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## Eco-Fatigue and its Potential Impact on Sustainable Tourist Experiences\*

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### Introduction

Sustainability leaders in tourism have begun to focus attention on building sustainability into their guest experience and using these experiences to encourage sustainability action beyond both their individual businesses and the tourists' own travels. This argument that tourism needs to contribute to sustainability beyond the tourist experience has been made by several authors and is usually linked to either the idea of including sustainability education/information in the tourist experience (Moscardo & Hughes, 2018; Weaver, 2014) or to claims that there is increasing consumer demand for sustainability in tourist experiences (Buffa, 2015; Lopez-Sanchez & Pulido-Fernandez, 2016). The label of eco-fatigue has been used to describe the idea that people have become weary of discussions about sustainability, pessimistic about the future of sustainability, and distrustful of business claims about sustainability. This concept of eco-fatigue challenges both the claim that there is increasing demand for sustainable tourist experiences and the argument that sustainable tourism experiences should include and/or encourage sustainability learning and action beyond tourism. The concept of eco-fatigue has been given almost no attention in the academic tourism literature but is well-established in popular discussions of sustainability action (Turtle, 2008). The present paper reports on an exploratory study that examines both the nature of eco-fatigue and demand for sustainable tourist experiences.

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### *A framework for designing sustainable tourist experiences*

In line with recent discussion of sustainability definitions (cf. Schaubroeck & Rugani, 2017), this paper sees tourism as contributing to sustainability if it makes an overall positive contribution to the various capitals and domains that make up the well-being or quality of life of key stakeholders with a particular emphasis on improving the stock of natural capital and enhancing the quality of life of destination residents (Moscardo & Murphy, 2014). Thus tourism sustainability is based on enhancing its positive impacts and minimizing its negative impacts on various aspects of well-being. McCool, Freimund and Breen (2015) have argued that the sustainability of tourism can be improved only if we think about tourism as a system and identify the key elements and interactions between these elements that exist in this system. Tourist experiences emerge out of the activities and interactions that tourists have in a particular physical setting and tourism providers influence these experiences through the way they design and manage that setting, the activities that they offer and the communication they provide during, before and after the activity.

In such a system a sustainable tourist experience is one that pays careful attention to:

- where the tourists come from and how they get to the settings, encouraging smaller travel distances and minimising or offsetting carbon emissions linked to the transport to and within the experience;
- where supplies and equipment are sourced and how they are produced with the aim of choosing lower impact options, such as locally produced organic food or recyclable containers;
- local employment and creating just and rewarding employment conditions for staff;
- selecting and/or scheduling activities for tourists which have minimal negative impacts on the physical setting, other tourists and residents who may also be in that setting;
- the inclusion of interpretation or persuasive communication about how tourists can act to enhance the sustainability of their presence in the setting; and
- the possible inclusion of interpretation or persuasive communication that encourages sustainability beyond the setting.

Much attention in the tourism literature to date has focused on the first four of these elements with many sustainability accreditation and certification schemes offering tourism providers guidelines for how to alter these elements to improve the positive and eliminate the negative impacts of their businesses. The reader is directed to the Global Sustainable Tourism Council (2019) criteria for examples. More recently there has been increasing attention paid to the extent to which the tourist experience itself can contribute to improved sustainability beyond the tourist experience (Moscardo & Hughes, 2018; Moscardo & Murphy, 2014; Weaver, 2014). The argument made here is that positive tourist experiences that explicitly refer to sustainability combined with effective interpretation of this sustainability information may encourage tourists to adopt more sustainable actions in future travel and at home (Ballantyne & Packer, 2011; Ham & Weiler, 2012; Moscardo & Murphy, 2014; Walker & Moscardo, 2014). All of these approaches assume that tourists either seek more sustainable tourism options and/or will respond positively to sustainability communication in and around their travel experiences. Thus it is important to explore demand for, and likely responses to, sustainability communication in tourist experiences.

### ***Predicting sustainable action and the concept of eco-fatigue***

Despite widespread discussion of, and advocacy for, more sustainable tourism, there is only limited research into actual demand from travellers for more sustainable experiences. Some more recent papers have suggested that there is rising demand for sustainable tourist experiences (Buffa, 2015; Lopez-Sanchez & Pulido-Fernandez, 2016), but generally the discussion in the tourism literature has focussed on the gap between awareness and/or intention and action (Gossling, Scott, Hall, Ceron & Dubois, 2012; Hughes, 2013; Mair, 2011; Rahman, Park & Chi, 2015). Tourism discussions about this gap are often confusing with a consistent failure to specify if the discussion is about an awareness – action gap, an intention – action gap, or a gap between sustainability action at home and sustainability action while travelling. Each of these three options is a distinctly different phenomenon, but the third is an especially problematic one and not directly relevant to the present discussion (see Moscardo, 2019 for a critical discussion of this issue). The other two gaps are not surprising, with long standing recognition in social psychology and persuasive communication of numerous steps between awareness and action and discussion as early as 1963

(Festinger, 1964) of a number of barriers between intention to act and action that must be addressed if desired behaviours are to be implemented.

