

# **Attitudes and tourists' sustainable behavior: an overview of the literature and discussion of some theoretical and methodological issues**

Paola Passafaro\*

\*Department of developmental and social psychology – Sapienza University of Rome - Italy

To cite this article:

Passafaro, P. (2020) Attitudes and tourists' sustainable behavior: an overview of the literature and discussion of some theoretical and methodological issues. *Journal of Travel Research*, 59, 4, 579-601. <https://doi-org.ezproxy.uniroma1.it/10.1177/0047287519851171>

## **Abstract**

The paper reports an overview of studies that have investigated the role of attitudes in understanding tourists' sustainable choices. The literature is discussed in the light of theories and empirical research in social and environmental psychology. The aim is to show how past and present work in these disciplines can help tourism scholars to deal with the complex functioning of the attitude concept when this is applied to sustainability issues. Particular attention has been paid to the theoretical and methodological distinctions between the different types of attitudes as they relate to sustainability. Suggestions for improving the effective use of attitudes in sustainability related tourism studies are made together with a discussion of the possible research avenues directed to consolidate as well as to broaden the theoretical foundations of the use of the attitude concept in this field.

**Keywords:** attitudes, tourism attitudes, attitude-behavior relationship, sustainable tourism, pro-environmental attitudes

## **Highlights:**

- attitudes are quite complex and articulated constructs
- various types of attitudes, relevant to sustainable tourism, have been studied
- the attitude-behavior gap can be explained in the light of a number of theoretical and methodological issues
- attitudes should not be considered in isolation; the attitude concept is best used within a broader model of social behavior

## **Introduction**

According to one of the most used definitions, attitudes are personal evaluative reactions (i.e. evaluations) to socially relevant issues concerning specific objects, events, people, contexts and/or behaviors (for recent discussions in social psychology see, e.g., Albarracín, and Shavitt 2018; Fazio, and Petty 2008; for discussions in the tourism domain, see, e.g., Iso-Ahola 1982; Pearce, and Packer 2013). Studies conducted in the tourism and leisure domain have repeatedly and consistently shown attitudes to be associated with pro-environmental choices regarding both general and specific tourism-related issues (see table 1). However, various authors have also highlighted the limitations affecting the application of the concept of attitude in tourism research. One of these is the weak (or alternate) relationship with behavior, which raises questions about its utility in the development of behavioral change interventions (e.g., Antimova, Nawijn, and Peeters 2012; Juvan, and Dolnicar 2014a). Another limitation is that much research on attitudes neglects the social and cultural

assumptions that underlie the reported attitudes (e.g., Dickinson, and Dickinson 2006), as well as, the role of social practices and of the structural and technological context (e.g., Verbeek, and Mommaas 2008). While these limits actually exist, it should be acknowledged that attitude is a multi-faceted construct, with a specific functioning, sometimes unexpectedly complex, that should be kept in mind by researchers (in all fields), if they want to avoid inconveniences and/or making biased interpretations of their results. The goal of this paper is, therefore, to discuss the complex nature of attitudes and highlight both limitations and utilities of the concept in research into tourist's sustainable choices. In particular, since the literature on attitudes and sustainable tourism has increased substantially in recent years, the aim is to provide an overview of it in the light of past and present work in the parallel fields of social and environmental psychology, where the construct has been extensively investigated. Suggestions for overcoming some of the most common problems arising from the use of attitudes in research will be proposed, and possible future research avenues will also be delineated. After a brief introduction to the relevance of studying attitudes for tourism sustainability and the historical conceptualization of attitudes, the discussion will focus on three crucial issues: i) the different types of attitudes (relevant to sustainable tourism), ii) the attitude – behavior relationship (in the tourism domain), and iv) the theoretical models (including attitudes) that can be used to describe or explain tourists' sustainable behaviors. The paper concludes with a summary of the main suggestions derived from the review.

**Table 1. Examples of studies that have considered the role of attitudes in supporting general and specific sustainable forms of tourism**

<i>Topic addressed</i>	<i>Reference</i>	<i>Types of attitude considered in the study</i>
General Pro-environmental travel intentions	- Park, Lee, Lee, Kim, and Kim 2018	General environmental attitudes (NEP).
Green tourism	- Bergin-Seers, and Mair 2009	General environmental attitudes.
Nature based tourism	- Coghlan, and Kim 2012 - Hill, Woodland, and Gough 2007 - Hughes, and Morrison Saunders 2005 - Luzar, Diagne, Gan, and Henning 1995, - Luzar, Diagne, Gan, and Henning 1998 - Luo, and Deng 2008	Attitudes towards reef and marine conservation (perceived change in one's own attitudes). Attitudes towards ecosystem conservation and sustainable tourism (perceived change in one's own attitudes). General environmental attitudes (NEP). General environmental attitudes (NEP). General environmental attitudes. General environmental attitudes (NEP).
Ecotourism	- Hultman, Kazeminia, and Ghasemi 2015 - Lee, and Jan, 2018 - Kazeminia, Hultman, and Mostaghel 2016 - Lu, Gursoy, and Del Chiappa 2016 - Meleddu, and Pulina 2016 - Lee, and Moscardo 2005	Attitudes towards ecotourism. General environmental attitudes. Affective attitudes towards ecotourism. Attitudes towards ecotourism. Attitudes towards ecotourism. General environmental attitudes (NEP).
Bicycle tourism	- Han, Meng, and Kim 2017 - Meng, and Han 2016	Attitude towards traveling by bicycle. Attitude towards traveling by bicycle.
Slow tourism	- Meng, and Choi 2016a - Meng, and Choi 2016b	General environmental attitudes (environmental concern), attitude towards slow tourism. General environmental attitudes (environmental concern), attitude towards slow tourism.
Performing sustainable behaviors while on holiday	- Han, Lee, and Kim 2018	Attitudes towards performing eco-friendly behaviors at a hotel.
Avoiding unsustainable behaviors while on holiday	- Brown 1999 - Juvan, and Dolnicar, 2014a	Attitude towards climbing the Uluru (Ayers Rock) in Central Australia. General environmental attitudes (awareness of tourism impact on the environment).
Contributing to the conservation of the environment in protected areas	- Brown, Ham, and Hughes 2010 - Floyd, Jang, and Noe 1997	Attitudes towards picking up litter in a protected area. General environmental attitudes (environmental concern, NEP).

	- Jurowski, Uysal, Williams and Nog 1995	General environmental attitudes (antropocentric/ecocentric).
	- Powell, and Ham 2008	Attitudes towards Galapagos National Park (GNP) resources management.
	- Uysal, Jurowski, Noe, and McDonald 1994	General environmental attitudes (environmental concern).
	- Xu, and Fox 2014	General environmental attitudes (anthropocentric/ecocentric), attitudes towards tourism and the environment, conservation in national parks, tourism in national parks.
Supporting the conservation of specific valued sites (e.g. cliffs and coastal areas, forest landscapes)	- Kim, Airey, and Szivas 2011	Attitudes towards cliff protection, fossil protection, coastal protection and visitors behaviors.
	- Chen, Nakama, and Zhang 2017	Attitudes towards the conservation of a traditional village forest landscape.
Selecting sustainable types of accommodations	- Baker, Davis, and Weaver 2014	General environmental attitudes (composite measures), attitudes towards green hotels (beliefs based measure).
	- Chen, and Peng 2012	Attitude towards staying at a green hotel.
	- Chen, and Tung 2014	General environmental attitudes (environmental concern), attitudes towards visiting green hotels.
	- Dalton, Lockington, and Baldock 2008	Attitudes to micro-generation renewable energy supply (RES) for hotel accommodation.
	- Gao, Mattila, and Lee 2016	Meta-analysis of studies on the role of various psychological factors (including attitudes) on intentions towards green hotels/restaurants.
	- Han, Hsu, and Lee 2009	Attitude towards green behavior (ATGB).
	- Han, Hsu, Lee and Sheu 2011	General environmental attitudes (eco-friendly attitudes).
	- Han, Hsu, and Sheu 2010	Attitude towards visiting a green hotel.
	- Han, Hwang, Kim, and Jung 2015	Attitudes towards revisiting (repurchasing) an eco-friendly lodging product.
	- Han, and Yoon 2015	Attitudes towards selecting an environmentally responsible hotel.
	- Kang, Stein, Heo, and Lee 2012	General environmental attitudes (environmental concern NEP).
	- Kim, and Han 2010	General environmental attitudes (environmental concern), attitudes towards paying comparable regular hotel prices for a green hotel.
	- Lita, Surya, Ma'ruf, and Syahrul 2014	Attitudes towards green behavior (ATGB)
	- Manaktola, and Jauhari 2007	Attitudes towards green practices in the lodging industry.
	- Olya, Bagheri, and Tumer in press	Attitudes towards revisiting and recommending green hotels.
	- Teng, Wu, and Liu 2015	Attitudes towards staying at a green hotel.
	- Verma, and Chandra 2018	Attitudes towards staying at a green hotel when traveling.

