The role of values for voluntary reductions of holiday air travel

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ABSTRACT

Recent research has shown that holiday air travel constitutes a typical value-action gap as many people continue to fly despite their concerns about climate change. However, some people do voluntarily reduce their holiday flights. Little is known so far about the role that values play in this decision. This paper examines this question based on semi-structured interviews with participants in local climate change and energy-saving projects. It finds that people who voluntarily reduce their holiday air travel are more ready than those who continue to fly to accept that their behaviour makes a contribution to climate change; that they feel a moral imperative to act regardless of its effectiveness in mitigating climate change; and that they distance themselves from socially dominant norms related to holiday air travel. This paper argues that these characteristics are connected to values of self-transcendence and self-direction, and that in this way values remain important for understanding and supporting low carbon behaviour.

Introduction

There has been an extensive debate in the literature about the role values play in supporting the adoption and maintenance of environmentally friendly behaviour. Schwartz (1994, p. 21) defines values as principles that are not situation-specific and that guide people's lives. However, several scholars have also argued that people usually identify with a range of values of which they prioritise some over others (e.g. Crompton & Kasser, 2010; de Groot & Steg, 2009) and that the prioritisation of values can be context specific (Howes & Gifford, 2009). Schwartz (1994, p. 25) distinguishes self-transcendent from self-enhancing values. Much of the literature on values and environmental behaviour refers to this distinction and suggests that self-transcendent values can better support environmentally friendly behaviour than self-enhancing values (de Groot & Steg, 2009; Schultz et al., 2005). However, personal air travel has emerged as a clear case of a value–action gap because many people continue to fly despite their concerns about climate change and future generations (Barr, Shaw, Coles, & Prillwitz, 2010; Becken, 2007; Cohen, Higham, & Reis, 2013).

While currently air travel is estimated to contribute only around 2.5% to global CO_2 emissions, air travel emissions are projected to grow by 4%–5% per year over the next few decades (Grote, Williams, & Preston, 2014, p. 215). Participation in air travel is also unequally distributed across the globe with higher rates of participation from rich countries. For example, emissions from passenger flights (excluding business flights) contribute about 12% to the UK's total household emissions from transport and home energy (Büchs & Schnepf, 2013, p. 117). For those who do fly, just one flight can make up a high proportion of their annual carbon footprint. For instance, a return flight from London to San Francisco generates about 5.5 tonnes of CO_2, which is more than half of an average UK

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person's 10-tonne annual carbon footprint; and a flight to Auckland, NZ (via Dubai) generates over 14 tonnes of CO_2, nearly one and a half of an average UK person's annual carbon footprint.[1] For those interested in reducing their personal carbon footprint and for initiatives that seek to support people in doing so, non-essential air travel is thus an important topic.

If concern about climate change can be understood as an expression of self-transcendent values, the current literature suggests that values do not make a difference for (holiday) air travel because many people continue to fly despite their concerns (Barr et al., 2010; Becken, 2007; Cohen et al., 2013; Hares, Dickinson, & Wilkes, 2010). However, this literature does not directly engage much with the debate about values. Therefore, the question about the role that values play for those who voluntarily reduce holiday air travel requires further investigation. This paper uses semi-structured interviews with participants in low carbon community projects to investigate this question. It focuses on holiday air travel because this is the type of air travel that people can exercise most discretion over as compared to business air travel, which people may be asked to engage in by their employers; or air travel to visit close family, which is increasingly seen as necessary to maintain intimate relationships in globally mobile societies. Initially existing theories and empirical evidence about the relationship between values and environmentally friendly behaviour are discussed. I then describe the study design and process of data analysis, report the results and discuss their relevance for the role of values in supporting a reduction of holiday air travel.

Values and environmental behaviour

The role of values has been widely discussed in the literature on environmental behaviours, but is yet to be applied to the case of holiday air travel in detail. This and the following section provide a summary of this literature, before I develop a framework of analysis which will be applied to examine the interviews in the findings section. The literature on environmental behaviours has long been interested in the role of values. Especially influential has been Schwartz's value typology which comprises 10 main dimensions (Schwartz, 1994) (see Figure 1). Many authors in this field have argued that self-transcendent universalism-related values, which include both altruistic (concern for other people, including those beyond one's close family, friendship or community circles) and biospheric (concern for the environment) values, can support environmentally friendly behaviour (e.g. de Groot & Steg, 2009; Stern & Dietz, 1994; Stern, Dietz, Abel, Guagnano, & Kalof, 1999).

Many scholars also state that self-enhancing values which focus on benefits for the individual such as financial, status or power gains are less relevant for motivating environmentally friendly behaviour (Corner & Randall, 2011; Crompton & Kasser, 2010; de Groot & Steg, 2009; Howell, 2013). Several reasons can be given for these claims. First, while there are some environmental problems which people may be interested to prevent or minimise out of self-interest, for instance localised pollution or the overuse of specific local resources, this is less likely to be the case for climate change. This is because the impact of climate change is difficult to predict and will mainly be felt by future generations; hence, there is little motivation for individuals to change their behaviour now out of self-interest (e.g. van der Linden, Maibach, & Leiserowitz, 2015). Second, while some studies argue that self-enhancing values can support environmentally friendly behaviour, e.g. if the action generates personal benefits such as cost saving or status enhancement (de Groot and Steg, 2009; Sweeney, Kresling, Webb, Soutar, & Mazzarol, 2013), many environmentally friendly behaviours do not result in individual benefits because they are often more costly or inconvenient than behaviour with a greater environmental impact, at least in the short term. One only needs to think of "green" electricity tariffs, organic food or train journeys compared to their more polluting counterparts.