Moscardo (2019) notes that a major issue with tourism and hospitality discussions of sustainability action in travel is a confusion between deliberative action and habitual or routine actions, which is an important distinction in behaviour change (Gardner, 2015; White, Habib & Hardisty, 2019). The choice of a sustainable tourist experience option is, however, generally a deliberative one so that is the focus of the present discussion. In this deliberative action pathway extensive research available across multiple research areas suggests the following prerequisites to encourage a person to engage in sustainable action:

- awareness or knowledge of the sustainability issues or threats, their nature, causes, immediacy and severity;
- a belief that the information offered is credible, that their personal actions can be linked to the issue or threat, that they can make a difference through a change in their action and an acceptance of personal responsibility for that change;
- a perception that the required action or change is socially acceptable to both their peers and social reference groups;
- an understanding of exactly what the desired action or change is; and
- the control, self-confidence, facilities, resources and physical capabilities to engage in the desired action or change (Crano & Prislin, 2006; Glasman & Albarracin, 2006; Lulfs & Hahn, 2014; Moscardo & Hughes, 2018; Steg & Vlek, 2009; White et al., 2019).

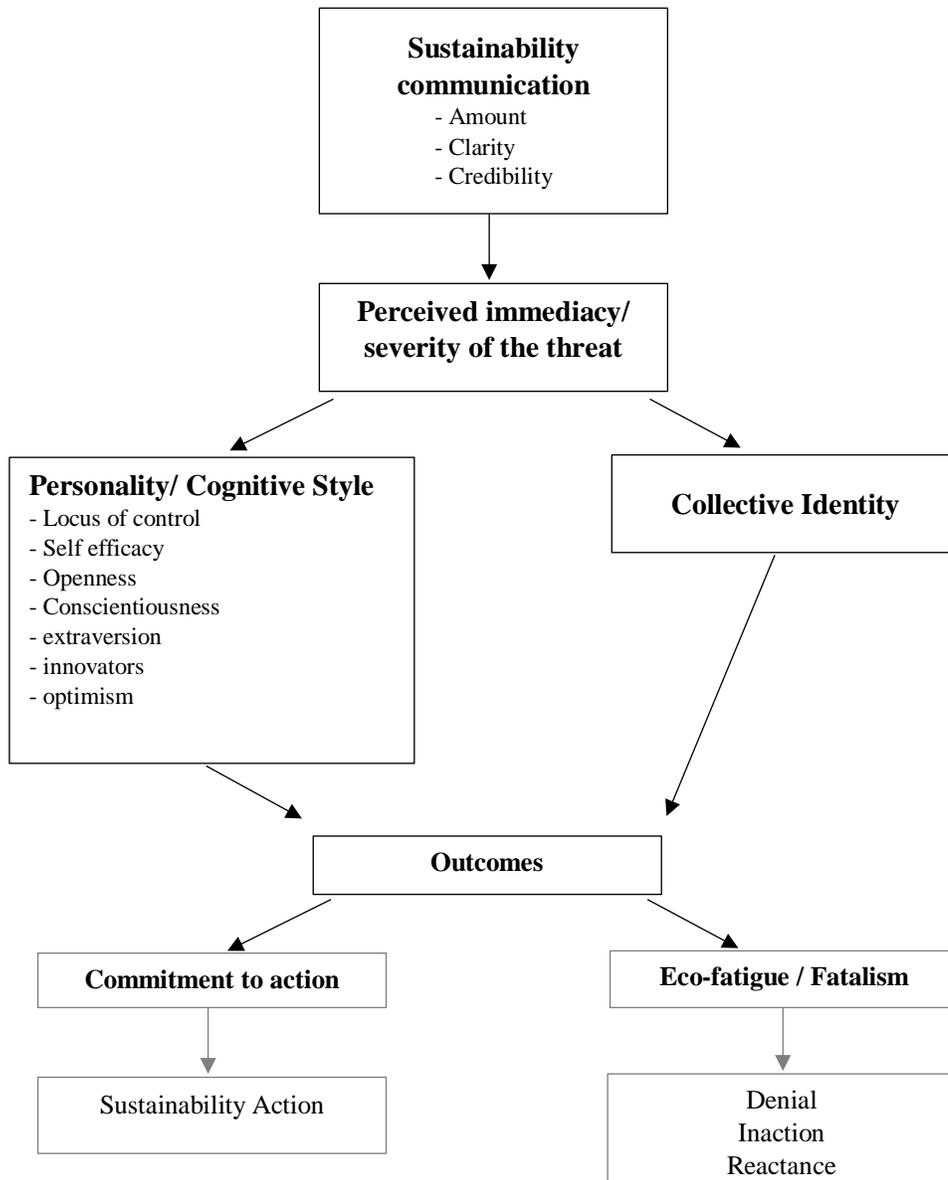
A problem with any of these criteria can act as a barrier to engaging in sustainable action. One barrier that has been connected to several of these prerequisite criteria is the proposed phenomenon of eco-fatigue (Negre & Delhomme, 2017; White, et al., 2019). In 2007 a marketing company, TrendWatching published a set of five big trends and introduced the concept of eco-fatigue to the popular press and internet media. This was, however, a spoof with all the trends, including eco-fatigue made up to mock the world of marketing hype. The creators of this spoof had, however, unwittingly picked up a concept already being discussed in psychology using various labels including green or eco-anxiety and eco-fatigue, and the popular media took up the idea with enthusiasm. In these news media discussions of eco-fatigue it is seen as a state of confusion, stress and anxiety supposedly generated by excessive and often contradictory claims about sustainability

actions that leads to cynicism, apathy, a sense of helplessness and inaction (Greenberg, 2008; Nobel, 2007; Turtle, 2008).