Choosing organic menus at restaurants	- Shin, Im, Jung, and Severt 2018	Attitudes towards choosing organic menus at restaurants.
Choosing sustainable transport modes when travelling	- Barr, and Prillwitz 2012	General and specific environmental attitudes.
	- Han, Lee, Chua, and Kim 2019	Attitude towards airline impact on the environment (Eco-concern).
	- Higham, and Cohen 2011	Attitudes toward long-haul air travel to New Zealand.
	- Prillwitz, and Barr 2011	Attitudes towards specific travel options, transport measures, sustainability and the environment.
Visiting sustainable museums	- Han, and Hyun 2017a	Attitudes towards visiting an environmentally responsible museum.
	- Han, and Hyun 2017b	General environmental attitudes (environmental concern).
	- Han, Kim, and Lee 2018	Attitudes towards visiting an environmentally responsible museum.
Endorsing sustainable choices at a convention site	- Han 2014	Attitude towards attending an environmentally responsible convention.
	- Han, Hwang, and Lee 2017	General environmental attitudes (environmental concern).
Preferring sustainable types of tourism activities and services	- Passafaro et al. 2015a	General environmental attitudes (ecocentric/anthropocentric), attitudes towards sustainable tourism.
	- Passafaro et al. 2015b	Attitudes towards sustainable tourism.
	- Yan, Zschiegner, Xi, Barkmann, and Marggraf 2010	Attitudes towards sustainable tourism services.
Making sustainable choices in the context of cruise travels	- Han, Jae, and Hwang 2016	Attitudes towards environmentally responsible cruise travel.
	- Han, Olya, Kim, and Kim 2018	General environmental attitudes (environmental concern).
	- Han, Hwang, Lee, and Kim 2019	Attitudes towards travelling with an environmentally responsible cruise.
Attending festivals	- Kim, Borges, and Chon 2006	General environmental attitudes (environmental concern, NEP).
	- Song, Lee, Kang, and Boo 2012	General environmental attitudes (environmental concern).

---

Note: the references reported in this table were retrieved by searching *scopus* and *psychinfo* data bases and by checking the literature cited in the references retrieved, according to a snowball technique. However, this literature is not exhaustive and many more studies might have been published on the topic. For example, the literature on the effects of tourism experience on attitudes were not considered in this table as these have been the subject of a dedicated paper by Ardoin et al. 2015. Moreover, the classification of topics proposed takes into account what it appeared to be the main focus of the study reported in the reference and should not be interpreted rigidly. It does not preclude alternative interpretations and classifications of the papers according to other criteria. In addition, some studies could have been classified in more than one of the categories reported.

### *Relevance of studying attitudes for tourism sustainability*

The World Tourism Organization has defined sustainable tourism as “tourism that leads to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems” (WTTC, and UNWTO 1996; see also Bramwell, and Lane 1993; Butler 1999; for a recent discussion see for e.g. Higgins-Desbiolles 2018; Fennell 2019). However, as many doubts have been raised as to the possibility of achieving such high and abstract goals in tourism practice (e.g. Butler 2019; McCool, Butler, Buckley, Weaver, and Wheeler 2013; Wheeler 2007), more realistic or ‘adaptive’ definitions have been proposed that see it as an “over-arching paradigm which incorporates a range of approaches to the tourism/environment system within destination areas” (Hunter 1997, 850; see also Clarke 1997). According to this view, tourism sustainability is a continuous quality, ranging from an undesirable minimum level of implementation to a more desirable maximum, and “a normative orientation that seeks to re-direct societal systems and behavior on a broad and integrated path toward sustainable development” (Bramwell, Higham, Lane, and Miller 2017, 1; see also Weaver 2017). According to Ko (2001), a tourist destination offering can be more or less sustainable depending on the extent to which it is able to fulfil the specific needs of its various stakeholders (i.e., local residents, tourists, and the natural environment; see also Hardy, and Beeton 2009). Byrd (2007) has suggested four types of stakeholders potentially involved in the development of sustainable forms of tourism, including the present and future members of the local hosting community, as well as present and future visitors (tourists). The process of stakeholder involvement can take many forms. According to Byrd (2007, 9) “they should be more informed and educated

about the topics and issues; their values and opinions should be recorded as they can generate new ideas to be included in the decision process; trust between parties should be increased while conflicts should be reduced. In this way, quality and legitimacy of decisions will be enhanced and stakeholders will be more willing to share the responsibilities of the sustainability goals that have to be achieved" (Byrd 2007, 9). In particular, regarding visitors, according to the Davos Declaration (UNWTO 2007, 3) "tourists should be encouraged to consider the climate, economic, societal and environmental impacts of their options before making a decision and, where possible, to reduce their carbon footprint, or offset emissions that cannot be reduced directly" (UNWTO 2007, 3; see also UNESCO 2010). These recommendations have drawn researchers' attention to the fact that tourists' choices and actions can be seen as particular cases of ecological behavior and, as such, can be understood in light of the literature on the social-psychological determinants of these behaviors. In this literature, attitudes represent key factors to be taken into account (e.g. Steg, and Vlek 2009).

#### *Some historical issues in attitude definition and conceptualization*

According to Allport (1954), although the term 'attitude' was first used in the sense closest to its present-day use by W.I. Thomas and F. Znaniecki, in 1918, the long history of attitudes actually started with an experiment conducted by L. Lange in 1888. Lange had noticed how participants who had been informed about the nature of a task they were about to carry out showed greater response readiness to the task, than did those who had not been informed about it. According to the author, this was due to the fact that the information the former had received gave them time to create a mental representation of the task thereby affecting their response readiness. For this reason, Allport's (1935, 810) defined attitudes as "a



mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon an individual's response to all objects and situations with which it is related". Allport formulated this proposal as a unifying conceptualization after acknowledging the existence of sixteen different definitions of attitude (as far back as then!). A discussion of these definitions and their evolution over time is beyond the scope (and ability) of the present paper. However, overall, it can be said that the various interpretations proposed tended to differ in terms of depicting attitudes as either of biological or cultural in origin, individual or social in nature, unidimensional or multidimensional in structure, stored in memory or contextually constructed, directly or indirectly observable, and generally rather than specifically focused (for a synopsis of attitude definitions in social psychology, see table 2). The existence of such a multiplicity of interpretations and conceptualizations is mentioned here only to give the reader an idea of the fact that, in the social (and environmental domain), the term 'attitude' tends to identify more a 'family' of closely connected constructs than a single, monadic instance (e.g., Albarracin, and Shavitt 2018; Kaiser, Hartig, Brügger, and Duvier 2013). This fact has a number of consequences for researchers in all fields, starting with the fact that, as already mentioned, despite its apparent simplicity, a certain competence about the concept is recommended before using it in any investigation studies. This is because each theoretical approach tends to be associated with specific methodological implications or different views (and explanations) of the relationships with antecedent and consequent factors. Because it is not possible to provide simple and synthetic suggestions about which conceptualizations are most appropriate for the tourism domain (this being a choice that varies from case to case), but given that the topic of attitudes has been addressed by a number of leading academics in social psychology, today's tourism researchers could resort to theoretical

exploration of classic and recent literature in social psychology, starting with the key references provided in this paragraph. In addition, in the next section, I introduce and discuss a possible classification of attitudes that I deem particularly relevant for the environmental domain, which I hope will be of help to tourism researchers seeking to better identify and use the attitude construct when dealing specifically with sustainability issues.