Several quantitative studies have shown that people who prioritise self-transcending values (often covering both altruistic and biospheric values) are more likely to engage in certain types of environmentally friendly behaviour. The behaviour covered in this research includes nature conservation and environmental volunteering (Schultz et al., 2005), recycling (Evans et al., 2013; Guagnano, 2001), enrolment on a green energy programme (Clark, Kotchen, & Moore, 2003), and a range of pro-environmental types of behaviour grouped into one or several indices which do not contain air travel (Karp, 1996; Thogersen & Olander, 2002, p. 622).
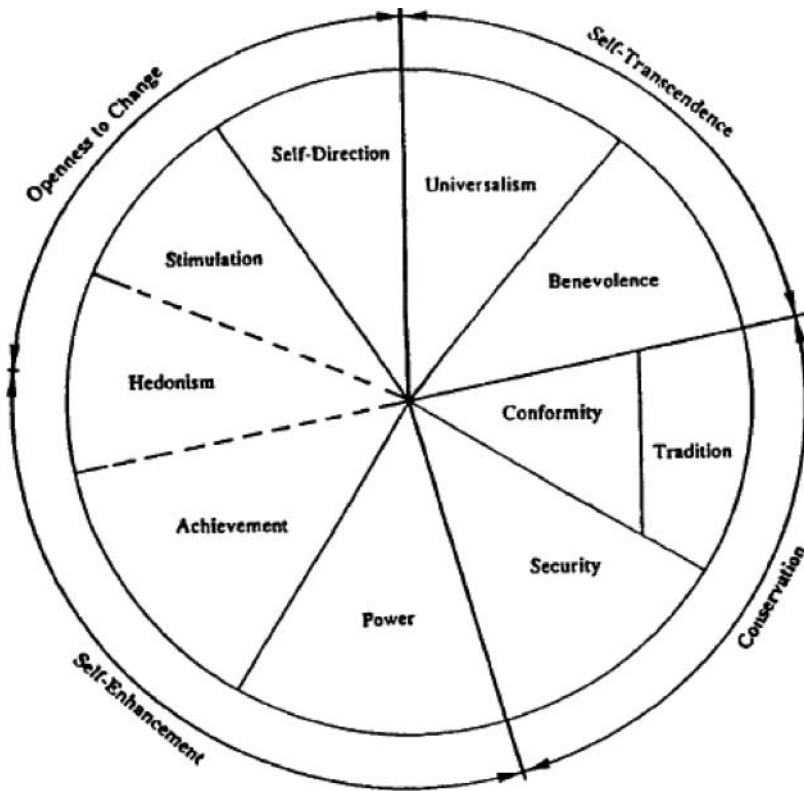
Figure 1. Schwartz' values typology. Reprinted with permission from John Wiley and Sons - Schwartz (1994, p. 24).

Several authors assume that environmentally friendly behaviour can also be supported by intrinsic motivations or values (Crompton & Kasser, 2010; Lindenberg & Steg, 2007). Intrinsically motivated behaviour can be defined as that which individuals engage in because they find the activity as such worthwhile, not because they are expecting any external rewards. Here it has been argued that, in the long run, intrinsic motivations are more effective in encouraging environmentally friendly behaviour because it means behaviour is independent from external rewards which may not last (Frey & Jegen, 2001; Ryan & Deci, 2000; van der Linden, 2015). Some research provides empirical evidence for this idea. Examples are studies on the reduction of food waste and meat consumption, and the adoption of recycling or switching off lights (Osbaldiston & Sheldon, 2003), as well as on energy saving in the workplace (van der Linden, 2015).

While the literature has so far mainly drawn links between intrinsic motivation and self-transcendent values (e.g. Crompton & Kasser, 2010; de Groot & Steg, 2010), it can be argued that there are also parallels between intrinsic motivations and values of self-direction (see Figure 1). Schwartz defines values of self-direction as those that emphasise "independent thought and action" (Schwartz, 1994, p. 22), and maintains that they are opposed to values of conformity with dominant social norms (Schwartz, 1994, p. 25). Since values of self-direction emphasise a person's independence of thought and action from dominant social norms, and hence from the rewards that compliance with social norms generates, it can be argued that there is a similarity with intrinsic motivations.

Values and air travel

So far, the literature on (holiday) air travel has focused on the role of climate change concern rather than values more broadly. However, some insights on the potential relationship between values and

holiday air travel can be drawn from this and the more general literature on values, attitudes and pro-environmental behaviours.

Several scholars have shown that the relationship between environmental attitudes/values and behaviour weakens as pro-environmental behaviour becomes more difficult, inconvenient or costly. For instance, Diekman and Preisendörfer (2003) compare the relationship between environmental attitudes and a range of behaviours including recycling, shopping, home energy use, water use, and car and air travel. They find that, compared to other behaviours, not having a car and reducing flying for holidays are much more weakly related to attitudes (Diekman and Preisendörfer, 2003, p. 460). Whitmarsh and O'Neill (2010) even find that while there is a positive relationship between pro-environmental values and eco-shopping or the reduction of waste and energy use, people with higher scores for pro-environmental values actually travel more than those with lower scores. These findings are compatible with studies which argue that there is a lack of "spill over" from environmentally focused behaviours at home to those that people engage in when they are on holiday, including the means of getting to the holiday destination (Barr et al., 2010; Cohen et al., 2013, pp. 989−990; Hibbert, Dickinson, Gössling, & Curtin, 2013).