More recent academic examinations of this eco-fatigue phenomenon reflect many of these popular media claims with Woods (2010) and Strother and Fazal (2011) describing it as form of learned helplessness based on a perceived lack of control over the events that are claimed to lead to sustainability issues. Woods (2010) describes eco-fatigue as a feeling of being overwhelmed and believing that personal action will not make a difference to the eventual outcomes, and argues that it is more likely to happen to people who see themselves as having less personal responsibility, low self-efficacy or a perception that they are unable to change things. These are all characteristics associated with personality and cognitive traits such as external locus of control, inflexibility and a lack of confidence in tackling challenges. Doherty and Clayton (2011) argue that excessive, confusing and contradictory sustainability communication contributes to anxiety which combined with the personality and cognitive traits listed previously, and a social reference group that is opposed to ecological responsibility or conservation, results in fatalism, denial, disinterest, apathy and sometimes even reactance in the form of increased consumption. A link between the personality traits of openness, conscientiousness and extraversion and engagement in environmentally friendly behaviour has also been established in other research into sustainable action in general (Brick & Lewis, 2016). Finally, Mayer and Smith (2019) defined eco-fatigue as a type of fatalist belief that it is too late to make a difference to sustainability threats and demonstrated that it can be influenced by the perceived immediacy and/or severity of the threats.

Existing discussions of eco-fatigue confuse multiple different aspects and levels of explanation. Some authors argue that it is a type of anxiety response to excessive and confusing sustainability communication (Strother & Fazal, 2011) and others treated it as a type of fatalism (Mayer & Smith, 2019). Fatalism is generally seen as combination of personality traits, especially pessimism, reinforced by collective views of personal agency, destiny and fate (Esparza et al., 2015; Shen et al, 2009), with research showing that it can be linked to culture and religion (Ruiu, 2013). Based on the existing literature Figure 1 presents eco-fatigue as an outcome of exposure to sustainability communication filtered through personality variables and collective identity. This it may be possible to arrive at denial, inaction and reactance through different pathways. Individuals with certain personality traits including pessimism, cognitive styles, such as external locus of control,

and a collective identity that encourages a set of beliefs that suggest fate or destiny is predetermined, may well extend their fatalism to sustainability and choose inaction or denial regardless of how sustainability communication is organised and presented to them. Alternatively, someone who is optimistic, has an internal locus of control and a collective identity that supports sustainability action, may still end up at inaction or denial because the nature of sustainability communication is confusing and anxiety producing.



**Figure 1: Summary of Claims about and Preliminary Results of Studies into Eco-Fatigue**

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***Research aim and objectives***

Overall the available research into eco-fatigue is very limited with only two empirical studies currently published (Mayer & Smith, 2019; Strother & Fazal, 2011) and with all the published material focussed on the environmental, especially climate change, dimensions of sustainability. It could also be argued that current discussion of eco-fatigue confuses what it actually is with both its antecedents and its consequences. Figure 1 summarises the findings and claims made about the nature of eco-fatigue and attempts to organise these into a clearer framework that separates the things that contribute to it, outlines its dimensions, and describes the possible consequences of it.

From an examination of Figure 1 it is clear that eco-fatigue could be an issue that influences demand for, and responses to, sustainable tourist experiences. For tourism practitioners, especially those focused on experience design, it is important to understand the extent to which tourists actively seek and accept tourist experiences designed around sustainability action and communication. It is possible that tourists may want their travel experiences to be sustainable but do not necessarily want that to be a prominent part of the experiences. The existence of eco-fatigue could also suggest that too much explicit sustainability in travel experiences could have a negative backlash. Thus research into tourist demand for sustainable tourism and the possible existence and nature of eco-fatigue has potential implications for the ways in which tourism providers decide on which sustainability elements to include in experiences and how to communicate their sustainability elements to their guests. The overall aim of the study reported in this paper was to explore and critically analyse the concept of eco-fatigue and how it might influence interest in sustainable tourism experiences. In order to address this overall aim, four more specific research objectives were to:

- examine demand for sustainable tourism experiences by measuring the importance of sustainability elements in destination choices;
- explore the variables that relate to this interest in sustainable tourist experiences;
- explore the concept of eco-fatigue; and
- how it might relate to interest in sustainable tourist experiences.