**Table 2. Some historical dichotomies in the conceptualization of attitudes**

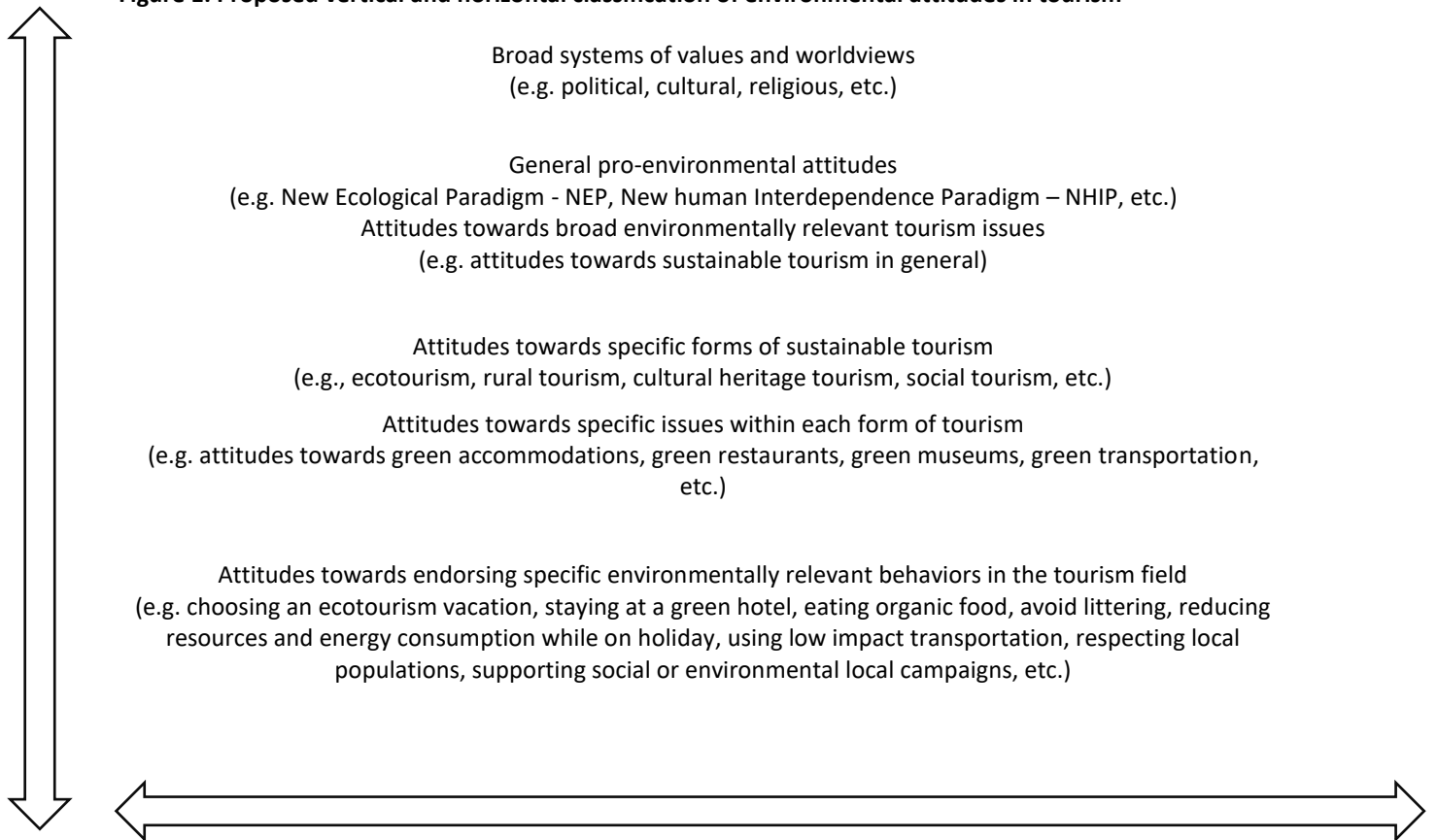
<b>Dichotomies</b>	<b><i>Nature of the issue and references</i></b>
Biological vs cultural origins	Whether attitudes are genetically inherited vs socially learned ways to respond to external stimuli (e.g. Allport, and Schanck 1936).
Individual vs social nature	Whether they represent individual vs social constructions of reality (e.g. Moscovici, and Zavalloni 1969; Newcomb 1943).
Unidimensional vs multidimensional construct	Whether the attitude coincide with (i.e. it is better represented and measured by) one of its components (the cognitive, affective or conative one) or all of them conjunctly (e.g. Rosenberg, and Hovland 1960; Zanna, and Rempel 1988) and whether they are related to (or coincide with) specific emotional states (e.g. Abelson, Kinder, Peters, and Fiske 1982).
Stored in memory vs contextually constructed	Whether attitudes are stable vs occasional, (situationally based) interpretations of reality (for recent discussions see Bohnet, and Dickel 2011; Briñol, and Petty, 2018; Dalege, Borsboom, Harreveld, and van der Maas, 2018), and whether they are (or not) part of broader systems of organized knowledge and beliefs (e.g. heuristics, schemata, etc.; e.g. Pratkanis 1988).
Directly observable vs non observable	Whether they can be measured directly vs simply inferred (e.g. Campbell 1963; Fazio, and Zanna 1978; see also Kaiser, Byrka, and Hartig 2010).
Generally vs specifically focused	Whether they are focused on generic/abstract concepts rather than on specific/concrete issues or behaviors (e.g. Ajzen 2001).

Note: this classification has been merely intended to give an idea of the high level of complexity and variety of the past and present discussion on attitudes. It should not be considered exhaustive, nor does it reflect the existence of actual boundaries between topics. Most of these dichotomies are intertwined among them and many of the authors cited as examples for a dichotomy have also contributed to the discussion on others

*Types of attitude in the environmental domain and their relevance to sustainable tourism research*

Attitudes represents one of the first psychological factors taken into account by researchers interested in identifying the determinants of environmentally significant behaviors. The latter correspond to behaviors that can have a direct or indirect impact on the availability of materials or energy in the environment or alter the structure and dynamics of ecosystems or the biosphere itself (Stern 2000). In the environmental domain, such behaviors have been found to be associated with various types of attitudes in dozens of studies (e.g. Bamberg, and Möser 2007), although, even here, this relationship has been revealed to be all but simple and straightforward. Below, I discuss some key aspects of attitudes that are peculiar to the environmental field and lead to differentiate them 'vertically', according to their level of specificity, and 'horizontally', according to the conceptual and ideological issues to which they refer (see also fig. 1).