Several papers examine the relationship between climate change concerns − which can be seen as an expression of biospheric or altruistic values − and air travel in more detail. Findings and arguments in the literature remain inconsistent: while one study on "slow travel" argued that climate change concern can be one amongst several motivations for people who do decide to give up or radically reduce holiday air travel (e.g. Dickinson, Lumsdon, & Robbins, 2011, p. 289), most studies show that people often continue with their holiday air travel despite their climate change concerns (Cohen & Higham, 2010; Cohen, Higham, & Cavaliere, 2011; Cohen et al., 2013; Hares et al., 2010; Hibbert et al., 2013; Higham & Cohen, 2011; Juvan & Dolnicar, 2014; Kroesen, 2012, p. 286; McKercher, Prideaux, Cheung, & Law, 2010). At first glance, this suggests values do not play an important role for holiday air travel and that appealing to self-transcendence/intrinsic values would not encourage them to re-think their holiday air travel behaviour. However, further research is required on this issue because the literature on climate change concerns and air travel does not address the role of values directly.

Framework for analysis

Based on the literature that provides insights into possible reasons for the holiday travel value-action gap, this paper develops a framework to guide the qualitative analysis of the interview material to examine whether, and if so in what way, values play a role in a voluntary reduction of air travel. The proposed framework comprises four dimensions: people's climate change concern and awareness of the carbon footprint of air travel; their perceptions about who or what is responsible for causing climate change; their views on their ability to mitigate climate change (outcome efficacy); and their perception of social norms around holiday air travel. This framework contributes to the literature as it applies some of the dimensions that were previously discussed in the literature to air travel, and as it discusses the ways in which the four dimensions are theoretically related to values. While they are not to be confused with hypotheses that can be tested quantitatively, the assumptions that the framework formulates can usefully guide qualitative analysis and the exploration of reasons for certain types of behaviour.

Climate change concerns and awareness of air travel emissions

Concerns about climate change and awareness of the carbon footprint of air travel are included in the framework because much of the literature on air travel focuses on concern and awareness as important factors for behaviour. As stated above, most of the literature finds that people continue to engage in holiday air travel despite their climate change concerns. Some authors (e.g. Becken, 2004) explain this missing link between climate change concerns and reduction of holiday air travel with

people's lack of awareness of the contribution that air travel makes to climate change. However, other (mostly) more recent studies have found that tourists have actually become more aware of the environmental impact of air travel but remain unwilling to cut down on holiday flights (Higham & Cohen, 2011; Kroesen, 2012; McKercher et al., 2010). This suggests that climate change concern and awareness of the carbon footprint of air travel do not as such seem to motivate the majority of people to voluntarily reduce holiday air travel.

Responsibility

The second dimension included in the framework of analysis refers to people's perceptions about the causes of climate change. The issue of responsibility was highlighted early on in the social-psychological literature on values and behaviour: for instance, Schwartz' (1977) theory of norm-activation and Stern et al.'s (1999) value-belief-norm theory discuss this using the term "acceptance of consequences" and argue that altruistic behaviour is more likely to occur if someone accepts the possibility that one's behaviour can cause harm to others or a "valued object" (Stern et al., 1999) such as the environment. Applied to the case of holiday air travel, we can distinguish collective and individual responsibility for climate change: people's views about the role of humans more generally in causing current climate change; and their perception of their personal contribution to climate change if they engage in holiday air travel. Indeed, the literature has suggested that people's unwillingness to accept that their participation in air travel contributes to climate change is one possible reason for the air travel value-action gap (e.g. Becken, 2007). It, therefore, seems plausible that people who believe that current climate change is anthropogenic and who think their participation in air travel would exacerbate climate change may be more willing to voluntarily reduce their holiday air travel than those who do not accept these views.

Ability to mitigate

The third dimension included in the framework of analysis relates to the question of whether people think their individual actions would help to mitigate climate change. While this seems very closely related to the question of whether people accept that their participation in air travel can make a difference to climate change (responsibility), it is productive to consider this question separately. For instance, while someone might agree that every single flight puts more emissions into the atmosphere (and that their decision to purchase a flight helps to maintain demand for that scheduled flight), they may be more pessimistic about their potential decision not to fly really making a difference. This issue has been discussed in the literature on "helplessness", "outcome expectancies" and "ascription of responsibility" in relation to environmentally friendly behaviour. Psychologists have identified people's underlying feelings of helplessness as a major reason for their lack of engagement with climate change and their refusal to reduce their carbon footprints (Lertzman, 2015, pp. 125−126; Norgaard, 2006). The term "outcome expectancy" was introduced by Bandura (1977) in distinction from self-efficacy (even though the term self-efficacy is sometimes used to refer to both aspects), both of which he believed would positively influence people's engagement in behaviour that may not provide immediate benefits for the individual. While self-efficacy refers to an individual's belief that they are able to engage in certain behaviour (e.g. to take up exercise, give up smoking or recycle their glass bottles), outcome expectancy refers to a person's belief that taking up certain behaviour will actually help to bring about their desired goals (e.g. weight loss, better health, conservation of resources). This view is also supported by norm-activation and value-belief-norm theory where it is termed "ascription of responsibility" to act and linked to the perception of ability to act (Schwartz, 1977; Stern et al., 1999).

