer satisfaction. It was, therefore, a key factor in the success of this intervention that we could agree that there was a happy synergy between what was good for environment with what was good for the hair and good for the bills. This made it easier to influence the hairdressers themselves to adopt more sustainable practices, and for them to talk to their clients. For example, depending on the client, or the direction of the conversation, advice (e.g., to blow dry less, use dry shampoo, colour less, shampoo less often/use less product) could be framed in terms of protecting hair condition, reducing energy/

water bills, speed or being environmentally friendly. This result confirms the benefits of shifting discourse from PEBs to sustainable lifestyles as many PEBs may be carried out for non-environmental reasons (Defra 2011; Eppel et al. 2013).

Although hairdressers were engaged and motivated to adopt more sustainable practices as a result of our inspirational speaker and discussions, one of the issues that arose several times was that hairdressers considered that trying to reduce resource use, e.g., by shampooing once rather than twice, or reducing amount of blow drying was in tension with their goal of providing a service for their customers, who the hairdressers believed often come to the salon for a bit of pampering. This ties in with the literature that has found that ‘strong’ forms of sustainable consumption that focus on reducing resource use suffer from connotations of frugality (Hobson 2013). Again the agreement that what is good for the planet is also good for the hair and energy bills were a key factor in helping to devise practices that reconcile this tension.

A common debate in the literature relates to the relative efficacy of top-down (e.g., regulatory) incentives and bottom-up drivers. Results from both the survey and interviews indicate a diversity of views relating to the perceived efficacy of regulation—some favoured voluntary approaches while others thought hairdressers wouldn’t bother in the absence of regulation. Pressure from customers was the most highly rated means thought to motivate more PEBs, however, the efficacy of this is in doubt as salons reported receiving little such pressure from customers. Voluntary efforts from the salons and pressure from suppliers were also more highly rated than regulation, supporting the predictions of self-determination theory (Deci and Ryan 2002). Nevertheless more agreed than disagreed that regulations would encourage more PEBs. These findings are consistent with Parker et al.’s (2009) contention that SMEs differ widely in what motivates them. These data are from the pre-event survey and interviews which drew on a fairly random sample of hairdressers and reflects a broad spectrum of opinion. On the other hand, those who chose to attend the GSM were perhaps those hairdressers who were more open to learning, as is indicated by the motivations given for attending. The fact that the GSM was so successful in influencing attending hairdressers’ attitudes, intentions and practices, therefore, does not mean that simply providing relevant information to all hairdressers will catalyse widespread behaviour change. It was a time-consuming process to recruit hairdressers to the event, and many who were interviewed did not actually choose to attend, thus such an intervention is only likely to affect that proportion of hairdressers that value new learning opportunities.

These results tie in with the need to adopt multi-level approaches that involve participation from relevant groups, bolstered by a more top-down approach (Ely et al. 2013). In this case, the bottom-up approach involving hairdressers in discussing themselves how best to marry business needs with environmental issues was very successful in developing motivation and self-efficacy in becoming more sustainable and disseminating more PEBs across their client networks. However, there was an agreement that training apprentice hairdressers is necessary to fully embed sustainability across the sector. This would constitute a form of civil regulation, which Lynch-Wood and Williamson (2013) report can be a useful adjunct to legal regulation in fostering desired behaviour changes.

Practice theorists (Røpke 2009) argue that cultural norms affect practices within specific contexts. For example, in the hairdressing sector, the current norm is that hairdressers are typically embedded in the modern consumption-based market system, accepting and perpetuating attitudes and behaviours that focus on selling products. However, unlike many other sectors, hairdressers are selling a service and so are well-placed to shift their focus more to the service angle, providing not just hair-care services, but also information and expertise. Thus, a shift in hairdressers' perception of what their primary role is has the potential to shift the cultural norms of the profession. If hairdressers' perception of their role can be shifted from selling products, to acting as hair-care consultants then, because of the synergy between what is good for the hair and what is good for the environment, more sustainable hair-care practices can be actively promoted to clients. Again, for this change in role identity to occur, a change needs to occur at the level of hairdressing training.

Although there has been research on the role of self- and social-identity on consumption choices (Soron 2010), research is scarce into how professional role identity within organisations affects practices. The importance of hairdressers' professional role identity on environmentally relevant practices was an unexpected finding from this study, and suggests this may be a fruitful area for further research. There are parallels also with the literature promoting a 'product-service systems' (PSS) approach as a way to enable more sustainable business models. Manzini and Vezzoli (2003) define PSS as 'an innovation strategy, shifting the business focus from designing (and selling) physical products only, to designing (and selling) a system of products and services which are jointly capable of fulfilling specific client demands' (p. 851). The idea is that by framing the interaction between business and customer as one involving service delivery rather than product sales, this removes the incentive to sell as many products as possible. Manzini and Vezzoli (2003) present several examples of firms who have changed their business model

to lease products (e.g., flooring) to customers, thus incentivising the production of long-lasting products rather than products that wear out quicker and need more frequent replacing. Our findings suggest the concept of PSS could be extended to include sectors that are already predominantly serviced based, but frame customer-business interactions in terms of the business as providers of professional advice and knowledge.

## Policy Implications

While a vast literature has emerged pertaining to theories of behaviour change, few papers describe how these apply within a specific context. This paper demonstrates how the various theories can be utilised to address the challenges of sustainable development. Our findings support the wisdom of DEFRA's shift in terminology from PEBs to sustainable lifestyles, as many less resource-intensive hair-care practices have multiple benefits aside from the environmental ones, and it was these additional benefits that appeared to be the focus when hairdressers discussed them with their clients.

Our findings also contribute to the debate about the relative efficacy of top-down versus bottom-up approaches to behaviour change, and we conclude that a multi-level approach is required in order to enable a shift to more sustainable hair-care practices across the hairdressing sector. Although our bottom-up approach of engaging hairdressers to devise more sustainable practices was very successful, this was a self-selected sample, as not all hairdressers interviewed took the time to participate in the project. Most participants, while divided on the merits of regulatory approaches, agreed that embedding environmental issues in hairdressing training is vital to fully embed sustainable practices across a sector that, more than any other, is in a position to influence domestic energy and water practices of the general population. Training is also the point at which professional role identities that are conducive to sustainable behaviour can be developed. Again couching arguments also in terms of cost and health benefits, both for the salon and the client, provide further reasons for trainees to adopt a more sustainable approach.

However, the strongest finding from this study was that targeting individuals who have large social networks and are in a position to influence the practices of the general population should be an essential part in the toolkit of approaches to effect behaviour change. The implications from socio-psychological theories of behaviour are clear—top-down exhortations to change behaviour have little chance of outweighing powerful normative influences. The indifference of influential individuals may be sufficient to send a strong negative message about a new behaviour to



network members. Our research found little evidence of awareness of environmental issues among hairdressers. Customers of such salons who were surveyed before the intervention, similarly showed little awareness. However, it was clear that inspiring hairdressers to adopt and promote more sustainable hair-care practices had a significant effect on their customers' attitudes and behaviours. We thus suggest that when promoting more sustainable practices, great care should be taken to target those who may be setting the norms and practices of resource-intensive behaviours, particularly where they are in the position to influence the general population.

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