**Figure 1. Proposed vertical and horizontal classification of environmental attitudes in tourism**



*A vertical (hierarchical) classification of environmental attitudes-* On a vertical (hierarchical) basis, attitudes that have been shown to be relevant to environmental issues can be distinguished according to the extent to which they refer to general (broad) themes (e.g., general attitudes and worldviews related to environmental protection, and the social, cultural and economic themes of sustainability, including sustainable tourism) rather than to specific environmental issues (e.g., attitudes towards ecotourism, cycle tourism, green hotels, green restaurants, etc.). This distinction originates from Fishbein and Ajzen's (e.g. Fishbein, and Ajzen 1974; Ajzen, and Fishbein 1977) postulate that attitudes can be differentiated on the basis of their level of abstraction and that such a distinction can affect their relationship to behavior (this aspect is discussed in more detail in the next section). Decades of studies conducted in the environmental domain have not only confirmed

Fishbein and Ajzen's postulate, but have also uncovered important additional theoretical and methodological consequences (for a discussion in the environmental domain, see also Milfont, Duckitt, and Wagner 2010a). For example, many studies in this field have empirically demonstrated that the two kinds of attitudes (general and specific) are typically connected via a causal chain in which the general (and more abstract) ones tend to predict the more specific and concrete (e.g., Milfont, Duckitt, and Wagner 2010a,b; Stern 2000; de Groot, and Steg 2007). This has been confirmed by studies conducted in the tourism domain as well (e.g., Chen, and Tung 2014; Fairweather, Maslin, and Simmons 2005; Lu, Gursoy, and Del chiappa 2016; Luo, and Deng 2008) and leads to the notion that - although correlated - general and specific attitudes should be conceptualized as distinct constructs because they can have different antecedents and consequences. In fact, the most direct antecedents of specific environmental attitudes tend to be beliefs about the attitude target (see, e.g., Staats 2003; Han, and Kim 2010; Nimri, Patiar, and Kensbock, 2017), as well as broader attitudes and values, of which the most studied are general pro-environmental attitudes and worldviews (e.g., Stern 2000; de Groot, and Steg 2007; for examples in the tourism domain, see Chen, and Tung 2014; Floyd, Jang, and Noe 1997; Luo, and Deng 2008; Xu, and Fox 2014). Moreover, specific environmental attitudes are more subject to the effects of factors uniquely related to a target issue or behavior. For example, in the tourism domain Han and Kim (2010) and Han (2015) established that perceived 'service quality' and the 'perceived consequences for valued objects' can be important antecedents of attitudes towards 'green hotels', in addition to the role played by classic 'behavioral beliefs', typically deemed to be relevant across contexts. Similarly, Kim, Airey and Szivas (2011) found a direct effect of 'interpretation' on tourists' awareness and support for conservation management policies of a coastal area in England.

Conversely, general environmental attitudes and worldviews, appear to be more directly affected by an individual's broad system of values and beliefs (e.g., Hurst, Dittmar, Bond, and Kasser 2013; Milfont, Duckitt, and Wagner 2010a; Schultz, and Zelezny 1999; for an example in the tourism domain, see Lu, Gursoy, and Del Chiappa 2016), which include overall attitudes towards the 'main moral foundations' (e.g., Baldner 2018). Moreover, general environmental attitudes have been found to be related to relatively stable individual traits, such as various forms of 'connectedness to nature' (i.e., *connectedness, relatedness, interdependence, implicit association, emotional affinity, dispositional empathy*, etc.; e.g., Kaiser, Brügger, Hartig, Bogner, and Gutscher 2014; Martin, and Czellar 2017; Mayer, and Frantz 2004; Davis, and Green 2009; Tam 2013), 'environmental' identity (e.g., Brügger, Kaiser, and Roczen 2011; Devine-Wright, and Clayton 2010), authoritarianism and social dominance (e.g., Stanley, Wilson, and Milfont 2017). Some authors have also argued that general pro-environmental attitudes are affected by a genetic/evolutionary predisposition termed 'biophilia', or "topophilia, corresponding to a general 'instinctive' inclination to appreciate natural environments (e.g., Kellert 1997; a study conducted in the tourism domain is reported in Perkins 2010). Furthermore, broad systems of general attitudes may be influenced by (or closely related to) a set of socio-structural and socio-demographic factors (e.g., Blake 2001; Dietz, Stern, and Guagnano 1998; Shen, and Saijo 2008; for discussions in the sustainable tourism domain, see, for example, McKercher, Pang, and Prideaux 2011; Han, Hsu, and Lee 2009; Dolnicar, Crouch, and Long 2008), that may include political ideology and party identification (e.g., Cruz 2017), religiousness (e.g., Felix, Hirsch, Rauschnabel, and Schlegelmich 2018; Guth, Green, Kellstedt, and Smidt 1995), geographical/cultural origin (e.g., Eom, Kim, Sherman, and Ishii 2016), parenthood (Thomas, Fisher, Whitmarsh, Milfont, and Poortinga 2018), race (for e.g. Deng, Walker, and

Swinnerton 2006), gender (e.g., Bord, and O'Connor 1997; Olsson, and Gerike 2017), professional occupation (e.g. Sundblad, Biel, and Gärling 2009), and level (and type) of education (e.g., Hodgkinson, and Innes 2001). It is worth noting here that these aspects have so far received little or no attention in the domain of sustainable tourism.

General and specific attitudes tend, then, to differ in their behavioral consequences, with specific attitudes exerting a stronger direct effect on intentions and behavior. This notion leads to the introduction of a further distinction between types of attitudes (within a hierarchical perspective); one that captures the extent to which the attitude object is, or is not, a particular behavior. Only behavioral attitudes (attitudes towards performing a certain behavior) should be considered direct predictors of corresponding intentions and behaviors (e.g., Ajzen 2001; for a discussion in the environmental domain, see Staats 2003; for studies in the tourism domain see e.g., Kim and Han 2010; Han and Hyun 2017a). However, general attitudes, and attitudes towards ecological issues in general seem to be particularly relevant anyway, because they tend to correlate with behavior to some extent (e.g., Milfont, Duckitt, and Wagner 2010a), and because they can act as crucial moderators of other more direct determinants. For example, a study by Huang and Liu (2017) showed environmental concern (a particular general attitude) to moderate the relationship between motivation and revisit intention, in the ecotourism domain.

In many cases general attitudes are able to affect crucial direct predictors of behavioral intentions, some of which are related to particular feelings and emotions. For example, in a study by Han and colleagues (Han, Hwang, and Lee 2017), environmental concern was shown to be able to directly affect personal norms (measured as a personal feeling of obligation to perform a certain behavior), a factor that, in turn, was revealed to be a strong predictor of intentions to practice green activities (for e.g. saving electricity,

reducing waste, etc.) when attending a convention. Similar results were obtained by Han, Kim, and Kiatkawsin (2017) in a study of young travelers' conservation intentions, while Han and Hyun (2017b) found environmental concern to be a predictor of anticipated positive affect, which - in turn - was able to predict (directly) intentions to enact environmentally responsible behaviors while visiting a museum.

Another strength of general attitudes is their relationship to policy support (e.g., Rauwald, and Moore 2002). Probably because of their strong ideological basis, general attitudes appear to be particularly relevant in predicting and explaining people's support for specific environmental policies - an important form of indirect pro-environmental action (e.g. Stern 2000). This aspect is acquiring increasing relevance in today's societies, as surveys of support for specific policies often guide politicians' and governments' strategic choices.