Truelove and Parks (2012) and Koletsou and Mancy (2011) found that people who believed their behaviour can help mitigate climate change were more willing to engage in that behaviour than those who did not (but this was not tested for air travel). Compared to other behaviours, there may be further issues related to air travel and climate change that may make people more pessimistic

about outcome efficacy. The first is the issue of fatalism − the sense that it is too late to tackle climate change and that, therefore, individuals' efforts to reduce emissions would be in vain. Two studies (Kroesen, 2012; McKercher et al., 2010) found that people who continued to take part in holiday air travel despite their climate change concerns tended to have fatalistic views about climate change. The second issue is that for more common environmentally friendly behaviour such as recycling or saving energy in the home, people can apply the "many drops will fill a bucket" logic − a sense of "collective efficacy" which suggests that small actions performed by many individuals will add up to something bigger. This perception has shown to support participation in some environmentally friendly behaviour (Bonniface & Henley, 2008). But because a voluntary reduction of holiday air travel is not yet a common behaviour, people will find it more difficult to apply this logic here. It is therefore plausible to assume that people who voluntarily reduce their air travel tend to believe their individual behaviour can help mitigate climate change.

Perceived "need" and social norms of holiday air travel

The fourth dimension of the framework for analysis relates to people's perception that they "need" to go on holidays which involve air travel and that they have an entitlement to do so, both of which are influenced by social norms. Several studies found that people were not willing to reduce their personal air travel despite their climate change concerns because they perceived foreign holidays to be an essential part of their lifestyle and identity (e.g. Gössling & Nilsson, 2010; Hibbert et al., 2013; Higham & Cohen, 2011; Kroesen, 2012) and thought they have a "right" to fly (Shaw & Thomas, 2006, p. 209). Some authors suggest that people find it so difficult to reduce holiday air travel because it provides "mobility capital" which marks power and status in today's societies (Higham, Cohen, Peeters, & Gössling, 2013; Randles & Mander, 2009). This is especially so as other forms of travel, e.g. trains or coaches, are perceived as significantly more cost- and time-intensive than flying (Cohen et al., 2013, pp. 990−991; Young, Higham, & Reis, 2014), thus not offering a real alternative to holiday air travel. Also, the psychosocial literature on climate change argues that people will find it difficult to reduce their consumption, including flying on holiday, if their sense of self and self-confidence rely on consumption (Randall, 2012). Based on these arguments and findings, it can be expected that people who do not perceive the socially normed "need" to go on holidays that involve air travel will be more willing to voluntarily reduce their holiday flights.

How then do these dimensions relate to values? The first dimension, climate change concern, can be seen as an expression of self-transcendent values because it closely relates to concerns for environmental protection, social justice and well-being of future generations (e.g. Howell, 2013).

The social-psychological literature on values and behaviours, especially Stern et al.'s (1999) value−belief−norm theory, conceptualises the second and third dimension, responsibility and outcome efficacy, as "activators" of personal norms and related pro-environmental behaviours, and it argues that values influence these factors directly, i.e. that people who prioritise self-transcendent values are also more likely to accept responsibility for the consequences of their actions and feel more able to mitigate negative consequences for their valued object (e.g. Stern et al., 1999, pp. 83−86, 90).

The fourth dimension of the "need" to engage in holiday air travel can also be conceptualised as being directly related to values. Here it can be argued that the perceived need to participate in holiday air travel relates to values of conformity (with social norms) and achievement (participation as a sign of social status), which Schwartz (1994) conceptualised as a dimension of self-enhancing values. Conversely, people who consciously decide not to fly may arrange alternative types of holidays closer to where they live, possibly involving other forms of travel such as by train, coach, car or bike. They, thus, need to be willing to forgo the social status that is associated with more "glamorous" and exotic types of holidays; in other words, they need to be more independent from social norms and more willing to act on the basis of what they think is the "right thing to do". These are characteristics that

are captured by the value of self-direction as conceptualised by Schwartz (1994) and the concept of intrinsic values as discussed above.

Methods

This paper draws on 52 semi-structured interviews with participants who were involved with eight local climate change and energy-saving projects in the UK. The reason for this sampling strategy is that the project aimed to find people who had voluntarily reduced their holiday air travel through these initiatives, to then be able to examine whether values played a role in this decision. The interviews were conducted between November 2012 and July 2014 as part of the four-year RCUK-funded project *The role of community-based initiatives for energy saving* (RES-628-25-0059). This paper only includes interviews from participants who either continued to fly for holiday purposes or had reduced holiday air travel for environmental reasons (thus excluding 10 additional interviews with participants who did not engage in air travel for other reasons such as fear of flying, health issues or financial reasons of an overall set of 62 interviews).

The third sector initiatives from whom participants were recruited were selected such that they covered different engagement strategies (e.g. more broadly on climate change and people's carbon footprints or more specifically on energy saving), geographical areas and socio-demographic contexts to avoid the data being skewed by initiatives' engagement strategies or contexts (Table 1). However, since none of these characteristics seemed to be systematically related to values or behaviour, they are not discussed in the results and discussion sections. This is not to say that they do not matter for values or behaviours, just that further research, probably involving a larger sample, would be required to investigate this further.

The interviews included questions on people's energy use and travel behaviour, motivations for saving energy or reducing their environmental impact, and their views on climate change. Participants were aware that the overall project was about carbon reduction, but to minimise desirability bias, initial questions on behaviours were very open, and references to climate change were only made towards the end of the interview (if the topic had not been raised by the participants themselves). The interviews were conducted by two main interviewers, audio-recorded and fully transcribed (intelligent-verbatim). The transcripts were then coded and analysed thematically by the author with the software package NVivo. At the beginning of the process, a small number of broad codes were used such as "values", "flight behaviour" and "climate change views". After the first round of coding, sub-codes were added from the bottom-up, for instance, "given up flying", "reduced flying", "continues to fly as normal", "anthropogenic causes of climate change" and "responsibility for tackling climate change".