## Method

Data was collected using a structured self-completion questionnaire distributed to undergraduate students in general business subject at a regional Australian university. This convenience sample was supplemented with a limited snowball technique where students were asked to hand hard copies of the questionnaire to friends, relatives, or colleagues. This resulted in a total sample of 82. Two-thirds (67%) listed their occupation as student, 17% were employed in clerical, administrative or sales positions, with 5% reporting they were professionals or managers. Most had either been born in or grew up in Australia (78%), with 16% being born or raised in Asia and the remainder from a variety of other countries. The age ranged from 17 to 58 years with 52% of the sample aged between 17 and 21 years, 31% between 22 and 30 years and 17% aged older than 30. The majority (61%) identified as female and the remainder as male. Nearly two-thirds (63%) believed that travelling was very or extremely important to a person's quality of life. This was reflected in their high levels of travel in the previous two years with 75% having travelled for a holiday within their own country more than once in the last two years and 70% having travelled at least once overseas for a holiday in the last two years.

The questionnaire consisted of the following sets of measures presented in the order that follows:

- A short 18 item version of the Milfont and Duckitt (2009) environmental attitudes inventory which measures attitudes towards environmental conservation and sustainability with two additional items on economic and social dimensions of sustainability adapted from Biasutti and Farte's (2017) attitudes toward sustainable development scale, measured on a seven point scale from strongly agree to strongly disagree;
- A short six item version of the PRESOR scale which measures perceived importance of ethics and social responsibility for businesses using a nine point scale from strongly agree to strongly disagree (Shafer, Fukukawa & Lee, 2007);
- An eight item adapted version of the environmental appraisal inventory which measures perceived threats of different environmental issues (Walsh-Daneshmandi & MacLachlan, 2000) and was adapted by including four items measuring social issues connected to sustainability, all on a seven point scale from no threat to extreme threat;
- A measure of perceived personal responsibility for sustainability action which required respondents to rank six options - me personally, citizens in general, businesses, local

governments, national governments and international groups – in terms of responsibility for sustainability action;

- A nine item version of the sustainability behaviour scale developed by Gericke and colleagues (2019) which measures self-reports of engagement in various sustainable actions extended using three items from the Young Consumer's Sustainable Consumption Behavior Scale, all measured with a five point scale from never to always (Fischer, Bohme & Geiger, 2017) ;
- A question asking for barriers to participation in sustainable action;
- A ten item measure of eco-fatigue developed for this study based on items used to measure fatalism, helplessness, and perceived lack of control from two existing fatalism scales (Esparza, Wiebe & Quinones, 2015; Shen, Condit & Wright, 2009) and from the discussions of the concept in the available literature, and measured with a seven point scales from strongly agree to strongly disagree;
- A question assessing the use of certified sustainable or responsible tourism companies;
- A 15 item destination choice elements scale adapted from Moscardo and Murphy's (2016) study to include statements about importance of different features of sustainable travel and measured on a scale from 0, not at all important, to 5, very important;
- Measures of travel behaviour in the last two years; the importance of travel in the individual's quality of life, and the appeal of different styles of travel; and
- Socio-demographic measures including gender, age, occupation and country of birth and recent residence.

The measures of sustainability attitudes, perceptions of business social responsibility, awareness of sustainability threats, perceived level of responsibility for sustainability action, reported engagement in sustainability actions and barriers to these, were all included as they have been identified as key variables linked to sustainability action. Most of the existing scales or inventories were developed with a strong focus on environmental sustainability and so most of the adaptations made for the present study were designed to include social sustainability dimensions.

## **Results and Discussion**

The analyses were conducted in three steps. The first step examined the descriptive results for the key questions and included checks on the reliability of the various scales used to measure the key

concepts and, where appropriate, that the underlying factor structures were as expected. This first step provides some information relevant to both the first research objective on the nature of demand for sustainable tourist experiences and the third research objective to explore the concept of eco-fatigue. The second step in the analyses continued to examine the nature of eco-fatigue. The third step addressed the second and fourth research objectives which were to explore the variables that relate to interest in sustainable tourist experiences, including eco-fatigue.

### ***Step 1: Descriptive results and Scale Building***

A single index of sustainability attitudes was created with a Cronbach's alpha of 0.833 which is above the 0.7 level often cited as a good result (Saunders, Lewis and Thornhill, 2016). Overall the sample displayed high levels of positive attitudes towards sustainability with only 12% reporting that they were neutral or disagreed with statements such as 'whenever possible, I try to save natural resources' or "humans are severely abusing the environment". The mean score on the total scale was 80 (SD=15.6) where 105 was the highest and 7 the lowest possible scores. Similarly, a single index of a short version of the PRESOR scale was created. A reliability analysis produced a Cronbach's alpha 0.64. The sample mean was 36 (SD=5.1) on a scale that ran from 5 not at all supportive of ethical and socially responsible businesses to 45 strongly supportive.

A factor analysis indicated two distinct factors within the scale measuring perceived threats (see Table One), one focussed on environmental threats to sustainability (Cronbach's alpha = 0.88) and one focussed on social issues in sustainability (Cronbach's alpha = 0.89). Two scores were computed one for each factor with the environmental threats scale ranging from 9 (no threat at all) to 63 (extreme threat) and the social threats scale ranging from 3 (no threat at all) to 21 (extreme threats). Overall the sample scored a mean of 43.3 (SD=9.3) on the environmental threats with a mean score of 12.3 (SD=3.7) on the social issues scale.