Such an indirect role of general attitudes on behavior deserves greater attention in the domain of sustainable tourism, as do a number of other issues that have emerged in the social and environmental psychology literature, including:

i) the possible interaction between specific and general environmental attitudes - for example, some authors have noted that general environmental attitudes may act as internal motivators able to amplify and/or stabilize the effects of more specific attitudes on behavior (Huffman, Van Der Werff, Henning, and Watrus-Rodriguez 2014);

ii) the role played by 'particular' forms of general attitudes such as, for example, attitudes towards environmentalists (e.g. Ratliff, Howell, and Redford 2017) - some authors have suggested that these types of attitudes might predict pro-environmental behavior more effectively compared with general environmental concern (e.g. Ratliff, Howell, and Redford 2017). Indeed, according to the Prototype Willingness Model of behavior (PWM;



e.g. Gerrard, Gibbons, Houlihan, Stock, and Pomery 2008) evaluation of the characteristics of individuals who are prototypical of a social group or category is of crucial relevance for understanding other people's willingness to act like them. These kinds of effects may be related to the implication for self-expression and self-presentation that some behaviors may have (e.g. Mannetti, Pierro, and Livi 2004), and it would be worthwhile ascertaining their relevance to tourism issues too;

iii) the possibility that the effects of particular antecedents of attitudes (e.g. values) may be moderated by social cultural factors - for example, it has been shown that attitudes are more influenced by self-transcendent values in individualistic cultures and by conservation values in collectivistic ones (e.g., Boer, and Fischer 2013);

iv) the role of people's past experience of the social physical environment in which they live (e.g., Miller 2005; van den Berg, Vlek, and Coeterier 1998), or visit for leisure and tourism (e.g., Ardoin, Wheaton, Bowers, Hunt, and Durham 2015; Lee, and Moscardo 2005; Packer, and Ballantyne 2016), as well as in the context of educational intervention programs (e.g., De Dominicis, Carrus, Bonaiuto, Bonnes, Perrucchini, and Passafaro 2017; but see also Russell, and Russell 2010; Ballantyne, and Packer 2011; Ballantyne, Packer, and Hughes 2009; Ballantyne, Packer, and Sutherland 2011; Hughes, Packer, and Ballantyne 2011), in shaping both general and specific tourism attitudes - although this aspect has received some attention in the tourism domain, more systematic and theory-based investigations are still needed;

v) the effects on both general and specific attitudes of people's trait-like tendencies to have positive vs negative views of life events (i.e. their *dispositional attitude*; Hepler, and Albarracín 2013, 2014; see also Rocklage, and Fazio 2014) - the role of traits in affecting

responses to attitudes has been underestimated in the sustainable tourism field; and, finally,

vi) the effects of knowledge on attitudes formation and change - studies have shown that Knowledge of specific and general environmental issues can affect attitudes and behaviors (e.g., Kaiser, and Fuhrer 2003), and can play a role in their change over the life course (Otto, and Kaiser 2014). However, knowledge is quite a composite construct; different forms of knowledge relevant to environmental issues exist which can have different types of impact on attitudes and behaviors (e.g., Liefländer, Bogner, Kibbe, and Kaiser 2015). Unfortunately, although there is evidence that these differences are also relevant to the sustainable tourism domain (e.g., Alessa, Bennett, and Kliskey 2003; Juvan, and Dolnicar 2014b), both the role of the learning experience and the influence of the various types of environmental knowledge on attitudes remain under-investigated in this field (Falk, Ballantyne, Packer, and Benckendorff 2012; see also Coghlan, and Kim, 2012).

*A 'horizontal' classification of environmental attitudes* - In addition to a vertical or hierarchical classification, attitudes relevant to sustainability issues can also be categorized on a 'horizontal' basis. This means that within each level of abstraction/concreteness, environmental attitudes can still differ on the basis of the specific theme or topic addressed. Because the concept of sustainable development entails a number of domain-specific social and environmental issues (e.g., social inequality, loss of biodiversity, climate change, resources depletion, waste management, etc.) and these, in turn, reflect other more specific issues (e.g. attitudes towards reducing towels use at the hotels, attitudes towards using low impact transportation means, attitudes towards buying organic food, etc.), it is reasonable to expect that distinct specific attitudes can be identified and studied for every issue. Again, this differentiation is justified by the fact that each attitude may have a specific set of

antecedents and consequences in addition to those of a more general nature. This means, for instance, that the set of predictors of attitudes towards ecotourism might not always (or completely) overlap with those of attitudes towards sustainable cruise travel, cycle tourism, and/or heritage tourism, and that these, in turn, may show different patterns of relationship with corresponding behaviors. The use of the conditional form here reflects the fact that these issues have not yet been investigated extensively, although there is evidence in the environmental and tourism domains that congruence amongst different types of ecological behaviors is rather uncommon (e.g. Juvan, and Dolnicar 2017; Thøgersen 1999; see also Lanzini, and Thøgersen 2014), and should thus be ascertained on a case-by-case basis (e.g., Margetts, and Kashima 2017).

Conversely, much more evidence, exists concerning the internal complexity and articulation of general environmental attitudes. Such complexity parallels that of environmental ideology and discourse in society (e.g. Bell 1994; Little 1999; Rappaport 1979; Redclift 1987). As a matter of fact, not only can different perspectives on people-nature relationship be identified by tracing them back to, for example, their historical (e.g. Bramwell 1989; Conway, Keniston, and Marx 1999), geographical (e.g. Sarigollu 2009; Uyeki, and Holland 2000), social-cultural (e.g. Wang 1999; Williams, and Cary 2002; Warren 1990; van den Berg, Vlek, and Coeterier, 1998; Steg, and Sievers 2000) and/or political (e.g. Eckersley 1989; Brondi, Sarrica, Caramis, Piccolo, and Mazzara 2016; Carman, 1998) origins (to name but a few), but these perspectives are continuously evolving as a result of the hectic social-cultural exchanges of today's societies, enhanced by recent technical advances in mass media and social networks (e.g. Aiello, and Bonaiuto 2003; Bell 1994; Buijs, Hovardas, Figari, Castro, Devine-Wright, Fischer, Mouro, and Selge 2012; Castro, and Lima 2001; Curtin, and Rhodenbaugh 2001; Hansen 1991; Holbert, Kwak, and Shah 2003; Sarrica,

Brondi, Cottone, and Mazzara 2016). In other words, different dimensions of environmentalism exist at present, worldwide, which are likely to evolve via further differentiation in the future.

Researchers should be aware of this complexity when investigating factors thought to be expressions of these ideological dimensions, such as, for example, environmental concern. The latter has received substantial empirical attention, but little theoretical reflection in the environmental domain, and few authors seem to be aware of the different possible conceptual articulations of this construct across cultures, groups and societies. For example, Milfont, Duckitt and Wagner (2010b) suggested that, across-cultures, environmental concern can be traced back to two main higher order dimensions – i.e. preservation and utilization - that reflect the way people think environmental resources should be used by human beings. Within the utilization dimension, some authors have seen the necessity of further distinguishing between exploitative and appreciative uses of nature (e.g. Kibbe, Bogner, and Kaiser 2014).

The existence of internal differentiations such as these should be taken into account by researchers, in order to select the measurement instrument that captures the dimensions most relevant to the particular case and context being investigated. In fact, most existing instruments are based on a rather partial view of the concept. This is the case, for example, with the most popular measure of environmental concern, the New Environmental Paradigm scale (NEP; Dunlap, and van Liere 1978; Dunlap, van Liere, Mertig, and Jones 2000; for studies in the tourism domain, see for example, Jurowski, Uysal, Williams, and Noe 1995; Luo, and Deng 2008; Uysal, Jurowski, Noe, and McDonald 1994) which focuses on people's endorsement of ecocentric (valuing nature *per se*) vs anthropocentric (valuing nature because of its importance for human beings) perspectives

on the humans-nature relationship. Some authors have advised researchers to be well informed about both the potentialities and limits of this scale before using it (e.g. van Liere, and Dunlap 1981; Klineberg, McKeever, and Rothenbach 1998).