Participants who said they participated in holiday air travel and had not recently changed their behaviour because of climate change concerns or expressed unwillingness to change it in the future were allocated to the "continuers" group. Everyone else, who reported that they had reduced or given up holiday air travel because of their climate change concerns was allocated to the "reducers" group.

Findings

Of the 52 interviews included in this analysis, 31 were identified as those who had reduced or given up holiday air travel because of climate change and 21 who continued to fly as normal. This section first provides some typical examples of the ways in which people talked about climate change and their holiday air travel behaviour.

Since all of the participants were involved in low carbon community projects, they had at least a basic awareness of climate change and air travel's contribution to climate change. This means that also those who continued to fly expressed concern about climate change and thought something should be done about it, illustrated by the following quotes from continuers:

Table 1. Interviews and initiatives.

Continuers	Reducers	Initiative
A1 Geoff and Jane A3 Hillary A4 Brian	A2 William	A — Greening initiative, Hampshire, affluent area
B3 Laura B6 Ludy		B — University climate change and energy-saving project, Hampshire, affluent area
C1 Emily C10 Liz C3 Diane C3 Melissa C8 Dawn C9 Eileen	C4 May and Charles C5 Mark and Suzanna C6 Debbie C7 Alan and Wendy	C — Greening initiative, East Sussex, affluent area
	D1 Sue D3 Carol D4 Howard D9 Tracy	D — Sustainability initiative, Cheshire, deprived area
E5 Sarah E7 Dave and Saffron	E1 Stuart E2 Rachel E3 Jill E8 Helen	E — Low carbon zone, London, affluent area
F1 Toby F2 Phil	F10 Rob F11 Jane and Ted F12 Luke and Ali F14 Beth F15 Simon and Lauren F16 Felicity F3 Eddie and Rose F5 Neil F6 Lisa F7 Gary F8 Hugh and Elizabeth	F — Energy-saving initiative, Shropshire, affluent area
G1 Natalie G7 Ron and Linda G8 Maria	G2 Steven G4 Harold G5 Bernard and Mary G6 Graham and Rita	G — Sustainability initiative, Oxfordshire, affluent area
H2 Viv H8 Mick and Ruth	H3 Mandy H4 Paul H7 Sam and Bob	H — Climate change initiative, Hampshire, affluent area
I1 Luca		I — Energy-saving initiative, Bristol, deprived area

Participant names have been anonymised.

A1 Jane: Well, so many people don't think it [climate change] is an issue. They don't think there is such a thing, do they? I'm very much aware that it is and we ought to be doing as much as possible as soon as possible.

E5 Sarah: Because at the moment it just seems like it's [climate change is] happening and it's happening faster than they thought and we're rattling towards that point where we pass the point of no return and not a lot is being done.

G7 Ron: I am very concerned about the whole climate change thing. (…) I am, on the whole, very pessimistic about it.

In addition, like the reducers, many continuers not only expressed concern about climate change but also about the ways in which it might affect future generations:

C8 Dawn: Also, I've got children and I've got grandchildren and I just feel really strongly that we're fucking up the world, and (…) I want them to have the nice world that I've had. I feel really strongly about that, I think it's dreadful.

B3 Laura: I do worry about what the world will be like for my children, my grandchildren. (…) [Max] and I could carry on like that and probably in our lifetime it won't affect us that much, but you know, the children you love more than life itself, well it will affect them.

Despite their similar concerns about climate change, continuers and reducers had very different views of holiday air travel. The following two quotes represent typical "value−action gap" statements which express continuation of holiday air travel despite environmental considerations:

A3 Hillary: I wouldn't say, 'Oh I can't go there because I'd have to go on a plane and that would cause emissions'. No I'm not likely to do that. (…) I'm green up to a point.

G7 Ron: I'd quite happily jump on a plane, I've got no overpowering green urges to prevent me ever flying. (…) So yeah I am one of those environmentalists who have a conscience but it's not pricked sufficiently hard to change my way of travelling when I want to travel.

This contrasts with statements from the participants who explained that they had consciously reduced or given up holiday air travel because of their concerns about climate change:

F4 Pauline: And so I haven't, I haven't actually flown for holiday purposes since 1992. (…) And I just think, (…) I really do not want to fly again, because I just cannot justify, now that I've actually seen [the carbon footprint associated with flying].

C4 May: We made a deliberate policy, I should think within the last ten years, not to fly. (…) You know, we haven't gone on holidays where we… we could have done. It's a deliberate policy not to do it. Interviewer: Did environmental considerations play a role for that as well? Respondent: Yes, they did, very much so that's one of the main reasons.

H3 Mandy: So I guess before 2007 I did quite a lot of international travel. (…) 2007 was when I started to make a change and that was − it came about when I became more aware of the environmental impacts of flying. (…) I haven't flown since 2008.

These findings confirm that awareness of climate change and related concerns − whether biospheric or altruistic − are not systematically related to the decision to continue or reduce holiday air travel as suggested by previous literature (e.g. Barr et al., 2010; Becken, 2007; Cohen et al., 2013; Hares et al., 2010). Instead, the analysis reveals more systematic differences between "continuers" and "reducers" for the other three dimensions identified above, the first of which relates to perceptions about collective and individual responsibility for causing climate change.

Responsibility for climate change

Based on ideas from norm-activation and value−belief−norm theory (e.g. Schwartz, 1977; Stern et al., 1999), this paper assumes that people who agree that current climate change is largely human induced and who acknowledge that their carbon emissions contribute to the problem will be more willing to voluntarily reduce their holiday air travel than their counterparts. This is confirmed by the findings. Illustrated by the following quotes, many continuers questioned the anthropogenic nature of current climate change and believed it is a "natural cycle" or will "sort itself out":

A4 Brian: So I'm not… although I can say yes, there is a change, in the climate at the moment I'm not totally 100% sure what's causing it, and whether it will rectify itself.