**Table 1: Factor Analysis of Perceived Sustainability Threats**

Choice Elements	% rating item very strong or extreme threat	Factors	
		1	2
Loss of wildlife species	40	.80	
Over population	20	.78	
Carbon emissions	31	.75	
Water pollution	20	.75	
Managing the waste we generate	26	.74	
Loss of natural vegetation	39	.73	
Chemical pollution	33	.72	
Declines in available drinkable water	23	.68	
Climate change	45	.67	
Increasing gaps in incomes of the wealthy and poor	23		.90
Unfair treatment of women	17		.89
Increasing intolerance of cultural and religious diversity	20		.82

Notes: Principal components analysis with varimax rotation, only factor loadings above 0.60 are reported, total variance explained 69%

Given the high levels of awareness and concern expressed over environmental sustainability issues it is not surprising that the sample also scored highly on their self-reported sustainable actions. Table Two provides a summary of the responses to both the questions about actions and the barriers reported for those who said they never or rarely engage in an action. The majority of the sample reported engaging often or always in recycling with high numbers participating to some extent in purchasing organic food, and environmentally friendly and socially sustainable products.

A total score was also computed for these sustainable actions which ranged from 12, meaning respondents reported never engaging in any of the actions, to 60, meaning respondents reported always engaging in all actions. The mean score was 36.7 (SD=6.3) with 56% reporting that they engaged at least sometimes in most of the actions. The most common barrier across many of the actions was not having the facilities, time or resources required. Another commonly mentioned barrier was a belief that these actions would not make a difference to sustainability threats. This could be related to views on who should take responsibility for sustainability action with national governments being given the most responsibility by 43% of the sample followed by international groups (20%) and only one in five (20%) suggesting that “me personally” should take the responsibility.

**Table 2: Responses to Sustainability Actions Questions**

Action	% Never/Rarely	% Sometimes	% Often/Always	Barriers reported for those in the Never/Rarely Category
Sort your household recycling	5	28	67	8% Don't know how 62% No facilities/resources 15% Doesn't make a difference 15% Other
Compost your Food Waste	40	15	45	9% Don't know how 74% No facilities/resources 17% Doesn't make a difference 17% Other
Sort and recycle plastics	6	23	71	9% Don't know how 55% No facilities/resources 0% Doesn't make a difference 36% Other
Buy food that has been grown without pesticides or chemicals	30	49	21	21% Don't know how 48% No facilities/resources 28% Doesn't make a difference 3% Other
Buy cleaning and other household chemicals that are environmentally friendly	33	35	32	16% Don't know how 44% No facilities/resources 32% Doesn't make a difference 8% Other
Seek out products from companies that have good environmental and social records	47	33	20	19% Don't know how 47% No facilities/resources 17% Doesn't make a difference 17% Other
Buy products made from recycled materials	24	49	27	15% Don't know how 30% No facilities/resources 35% Doesn't make a difference 20% Other
Walk or ride a bicycle to reduce my use of petrol	60	21	19	20% Don't know how 47% No facilities/resources 9% Doesn't make a difference 25% Other
Avoid buying products with excessive packaging	29	39	32	0% Don't know how 4% No facilities/resources 40% Doesn't make a difference 48% Other
Buy second hand goods	27	40	33	0% Don't know how 14% No facilities/resources 23% Doesn't make a difference 63% Other
Choose clothing from companies that don't have poor working conditions for their staff	46	29	25	26% Don't know how 39% No facilities/resources 15% Doesn't make a difference 21% Other
Choose fair trade products	35	45	20	16% Don't know how 35% No facilities/resources 35% Doesn't make a difference 14% Other

The next analyses in this first phase of describing and checking measures examined the eco-fatigue scale in more depth (see Table Three). Although half of the sample (51%) agreed that small individual actions can add to big differences in sustainability, 40% feared it may be too late to save the planet and approximately one-third (31%) also felt that they didn't have enough control to make a difference and that things may be getting worse no matter what individuals do (36%). Table Three provides the factor analysis results based on all 10 items in the eco-fatigue scale which

identified five factors. The first combined the major elements of fatalism including having sense of no control and the inevitability of negative outcomes with a mistrust of businesses or greenwashing suggesting it is a measure of eco-fatalism. The second factor combined the positive statements and seemed focussed on enthusiasm for overcoming sustainability issues, which could be called eco-optimism. The third factor combined a fear of it being too late, a belief that it may be too hard to make a difference to sustainability issues, with a dislike of being made to feel guilty for not doing more. These correspond to the elements mentioned in the popular literature as contributing to eco-fatigue and so this factor was labelled eco-fatigue. The final factor had one item about confusion which was independent of the other factors. Although the factor analysis produced orthogonal or independent factors eco-fatalism and eco-fatigue were significantly correlated ( $r=0.44$ ) suggesting that they may be different dimensions of a common phenomenon. Thus a single score was calculated for each of the three dimensions based on adding responses to the highest loading statements for each factor. These results suggest that the phenomenon of eco-fatigue does exist and that it is multidimensional, combining fatalism, pessimism and confusion.