In particular, Milfont and Duckitt (2010) observed that samples with different socio-economic backgrounds may respond differently to the NEP scale. For instance, environmentalists and white-collar samples tended to score significantly higher on this scale than did nationally or regionally representative samples, while blue-collar samples tended to score significantly lower. Differences in scores among respondents according to the type and number of the original items included were also reported, as a consequence of the fact that, by including or excluding certain items, issues that may have different importance for different social groups may be included or excluded as a result. Consequently, the authors provide useful detailed suggestions on where and how to implement this renowned scale, and researchers are invited to follow them carefully when designing their studies.

In the meantime, over the years other measures of environmental concern have been proposed, as alternatives to the NEP, for tapping into important conceptual aspects not considered by this scale. For example, according to some authors, the NEP fails to capture indifference or apathy *vis-à-vis* environmental issues, and tends to treat ecocentrism and anthropocentrism as opposite poles of a single continuum (e.g., Thompson, and Barton 1994). This renders the scale incapable of grasping the (often contradictory) views on environmental issues circulating in today's societies. For these reasons, Thompson and Barton (1994) proposed a scale that treats ecocentrism, anthropocentrism and environmental apathy as separate dimensions. This scale has been used in the environmental and tourism domain with interesting results (e.g. Bonnes,

Passafaro, and Carrus 2011; Passafaro et al. 2015a), revealing it to be particularly effective for understanding the determinants of ambivalent and contradictory tourism choices.

Nevertheless, Tompson and Barton's scale has also been criticized. According to some, this scale (as well as the NEP) does not incorporate the tenets of sustainable development (e.g. Corral-Verdugo, Carrus, Bonnes, Moser, and Sinha 2008). Indeed, the peculiarity of sustainable development is that it entails the need to reconcile the two perspectives (anthropocentric and ecocentric) in a trade-off view. Hence, measures more in line with this integrative non-dichotomic view have been proposed. One of these is the NHIP, (New Human Interdependence Paradigm; Corral-Verdugo, Carrus, Bonnes, Moser, and Sinha 2008), which has been used in a study of sustainable water consumption.

However, it should be noted that, in general, the number of different measures of environmental concern proposed by studies over time, and in various disciplinary fields is rather impressive. Milfont and Duckitt (2010; see also Milfont, Duckitt, and Wagner 2010b) have tried to assemble some of them within a single new instrument: the Environmental Attitudes Inventory - EAI. The EAI scale is thus a comprehensive and hierarchically organized measure that taps into twelve crucial dimensions relating to ecological issues. Each dimension represents a scale that can be administered, if need be independently of the others, to assess a specific environmental issue. The instrument has been validated cross-culturally and shows high internal consistency, homogeneity and reliability, as well as low desirability bias. It would be worthwhile testing the utility of this instrument in cross-cultural studies focused on tourism-related issues.

The centrality of the issue of the way environmental concern and other attitudes are measured will become more evident in the section below, where the problem of the attitude-behavior relationship is addressed more thoroughly.

### *The attitude-behavior relationship in sustainable tourism*

One of the most challenging issues in attitude research is the controversial relationship with behavior (e.g., Ajzen, and Fishbein 2005). Research on attitudes related to tourism is no exception (e.g., Antimova, Nawijn, and Peeters 2012; Bergin-Seers, and Mair 2009; Budeanu 2007; Hibbert, Dickinson, Gössling, and Curtin 2013; Mehmetoglu 2010; Passafaro et al., 2015a,b). For example, Juvan and Dolnicar (2014a) found that members of an environmentalist group (who were assumed to hold strong pro-environmental attitudes) admitted that they did not always act in an environmentally friendly way when they were on vacation and similar results have been reported by Barr et al. (Barr, and Prillwitz 2012; see also Barr, Shaw, and Coles 2011; Barr, Shaw, Coles, and Prillwitz 2009), Baker et al. (Baker, Davis, and Weaver 2014), Hares et al. (Hares, Dickinson, and Wilkes 2010) and by Passafaro et al. (2015a,b). These and other results seem to confirm the validity of McDonald and colleagues' 'typology of green consumer' (e.g., McDonald, Oates, Alevizou, Young, and Hwang 2012) which was also empirically supported by a study in the tourism domain (Bergin-Seers, and Mair 2009). These authors found evidences that being a 'green traveler' is not an 'all or nothing' matter, and that 'shades of green' exist, so that, independently of their overt attitude orientation, some consumers can display a greater or lesser commitment to the green cause. Hence, now, the question is why this may happen.

### *Theoretical explanations of the attitude-behavior gap*

Over the years, social psychologists have identified a number of general intervening factors that can contribute to the attitude-behavior gap (e.g., Ajzen 2001; Petty, and Krosnick 1995; for a discussion in the environmental domain see e.g. Gifford 2011; Gifford, and Nilsson

2014; for a discussion in the domain of sustainable tourism see, e.g., Antimova, Nawijn, and Peeters 2012). For example, hundreds of studies in various behavioral fields (including tourism) have consistently shown that attitudes should be considered strong direct predictors of behavioral intentions, but not of behavior *per se* (e.g. Ajzen, 1991, 2001). In addition, there are cases in which the attitude-intention relationship is mediated by desires (e.g., Perugini, and Bagozzi 2001), including in sustainable tourism (e.g., Meng, and Han 2016; Meng, and Choi 2016a).

However, there may be other mediators as well. For example, according to some authors the various components of attitudes interact differently with social norms, leading to differences in their effects on intentions and behaviors (e.g., Huffman, Van Der Werff, Henning, and Watrous-Rodriguez 2014; Wan, Shen, and Choi 2017). In particular, it appears that strong subjective norms can: 1) decrease the effects on intentions of attitudes measured according to their cognitive or deliberative component (corresponding to an evaluation of the pros- and cons of an issue - also known as the functional component of attitude); and 2) increase the influence of those measured according to their emotional or affective/hedonic component (also known as experiential attitudes).

Moreover, according to the 'theory of vested interest' (e.g., Sivacek, and Crano 1982) attitudes tend to be more consistent with intentions if the attitude object is perceived as both important and hedonically relevant (i.e. relevant to oneself; see De Dominicis et al. 2014). Many studies have also highlighted the role played by people's beliefs about their ability to induce a change in the environmental conditions (i.e. *environmental self-efficacy*) through performing or refraining from a particular behavior. This depends on a number of factors including individual's perception of others' willingness to act in the same way, and the extent to which he or she has an inner belief that any personal actions is a waste of



time, if other people do not cooperate (for recent discussions see Geiger, Swim, and Fraser 2017; Gifford 2011; Landry, Gifford, Milfont, Weeks, and Arnocky 2018).

Furthermore, it is reasonable to assume that if people are unaware of the possible environmental impact of a certain behavior (e.g., Cheung, Chan, and Wong 1999), or if that behavior has become an ingrained habit (e.g., Verplanken, Aarts, Van Knippenberg, and Van Knippenberg 1994), they may not act pro-environmentally, regardless of their attitude towards the environment. The empirical evidence, indeed, indicates that people tend to underestimate the potential environmental impact of tourism (Becken 2004), and that they tend to be very resistant to change their travel habits (e.g. Cohen, Higham, and Cavaliere 2011).

The attitude-intention relationship also vary in function of social-cultural characteristics, with greater consistency observed in developed and individualistic countries (e.g., Morren, and Grinstein 2016).