A3 Hillary: I think climate change is all the time. Think about the little Ice Age in the 18th Century (…) I really don't know, honestly, who to believe. (…) I suppose I'm taking it with a bit of healthy scepticism, really − yeah, well, let's see what happens in another 50 years' time. I also think that climates have a way of sorting themselves out.

G1 Natalie: I think [the climate] is changing but is that due to us or because it's just a natural cycle of the earth?

Furthermore, the continuers denied that their participation in air travel would make any difference to climate change, mainly arguing that the flights would take place with or without them:

G8 Maria: But yes, I do think of the air miles when I'm going to Australia and I'm thinking, 'well, the aeroplane's going there anyway so I'm just catching a ride'.

E7 Dave: Yeah it wouldn't make any difference because to be honest with you, would I choose not to go on a plane abroad because it's environmentally unfriendly? No, because the plane would still be going whether I'm on it or not. (…) So no, I don't ask those questions at all.

Some of the continuers also explained that they felt their air travel behaviour was cancelled out by other, more environmentally friendly behaviour at home, thus rationalising or downplaying the contribution that their holiday flight behaviour was making. This is consistent with the literature on the lack of spill-over of green behaviour at home to those in tourism spaces (Barr et al., 2010; Cohen et al., 2013; Hibbert et al., 2013):

C9 Eileen: I suppose mentally I balance it up in a strange equation in that I'm very careful at home, I do a lot of recycling, I'm quite environmentally conscious at home. And then I think, oh well, I suppose I offset that by the trips that we take and I'm aware obviously particularly flying is not very good although I'm pleased that nowadays aircrafts are getting more and more efficient and less polluting, so at least that is a good thing. But, no, I know it's not good and you just take that trade-off in your mind and I suppose, if I'm honest, no I can't see myself cutting back purely on environmental reasons particularly.

F1 Toby: [whether env considerations come into play] It's not something I look at when I travel, I wouldn't stop a trip because of it. But I mean we are quite green here where we live, you know we compost a lot of stuff, I do quite a lot of survey work on birds and various groups. (…) I mean I understand conservation and air miles and pollution and all the rest of it, but at the same time you know I do my bit at home but it's not going to stop me going on a holiday if you like (…).

These views were not represented amongst the reducers of holiday air travel. To start with, all of them were convinced that current climate change is driven by anthropogenic emissions, illustrated by the following two quotes:

H3 Mandy: So I've very much bought into the idea that climate change is happening, that the main causes are human driven by our emissions of greenhouse gas emissions.

G2 Steven: I'm totally convinced by the scientific arguments, of the general consensus. (…) The world's climate is changing, it's changing faster than it has done for a very long time and while some of that may well be natural it's patently obvious that the vast amount of activities that humans do around the world has got to be making a big difference to what might be happening anyway.

Many 'reducers' also talked about the impact that they thought their individual behaviour had on climate change and their desire to minimise the harm they might otherwise personally cause to the planet. The first two quotes are related to general impacts on climate change:

C6 Debbie: So (…) seeing the urgency, seeing the timelines involved, and then suddenly my children being of an age, hey, not what's their future going to be like but what's their children's going to be like? Wow, actually I'm part of this, I caused this. I'm a baby boomer, that terrible breed of person that caused − that did a lot of this damage.

F4 Pauline: I think it's just an amazing planet and a very beautiful planet. (…) And, for me, I actually think I'm incredibly powerful because I know that what I do from day to day actually affects people and places around the world.

And the following two quotes relate to impacts from air travel more specifically:

E8 Helen: I'm just wary of travelling too much by air because you sort of think 'what sort of carbon footprint are you leaving behind when you jump on an aircraft?'

G4 Harold: Well, I'm trying to reduce my carbon footprint …, I see international travel or air travel or even long distance travel of any sort is a very costly way environmentally of a single individual to have an imprint on the planet.

In contrast to the continuers, the reducers also tended to reject the view that their other carbon-reducing behaviour could make up for air travel, and instead highlighted the disproportionate contribution that air travel would make to their personal carbon footprint:

F4 Pauline: As soon as I kind of realised what contribution the carbon footprint [from flights] would make in relation to the rest of my own [footprint], calculating at various destinations, you know, it more than doubled, even going locally, … you know, relatively short distances. And I thought, 'no, I actually can't justify that, there is no point whatsoever in trying to live a, a fairly good life in harmony with the planet in terms of carbon, in terms of, of [my] house (…) and, you know, local travel, if I then actually leap into an air plane'. I just couldn't justify it.

Outcome efficacy: does individual action make a difference?

Based on the literature on air travel that identifies people's fatalistic views about whether climate change can still be tackled (Kroesen, 2012; McKercher et al., 2010), and suggests people are more likely to engage in environmentally friendly behaviour if they expect it to be effective (Koletsou & Mancy, 2011; Truelove & Parks, 2012), this paper assumed that people who believe their personal reduction of holiday air travel could alleviate climate change will be more inclined to reduce holiday air travel.

What the analysis uncovered does not entirely confirm this assumption. First of all, while there was some variation, many participants in both groups expressed the view that it might be "too late" to prevent dangerous climate change, as well as doubts as to what they as individuals could do about it, starting with some examples from the continuers:

G7 Ron: You know, to refuse to get on a plane is not just a pinprick, it's a microscopic pinprick in terms of stopping what is happening (…). I have a very gloomy (…) view of the way climate change is going.