**Table 3: Factor Analysis of Eco-Fatigue Scale Items**

Choice Elements	% rating item agree or strongly agree	Factors			
		1	2	3	4
<b>I'd like to help save the planet but I don't have enough control over the things that matter to make a difference</b>	31	.85			
<b>Sometimes it seems like things are just getting worse no matter what we do as individuals</b>	36	.71			
These days every business is talking about how responsible they are, but I don't trust many of them	24	.69			
<b>I believe that small individual actions can add up to big differences in sustainability</b>	51		.79		
<b>I feel like the more I learn about being sustainable the more I feel some sense of control over my world</b>	27		.77		
I know not all companies are honest about their sustainability actions, but most are trying to improve the planet	13		.62		
I am tired of people/businesses trying to make me feel guilty about what I do or don't do to protect the planet	10			.78	
<b>I'd like to do more for the planet but I'm just so busy with the rest of my life, it is hard to make room for another thing</b>	24			.67	
<b>I sometimes fear that it is too late to save the planet</b>	40			.64	
I am very confused about what are the best options for sustainability	7				.92

Notes: Items in bold adapted from existing scales, other items developed specifically based on literature review discussions of eco-fatigue, Principal components analysis with varimax rotation, only factor loadings above 0.60 are reported, total variance explained %

Finally, this first phase of the results examined support for sustainable tourism. In several of the actions listed in Table Two, especially those linked to purchases of products, the barrier of no facilities or resources could be linked to a lack of understanding or business use of sustainability labels. Problems with the effectiveness of such labels in tourism have been noted previously (Gossling & Buckley, 2016). This issue with sustainability labels was also apparent in the answers to the question “have you ever taken a holiday with a certified sustainable or responsible tourism company. Table Four shows the responses to this question and the majority of respondents (63%) were either unaware such labels existed or unable to identify them. Not surprisingly then they are currently not used by many respondents, although 16% said they would use them if they could identify them.

**Table 4: Taken a Holiday with a certified Sustainable Tourism Company?**

<b>Response Option</b>	<b>% of Sample</b>
I did not know there was such a thing, so I think not	27%
No	16%
Not that I am aware of	20%
I would if I knew how to identify them	16%
I often do as long as the price is competitive	8%
I do it whenever I can	10%
I only travel with certified sustainable tourism companies	3%

A factor cluster analysis was conducted on the 15 destination choice elements to identify groups, or market segments, based on the features they look for in a holiday. The results of the factor analysis are given in Table Five. The cluster analysis identified three groups amongst the respondents: a sustainability and nature group (29%) who gave highest importance to the sustainable travel and nature factors, a social group (39%) who gave the social relaxation factor greatest importance, and a destination focussed group (32%) who gave most importance to the destination learning factor. The overall pattern of results provides some preliminary answers to the first research objective showing that there is demand, especially amongst younger travellers, for sustainability in tourism experiences, which is consistent with recent research (Buffa, 2015; Lopez-Sanchez & Pulido-Fernandez, 2016).

**Table 5: Factor Analysis of Destination Choice Elements**

Choice Elements	% rating item important or very important	Factors				
		1 Sustainability	2 Destination Focused	3 Nature	4 Social	5 Luxury
Use accommodation which is environmentally & socially responsible	39	.89				
Be in a place where locals are happy	67	.86				
Go on tours which are environmentally & socially responsible	45	.78				
Be in a place with strong environmental protection	41	.68				
Learn about culture & history	50		.84			
Learn about the destination	67		.83			
Meet local people	60		.77			
Spend time in natural environments	54			.85		
Engage in outdoor activities	62			.78		
See wildlife	66			.74		
Relax and escape	84				.79	
Meet and socialise with people like me	49				.69	
See and photograph famous landmarks and attractions	71				.62	
Indulge in luxury	21					.89
Go shopping	43					.72

Notes: Principal components analysis with equamax rotation, only factor loadings above 0.60 are reported, total variance explained 79%)

**Step 2: Exploring Eco-Fatigue**

The second step in the analyses was to further examine variables linked to the different elements of eco-fatigue. As the sample size was small and the research objective was exploratory seeking patterns rather than testing an existing model, it was not appropriate to attempt complex multivariate statistical analyses such SEM. Therefore simple linear regressions were conducted to examine the variables most closely connected to the three main eco-fatigue factors. Each eco-fatigue factor was analysed as a dependent variable and the predictors were the total score on sustainability attitudes, the total score on PRESOR, perceived personal responsibility for sustainability action, total score for engagement in sustainability action, the score on severity of environmental sustainability threats and social sustainability threats, and age. In all three analyses the overall variance explained was low ( $r^2$  for eco-fatalism=.22;  $r^2$  for eco-fatigue= .19;  $r^2$  for eco-enthusiasm=.20) suggesting that many other variables are involved in the development of these perspectives. Only personal responsibility for sustainability action was significantly related to eco-fatalism with a Beta of -0.40 indicating that those who gave a lower score for personal responsibility were more likely to score highly in the eco-fatalism scale. Eco-fatigue was best