Attitude-behavior inconsistencies may, then, be linked to the fact that the decision-making about conservation behaviors can happen “in the context of an internal debate where contradictory ideas are weighed up and the possibility of ambivalence arises” (Castro, Garrido, Reis, and Menezes 2009, 24; see also Barata, and Castro 2013). There is evidence that attitude ambivalence influences the attitude-behavior relationship in various ways (e.g., Costarelli, and Colloca 2004) and that such ambivalence can be the result of the existence, within individuals and societies, of multiple views on an issue (e.g., Bonnes, Passafaro, and Carrus 2011; Song, and Ewoldsen 2015). This makes the process of transition from one attitude to another anything but straightforward (e.g., Sarrica, Brondi, Cottone, and Mazzara 2016), as it is often hampered by denial processes at the individual and the societal level (e.g., Cohen, Higham, and Cavaliere, 2011; Stoll-kleemann, O’Riordan, and Jaeger

2001). There are, however, alternative theoretical accounts of attitude ambivalence, which relate it to an 'internal' debate about how one wishes to be seen by others (i.e. 'self-presentation'; e.g., Pillaud, Cavazza, and Butera 2013).

At an individual level, the attitude-behavior relationship may also be influenced by differences in the desire to be consistent, to be perceived as consistent and for others to be consistent (e.g. Guadagno, and Cialdini 2010), as well as by the existence of "desired attitudes" that may conflict with one's own actual ones (DeMarree, Wheeler, Briñol, and Petty 2014). In addition, it seems that the mere perception that there is a moral basis to one's own attitudes can moderate the correspondence between attitudes and behavioral intentions (Luttrell, Petty, Briñol, and Wagner 2016), recalling the importance of values in general as moderators of the attitude-behavior relationship.

Some authors have also observed that attitude-behavior incongruence may be caused by conflict among the various attitude components (i.e. cognitive, affective, and behavioral). Indeed, there are cases in which attitudes stem from emotional rather than cognitive instances and may be the result of 'mere exposure effects' (e.g., Zajonc 1968; see also Montoya, Horton, Vevea, Citkowics, and Lauber 2017) or, within the environmental domain, the quality of experiences of nature, in which the emotional component prevails (e.g., Roczen, Duvier, Bogner, and Kaiser 2012). The possibility that the effect of attitudes on behavior and intentions may be moderated by the interplay between the affective and cognitive components has received some empirical confirmation in the tourism domain also (e.g. Kazeminia, Hultman, and Mostaghel 2016) and would thus deserve greater attention in this field.

A relatively recent and promising field of research on attitude formation and effect on behavior, is that regarding the so-called 'embodied cognition' (e.g., Rosch, Thompson,

and Varela 1992). Here, researchers are trying to establish how body states are related to states of mind. Given that tourists' experiences are associated (almost by definition) with particular physical and mental states, it would not be surprising if 'embodied cognition' proved a fruitful line of investigation for understanding the attitude-behavior gap in sustainable tourism as well (see for an example, Oleksy, and Wnuk 2016).

### *Methodological issues*

The attitude-behavior gap could also be due to bias introduced by the research design and the way attitudes and the related constructs are conceptualized and measured by researchers (e.g., Kaiser, Byrka, and Hartig 2010; Klineberg, McKeever, and Rothenbach 1998; Pienaar, Lew, and Wallmo 2015; van Liere, and Dunlap 1981; for discussions in the tourism domain see, e.g., Kim, and Filimonau 2017; Oates, and McDonald 2014). For example, Ajzen and colleagues (e.g., Ajzen, 2001) suggested the importance to respect the 'correspondence' principle (that there should be correspondence between the object, context and time to which the measures of attitudes, intentions and behavior refer). Some researchers in the environmental domain have also proposed that 'evaluative correspondence' should be taken into account (e.g., Byrka, and Kaiser 2015). These authors draw on Campbell's (1963) notion that general attitudes may have implications for several specific behaviors and hence that people's attitudes towards an issue may manifest in a variety of activities, which, in turn, may vary according to the level of difficulty for individuals. Hence, the likelihood that an attitude will be reflected in a specific behavior will vary according to how difficult the behavior is for the individuals in a given context (see also Kaiser and Schultz 2009). This means that the attitude behavior gap can vary according to the level of difficulty of the behavior in question. For this reason, according to Kaiser and

colleagues, alternative ways to address the issue could be to use behavior based measures of attitudes (Kaiser, Oerke, and Bogner 2007) and/or to set up measures of attitudes and behaviors that refer to a broad range of behavioral domains (Kaiser, Schultz, and Scheuthle 2007). These proposals appear particularly relevant to the tourism domain, where individuals' broad attitudes towards sustainability may manifest in a variety of different choices, ranging from choice of location to travel preferences, accommodation and on site tourist activities, for which different levels of 'difficulty' could be defined.

Greater attention should also be paid to the wording used in the construction of attitude measures. It has been shown that measures of attitude that heavily depend on verbal forms (as most "explicit" measures of attitude do) might be influenced by the 'linguistic relativity bias' (for a discussion in the marketing domain see, e.g. Chen 2013). Because the structure of a language influences the way speakers think and act, there may be differences between linguistic groups with respect to the attitude-behavior relationship. One such difference concerns time framing. Kim and Filimonau (2017) showed that people who speak strong Future-Time-Reference (FTR) languages tend to declare less favorable attitudes towards environmentally sustainable tourist activities. Drawing on earlier work by Chen (2013), the authors suggested that this could be because the grammar and syntax of strong FTR languages tend to stress the distinction between present and future tenses and thus between present and future events, making future events psychologically more distant and less threatening. Pro-environmental action often entail an immediate sacrifice in order to avoid future negative consequences and/or to obtain a pay-off in the future, so if the future is perceived as more distant, one would expect people to be less likely to act to protect the environment. However, studies in environmental psychology have shown that the situation could be even more complex than this. These studies suggest, first, that it is

important to distinguish the 'seriousness and magnitude' of a problem from its 'relevance to the self'. The former amounts to objective or detached 'evaluations' of the probability that an event could occur and the gravity of its consequences, whereas the latter refers to the probability and extent to which the consequences would affect the individual directly or indirectly (via impact on people or things of relevance to him or her). Second, the issue seems to relate as much to time as to space (e.g., Gifford et al. 2009; Spence, Poortinga, and Pidgeon 2012). Peoples' perception of the seriousness and self-relevance of environmental problems is influenced by when (present or future) and where (geographically proximate or distant locations) they are likely to occur. Third, the phenomenon appears to be due to multiple factors, of which linguistic bias is only one; the others include protection from anxiety, identity processes and socio-cultural origins (see, e.g., Craig, and Douglas 2006; Bonaiuto, Breakwell, and Cano 1996; Gifford et al. 2009; Hatfield, and Job 2001). However, Gifford et al.'s (2009) study also highlighted that there are national groups in which no such biases have been recorded. All these eventualities have not been investigated in the sustainable tourism domain and would deserve greater attention.

Overall, the extant research indicates that the framing of a problem (sometimes even more than its substance) can orient people responses to measures of attitudes (and of other constructs such as values, worldviews, behaviors etc.; see also, Schuldt, Konrath, and Schwarz 2011). Orams' (1997) argument that great caution should be exercised when measuring environmental attitudes in order to avoid 'ceiling' and 'acquiescence effects' as well as Dolnicar's (2006, 2018) reiterated recommendations to avoid trivial measurement errors in tourism research (e.g. associated with the inappropriate format of items, cultural bias and violations of the basic assumptions of analytical procedures that may hamper the

validity and reliability of studies) appears particularly relevant to research on attitudes in the sustainable tourism domain too.