F1 Toby: I'm not sure that little [Toby] sitting in his house (…) can really do much about it [climate change]. Okay?

F2 Phil: Yeah, and it's too late. It's too little too late. It actually… me doing my bit, is going to make absolutely bugger all difference because in the end it's going to happen anyhow. We're not going to stop it happening, no way.

These views were not confined to the continuers, as many reducers also expressed feelings of helplessness and despair in relation to climate change:

A2 William: I feel complete despair; I don't see that anything other than a crisis is going to change this.

F6 Lisa: I think the human animal is a cancer species actually and we are just fucking the planet up (…), you know, if we can, we'll kill it. And that makes me want to scream. So yeah, that's why I do it [reduce her emissions]. (…) I don't actually have any false illusions about the success of it.

However, a difference that emerged between the continuers and the reducers is that the latter felt compelled to cut their emissions, including from holiday travel, simply because they believed this was "the right thing to do", a moral obligation, regardless of whether it made any difference to climate change. The following quotes illustrate this kind of narrative, which was typical among the reducers:

D1 Sue: Yes, it's got to be the right decision hasn't it [to give up flying on holidays]? To me it's a moral issue, it's an environmental issue, we really have got to sustain this planet for generations to come. (…) So yes I do feel that it was the right thing to do. (…) But I don't think everybody is entirely convinced that our single actions will actually have a gross effect on climate change, and my view is that everybody as far as possible has to try and do something.

E2 Rachel: I was just like, there's no point even trying to do anything. And, somewhere along the line, I decided that that wasn't helpful (…) also (…) when you look at history, things have changed by small steps, often, haven't they? So there is still, either there's hope of us sorting this out or, even if there isn't, we've got to give it a go.

A2 William: We have no idea if it's making a difference to our village, to our country, to our globe [cutting back on emissions]. There's no way of telling, but I guess in 50 years we'll know whether — we don't know, you can't tell. It's one of those things you just do on faith isn't it?

These findings suggest that it is not so much the belief that an individual's actions or the actions taken by everyone together will make a difference that motivates cutting back on holiday air travel. Unlike with saving energy in the home, which is perceived to have become a typical thing to do, people cannot trust that many other people will cut back on their holiday air travel, so the "many drops will fill a bucket" (Bonniface & Henley, 2008) logic does not apply here. Rather, the "reducers" in our study held the view that they were morally obliged to cut back regardless of its effectiveness.

The "need" to fly and social norms

Another important reason that the literature has highlighted for people's reluctance to cut down on their holiday air travel is that over time social norms and expectations have developed in a way that people should be able to have holidays abroad that involve flying. Coupled with this, it has been argued that holiday air travel provides "mobility capital" and thus increases people's social status (Gössling & Nilsson, 2010; Hibbert et al., 2013; Higham & Cohen, 2011; Higham et al., 2013; Kroesen, 2012; Randles & Mander, 2009). Indeed, the data from this project show that the continuers often argue that they "need" to fly:

C10 Liz: You know, I… I would love to not pollute and go somewhere but until we all meditate and go into another state how are we going to do it? (…) We need sunshine, we need to have a change (…) a holiday is a big thing (…) if I've got the money then I'm going to the sunshine.

F1 Toby: We have both worked hard during our lives and saved and now we can do it so why not.

B3 Laura: I suppose we could not fly, but that would nearly kill me not to get any sunshine once a year.

As the following quote demonstrates, people's perception of the "need" or "right" to fly might also be connected to concerns about their social status:

A1 Geoff: Well, if we really wanted to we wouldn't go on such energy intensive holidays, but we do. There's no… Well, I think we could try and economise but we don't want to wear too hairy a shirt. (…) We don't want to become mugs.

In contrast, while some of the reducers stated they also like flying and going on holiday abroad, they were willing to sacrifice this:

G2 Steven: Yeah, I don't fly anymore. If I had to I would, obviously, but it's a choice not to. And I love flying and I love warm sunny beaches and there's often sunny beaches in this country but not usually warm, so I miss all that.

However, the majority of the reducers emphasised they did not feel the "need" to fly abroad for holidays, either because they could access information about other countries and cultures through other means, or because they thought that places in the UK or Europe that are accessible by train offer them all the cultural diversity they wished to experience:

C7 Alan: Why do you want to travel? (…) There's, you know, it's just within the UK, there are lots of places that I've not been to, like different cultures, you know. So I just don't feel the need, I suppose.

F14 Beth: I don't particularly want to go anywhere anyway, because there are amazing places round here and why would I want to sit on a thin tube with a bunch of other folks when I can potter around the countryside round where I live?

Some of the reducers also stated that they did not care about what other people thought of their decision:

C4 May: I suspect some of them [her friends] think we're rather silly and stick in the muds, you know, because it won't make any difference to anything (…) but that's not how we see it. So, we just haven't gone. (…) We're known as being a bit odd. It doesn't worry us. Yeah, so we're a bit cranky, a little bit strange. There you go, that's fine.

Overall, this suggests that the reducers consciously distance themselves from social norms and status expectations and instead take decisions that they believe are "right". I argue that this relates to intrinsic values and values of self-direction − independence of thought and action from dominant social conventions.

Discussion and conclusion

While there is some evidence that self-transcendence/intrinsic values can support "easy" carbon-reducing behaviour, previous research has shown that holiday air travel represents a typical value-action gap as it is not associated with concerns about climate change (e.g. Cohen et al., 2013; Hibbert et al., 2013). However, since the literature on air travel behaviour has not addressed values directly, it remained unclear what role values play in supporting some people's decisions to reduce or even give up holiday air travel, a question that this paper examines.