predicted by perceived environmental threats (Beta=0.42) and overall sustainable action (Beta=-0.24). Thus people who saw environmental threats as more extreme and who engaged in less sustainable action were more likely to score highly on the eco-fatigue items. The connection between the three eco-fatigue factors and the sorts of barriers reported for sustainability inaction revealed that those who reported “I don’t think it makes much of a difference” at least once as a barrier to participation in sustainability action scored more highly than those who never used this as a reason for non-participation, on both eco-fatalism and eco-fatigue and lower on eco-enthusiasm, with the difference on eco-fatigue being significant at the  $p < 0.05$  level ( $t = -2.4$ ). No consistent patterns were found for the other barriers to sustainability action. Finally, eco-enthusiasm was linked to age (Beta=-0.22) and personal responsibility (Beta=-0.40), with older respondents and those who gave a greater importance to personal responsibility more likely to be eco-enthusiasts.

The present study supports and extends the preliminary model presented in Figure 1 suggesting that there may be may be two distinct, but related phenomenon, involved in approaches to sustainability action. It seems that there is a type of fatalism or pessimism that is more likely to reflect personal and social characteristics than exposure to sustainability communication, which is supported by the link to lower levels of personal responsibility reflecting an external locus of control. This is also supported by the existence of an opposing concept of eco-enthusiasm which seems to be about being optimistic and having a stronger sense of personal responsibility, reflecting an internal locus of control. Finally, there appears to be a type of fatigue or anxiety linked to exposure to messages that may be confusing and that suggest the problem is too big and difficult to tackle, supported by the link to seeing environmental threats as more extreme and the increased likelihood of reporting that they don’t think the action will make a difference as a reason for not engaging in sustainability action.

### ***Step 3: Links to Demand for Sustainable Tourist Experiences***

Analyses in the third and final step of the analyses addressed the second and fourth research objectives exploring the variables that relate to interest in sustainable tourist experiences, including eco-fatigue. Table Six provides an overview of the differences in mean scores on the various

scales between those who did not use certified eco or sustainable tourism businesses, those who would if they knew how and those who already did. Oneway ANOVAs found only five significant differences between the three groups of users at the  $p < 0.05$  level. These were for eco-enthusiasm ( $F=2.7$ ), eco-fatigue ( $F=2.9$ ), interest in destination education features ( $F=3.5$ ), interest in social travel features ( $F=4.4$ ) and interest in luxury travel ( $F=4.0$ ). Overall though there was consistent pattern of results with those who do use eco or sustainable labels to choose a tour operator scoring the highest on positive attitudes towards sustainability, rating both environmental and social sustainability threats as more severe, rating sustainable and destination education choice features as more important, rating luxury travel features as less important, and demonstrating more eco-enthusiasm and less eco-fatigue and eco-fatalism. This was in contrast to those who do not seek certified operators, who scored lowest on sustainability attitudes, environmental and social sustainability threats, sustainability action, interest in sustainable tourism features and eco-enthusiasm and highest on both eco-fatalism, eco-fatigue and interest in luxury tourism.

**Table 6: Means Scores for Three Groups of Users for Certified Eco or Sustainable Tourism Businesses**

Scale	Those who do not use certified business	Those who would if they knew how	Those that do use certified business
Sustainability attitudes	79(10)	82(7)	83(14)
Short PRESOR	36(5)	36(6)	36(5)
Environmental sustain. threats	42(10)	44(8)	46(8)
Social sustainability threats	12(4)	12(3)	13(4)
Sustainability action	36(7)	36(6)	39(5)
Eco-fatigue score	13(2)	13(3)	12(2)
Eco-fatalism score	15(3)	14(4)	13(3)
Eco-enthusiasm score	14(3)	16(2)	16(3)
Sustainable destination choice features	-0.01(0.95)	-0.03(1.0)	0.06(1.2)
Destination education choice features	-0.16(1.0)	-0.10(1.0)	0.55(0.8)
Social destination choice features	0.24(1.0)	0.48(1.0)	0.36(0.4)
Luxury destination choice features	0.18(0.9)	0.06(.7)	-0.59(1.3)

Note: figures are mean score (standard deviation)

The final set of analyses explored links between the various measures and overall importance of sustainable destination choice features. As in the earlier section on eco-fatigue, simple linear regressions were conducted with importance of sustainable travel destination features as the dependent variable and age and the various scales listed in Table Six as the independent or predictor variables. The overall  $r^2$  was again low (0.18), with two variables seen as having a

significant relationship with the independent variable – perceived severity of social sustainability threats and total score on sustainability actions.

While there is an overall pattern suggesting that eco-fatigue and eco-fatalism are linked to less interest in sustainable tourism options, the key predictors of sustainable travel choices are participation in a wider range of sustainability actions beyond travel suggesting an overall commitment to sustainable action and consumption and perceived severity of social sustainability threats. The relationship between seeking sustainable tourism options and engaging in sustainable action at home or in consumption in general is a problematic one in tourism. Some research supports the present study (Dimara, Manganari & Skuras, 2017; Han & Yoon, 2015), but other research suggests that people do not always transfer their sustainable actions at home to their choices while on holidays (cf., Baker, Davis & Weaver, 2014; Miao & Wei, 2013). Moscardo (2019) argues that this inconsistency in results reflects several problems in the nature of both the research being cited as evidence of a gap as well as the logic behind suggested reasons for this gap, rather than an actual gap. More specifically, to demonstrate a gap between sustainability action generally and sustainable action while traveling researchers would have to demonstrate that:

- the target actions are deliberative rather than habitual and thus are conducted as a result of a considered decision;
- the actions reported beyond tourism reflect a concern over sustainability and are not driven by factors other than sustainability such as cost savings;
- tourists understand what choices they have with regard to improving the sustainability of their travel choices; and
- that barriers to engaging in sustainability actions are the same for travel as for other areas.

The existence of a type of eco-fatigue and its significant connection to choice of a certified sustainable tourism operator and interest in sustainable travel does lend some support though to the argument that for some people travel is an escape from the pressures and limitations of their everyday lives and this could include escaping from pressures to think about and respond to sustainability threats.

The second major predictor of interest in sustainable travel was perceived severity of social sustainability threats such as unfair treatment of women, increasing religious and cultural

intolerance, and an increasing gap in the incomes of the wealthy and the poor. Two possible explanations can be offered for this relationship. It may be that these respondents have a more extensive and detailed understanding of sustainability which means they are more likely to include social dimensions in their considerations of consumption choices. It may also be that social sustainability issues are easier to understand, less complex, more immediate to their experiences, and closer to them both physically and in time. Compared to environmental dimensions of sustainability it may be easier to find a direct link between one's actions and positive changes in social issues. All these issues have been identified as problems in encouraging action about environmental issues which can be too complex to understand, seen as far away in both time and space, not likely to be directly experienced, and which are linked to actions where the individual is unlikely to directly experience a significant difference in the threat as a consequence of their individual actions (Moser, 2010).

## **Conclusions**

In considering the summary of results and conclusions it is important to remember that they are based on a small convenience sample dominated by younger university students. While this limits the wider generalizability of the results, given the exploratory nature of the research questions it provides a reasonable first attempt at addressing the overall aim of the study which was to explore and critically analyse the concept of eco-fatigue and how it might influence interest in sustainable tourism experiences. In terms of the more specific research objectives the study did find substantial levels of interest in, and importance given to, sustainability elements in destination choice. This demand for sustainable tourism was further found to be part of a larger interest by the respondents in sustainable consumption and was consistent with their higher levels of participation in sustainable action in general. It was also linked to greater perceptions of social sustainability threats. The study also found evidence that there exists both a type of eco-fatigue which appears to be linked to anxiety and a feeling that sustainability is too hard to respond to, that it is too late to change, and that it is beyond personal ability and responsibility to address. People suffering from this are not likely to be interested in sustainable travel choices and may actively avoid them in order to escape the stress connected to this anxiety. There was also evidence of a type of eco-fatalism linked to personality traits of pessimism and collective views of predetermined fate and

destiny. These people are also unlikely to actively pursue sustainable tourism choices, but may not actively avoid sustainable tourism options in the same way as those suffering from eco-fatigue.

These results have two sets of implications for sustainable tourism practice – one for tourists who are interested in making more sustainable travel choices and one for those who are more likely to be anxious, fatalistic or tired of communication and consideration of sustainability threats. In the first case this study provides evidence that there is interest in sustainable tourist experiences but there are difficulties in identifying and finding more sustainable options. This suggests that attention be paid to both the use of sustainability labels and more explicit communication about the sustainability strategies of the tourism organisation relevant to the experiences being promoted. With this tourist group it may also be better to focus on social sustainability in activities and features of tourist experiences.

Communication about sustainability features of the tourist experience has to be organised so that it is easy to find and understand for those who do seek it, but also not such a critical elements to the experience that it appears daunting or excessive to the second group of tourists. Whilst eco-fatalists and those experiencing eco-fatigue may not be easily attracted to sustainable tourism experiences, it does not mean that they cannot be reached with sustainability messages. Strategies successfully employed elsewhere to manage anxiety, feelings of helplessness and hopelessness, and pessimistic attitudes can be adapted for tourist experiences. These include directly engaging visitors in activities that give them a sense of control, which provide direct, positive feedback giving a sense of success, and which focus on wider personal and social benefits of the sustainability actions (Doherty & Clayton, 2011; Strother & Fazal, 2011). Another option is not to focus on sustainability and/or sustainability communication during the activity or experience, but rather to tell tourists after the experience a positive and empowering story of how their choices and the actions of the tourism provider have made a significant positive contribution to sustainability.

For researchers the study highlights the importance of understanding a range of psychological frameworks and the need to understand better what tourists bring with them to their travel decisions. We also need to further explore this concept of eco-fatigue and eco-fatalism and especially how they link to sustainability communication so as to ensure that our attempts at

designing and offering sustainable tourist experiences do not have the unintended consequence of making people more anxious and pessimistic about the future of human life on the planet.

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