Its findings demonstrate that values matter for people's decisions to reduce their holiday air travel. As previous research has argued, people relate to a range of values but prioritise them in different ways: all of the participants expressed some level of concern about climate change which is related to self-transcendence values. However, reducers also identified more strongly with a sense of responsibility for causing climate change, an obligation to act regardless of effectiveness, self-direction or independence from socially dominant norms.

The finding that participants' climate change concerns and awareness of the carbon footprint associated with flights did not as such motivate voluntary reductions of air travel fits well with previous research (e.g. Cohen et al., 2013; Hibbert et al., 2013). It means that self-transcendence values as such do not necessarily support voluntary reductions of holiday air travel. However, this paper finds that air travel reducers and continuers tended to take different standpoints in relation to the other three dimensions set out in the framework of analysis. First, the reducers all agreed that climate change is human induced and were more willing than the continuers to accept that their participation in flights would exacerbate the problem. This supports the assumption set out in the framework that self-transcendence values, here expressed as biospheric and altruistic climate change concerns, can "activate" pro-environmental behaviour (Schwartz, 1977; Stern et al., 1999) and thus matter for behaviour, if they coincide with perceptions around collective and individual responsibility for causing climate change.

Second, the air travel reducers in this study tended to express the moral conviction that their personal reduction of holiday air travel was simply "the right thing to do", regardless of whether or not it helped mitigate climate change. It can thus be argued that self-transcendence values can support reductions of air travel if they coexist with strong feelings of moral obligation to minimise one's environmental impact. This adds a new insight as it stands in contrast to arguments from previous research which finds that the perception that personal action will not make a difference regarding the desired outcome can prevent people from reducing their environmental impact (Koletsou &

Mancy, 2011; Lertzman, 2015, pp. 125−126; Norgaard, 2006; Truelove & Parks, 2012). This finding indicates that people in this group prioritise self-transcendent values of care for the environment and other people over potential outcome efficacy − and that in this case these values, perhaps, matter more directly for behaviour as usually assumed by norm-activation or value-belief-norm theory.

Third, in this study, the air travel reducers actively distance themselves from the perceived socially dominant norm established by previous research (e.g. Gössling & Nilsson, 2010; Hibbert et al., 2013; Higham & Cohen, 2011; Kroesen, 2012) to participate in holidays that require air travel and express that they are not concerned about how others view their behaviour. It does not mean that they are "lone wolves" who do not follow any social norms as they are likely to be supported by initiatives and peers who approve of these alternative standards. Still, since currently only a small minority in society endorses these alternative standards, air travel reducers are likely to encounter lack of understanding or even criticism from close friends or family as evidence in this paper has shown. This result suggests that self-transcendence values can support decisions to reduce holiday air travel if someone also identifies with values of self-direction and is thus willing not to fit in with socially dominant norms around holiday travel and status.

This study remains limited in several ways. As a qualitative study it is based on a purposive sample. Even though it was attempted to include initiatives from different socio-economic contexts, the majority of initiatives was based in affluent areas. Thus, it could be examined more systematically whether the role of values varied across different contexts. Participants were also only asked indirectly about values, for instance, through questions about their motivations and justifications for behaviours and their views about climate change. This was because experience from previous interviews had shown that people find it difficult to talk about values directly as it is a highly abstract concept. However, future studies could be supported by conducting an additional values survey with participants, not least to see how results might tally up with qualitative data. Furthermore, the interviews did not cover some topics that might have provided additional information on people's values, for instance, the issue of carbon offsets for flights. Finally, the insights that the paper provides on the ways in which values matter for the decision to voluntarily reduce holiday air travel may be salient for reducers from similar initiatives and contexts but cannot be generalised to the whole population as it is based on a qualitative study. Future research should seek to address these issues.

This research also highlights some of the challenges that practical initiatives which seek to encourage people to reduce holiday air travel face. It is relatively easy to present people with facts about climate change and theories about its anthropogenic nature; but it is more difficult to persuade people to accept personal responsibility for their contribution to climate change, to act on the basis of principles regardless of the effects of that behaviour, and to distance themselves from dominant social norms. If it is true that people identify with a set of values and that the values they prioritise can change (Crompton & Kasser, 2010; de Groot & Steg, 2009; Howes & Gifford, 2009), climate change initiatives can try to appeal to self-transcendent and intrinsic/self-directional values. There is some evidence that more deliberative forms of repeated small group discussions which encourage people to reflect on these types of values can support behaviour change even in difficult areas such as holiday flights (Büchs, Hinton, & Smith, 2015). However, these forms of engagement are time consuming, only reach small segments of the public, and are therefore likely to only make a difference in the long run. Other research has also shown that many voluntary organisations shy away from appealing to these values for broader public campaigns because they sense, often based on previous experience, that this strategy puts off people who do not already prioritise these values (Büchs, Saunders, Wallbridge, Smith, & Bardsley, 2015). However, to contribute to long-term cultural change which could support a re-prioritisation of values, voluntary organisations should still try to appeal to self-transcendent and intrinsic/self-directional values in ways that are perhaps more popular with broader publics, for instance, by highlighting concerns for future generations or the attractions of slower ways of travelling. As has previously been argued, e.g. by Higham et al. (2013), these efforts will need to be complemented by regulation of the air industry and taxation of air travel emissions to support such morally demanding behaviour.

Note

1. The flight carbon footprints were calculated using the carbon offset website www.atmosfair.de.

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