The use of implicit measures of attitudes and other constructs has sometimes been recommended to overcome these types of problems (e.g. Fazio, and Olson 2003), and it would be worth assessing whether such an approach is useful when it comes to choices about sustainable tourism as well (e.g. Kim 2011; Kim, and Chen 2011; Yang, He, and Gu 2012; for a recent discussion of the implications of the use of this method see Yen, Durrheim, and Tafarodi 2018).

The use of photos and pictures to indirectly elicit unconscious beliefs, evaluations and ideas has also been suggested as an alternative approach to explicit measures of the determinants of tourist choices (e.g. Khoo-Lattimore, and Prideaux 2013). These too could be applied to studies of sustainable tourism.

### *Social psychological models including attitudes and their relevance for the sustainable tourism field*

Another important point to keep in mind when studying attitudes is not to expect from these more than they can actually offer.

Towards the end of the years sixties, Martin Fishbein and Icek Ajzen (e.g., Ajzen, and Fishbein 1969, 1977; Fishbein 1967; Fishbein, and Ajzen 1974) showed how the best way to 'get the most' out of the attitude construct was to insert it within a broader model of social behavior. Their Theory of Reasoned Action/Planned Behavior (TRA/TPB) introduced the 'correspondence principle' as well as the postulate that attitude-behaviors relationship is mediated by behavioral intentions (both ideas have already been discussed in this paper).

They also proposed that attitudes can only predict volitional behaviors (i.e., behaviors that are under the complete control of an individual) and limited the scope of their model to describing and explaining the effects of a specific kind of attitudes: the attitudes towards a behavior. Furthermore they noted that attitudes are not the only determinants of behavior, as other possible determinants should be considered (i.e. social norms and perceived behavioral control), and acknowledged that the relative weight of such components could vary across behaviors and situations (Ajzen 1991), due to biases introduced by the measurement instruments (e.g. Ajzen 2015) and/or to the effects of important moderating factors (e.g., Kredentser, Fabrigar, Smith, and Fulton 2012; Trafimof, and Finlay 1996). The TRA/TPB has been widely tested in many behavioral domains, including the environmental one (see, e.g., Staats 2003), and the domain of sustainable tourism (e.g. Brown 1999; Chen, and Peng 2012).

However, researchers in sustainable tourism (and in many other fields) have suggested a number of extensions to the model which, according to their proponents, increase its predictive power and enhance the understanding of the behavior at issue, or have practical relevance in a specific domain (e.g., Han, Hsu, and Sheu 2010; Han, Meng, and Kim 2017; Meleddu, and Pulina 2016). Some of the extensions involve adding constructs from other models (e.g., Stern and colleagues' Values-Beliefs-Norms theory, VBN, and Schwartz's Norm-Activation- Model, NAM; Stern, Dietz, Abel, Guagnano, and Kalof 1999; Schwartz 1977; Milfont, Duckitt, and Wagner 2010a) to produce *ad hoc* composite models (e.g. Han 2015; Han, Hwang, Lee, Kim. 2019; Han, and Hyun 2017a; Han, Yu, and Kim 2018; Lee, and Jan 2018; Meng, and Choi 2016b; Park, Lee, Lee, Kim, and Kim 2018; Shin, Im, Jung, and Severt 2018; Teng, Wu, and Liu 2015; Verma, and Chandra 2018; Ye, Soutar, Sneddon, and Lee 2017). Some interesting cases have involved the inclusion of a measure of general

environmental concern, which has been revealed to be an additional direct predictor of behavioral intentions in this field (e.g. Kim, and Han 2010; Meleddu, and Pulina 2016).

Ajzen and colleagues' have not excluded the possibility that extensions of the TPB may be valuable (the TPB is itself an extension of a previous model, the TRA), but they do emphasize additions to the model should be made with caution and based on a deep understanding of their theoretical and methodological implications (see, e.g., Ajzen 2011 2015; Ajzen and Sheikh 2013; Bamberg, Ajzen, and Schmidt 2003; see also Kaiser, Hubner, and Bogner 2005).

That said, for the sake of completeness, it is worth briefly mentioning some other variants of the TPB proposed in the environmental field that may be of interest for researchers working in the field of sustainable tourism. One of these variants is the 'general version' of the theory of planned behavior, which is intended to overcome some of the mentioned limitations of the TPB when it comes to the prediction of general pro-environmental behavior (i.e. the general tendency of a person to behave pro-environmentally in a variety of situational contexts; e.g., Kaiser 2006; Kaiser, and Gutscher 2003; Kaiser, Schultz, and Scheuthle 2007; Kaiser, and Wilson 2004).

Perugini and Bagozzi's (2001 2004) Model of Goal-directed Behavior (MGB), is another model intended to "broaden" and "deepen" the TPB (see also Leone, Perugini, and Ercolani 2004). This model is particularly suitable as a framework for studying the relationship between attitudes and 'desires' (the willingness to endorse a behavior that has not yet translated into a behavioral intention). It has been used in both the environmental (e.g. Carrus, Passafaro, and Bonnes 2008; Passafaro, Rimano, Piccini, Metastasio, Gambardella, Gullace, and Lettieri 2014) and tourism domain (e.g. Meng, and Han 2016),



also with some interesting variants (e.g. Han, Jae, and Hwang 2016; Meng and Choi 2016a; Meng, and Han 2016; Park, Lee, and Peters 2017; Song, Lee, Kang, and Boo 2012; Song, You, Reisinger, Lee, and Lee 2014).

Finally, it is worth commenting briefly on Stern and colleagues' VBN theory (Stern, Dietz, Abel, Guagnano, and Kalof 1999), a model that has been used several times in the environmental field and that has received some attention in the tourism domain as well (e.g., Kiatkawsin, and Han 2017; Park, Lee, Lee, Kim, and Kim 2018). Unlike the original version of the TPB, the VBN has the merit of assigning general environmental concern a key role in the decision making process regarding environmental issues, while it allows to take into account the relationship between attitudes and moral factors.

## **Discussion and conclusions**

Attitudes are rather complex constructs in their origins, conceptualization, relationships with other factors and behavioral consequences and many of their potentialities and limitations are directly due to this complexity. However, provided their complexity and articulation is taken into account by researchers, introducing the concept of attitudes can add to the understanding of people's behavior in many fields (including sustainable tourism) and can play a crucial role in developing and monitoring intervention policies. For these reasons, theories and research results in social and environmental psychology (where the attitude construct originated) have been used to guide this review of literature on the role of attitudes in tourists' sustainability. Below are some suggestions derived from this analysis.

*Suggestions 1: differentiate amongst the various types of attitudes.* One hundred years have passed since the term attitude was first introduced and an impressive number of studies making use of the attitude construct have been carried out since then. As a result the scope of the construct has grown enormously. This paper has adopted a classification of environmental attitudes based on their 'distance' from behavior (vertical-hierarchical distinction) and their possible internal conceptual articulations (horizontal-distinction). The former distinction is based on research showing that the extent to which attitudes directly predict behavior is determined largely by whether their content is abstract and general rather than concrete and specific. The latter distinction takes into account the huge variety of topics that can become the object of an attitude. This paper makes no attempt to identify them all, simply indicating some possible broad categories to consider, and offering some suggestion about the topic areas that might be promising to explore in relation to sustainable tourism.

*Suggestion 2: identify attitude moderators and mediators relevant to specific contexts and behaviors.* Attitudes should not be expected to be strong direct predictors of behaviors and attitude-behavior incongruence is quite common. A number of moderators and mediators of the attitude-behavior relationship have been identified. Some of these, for example, behavioral intentions, have been shown to be relevant in many different contexts and behavioral domains, and can be reasonably considered universal, but others are more context dependent and should be assessed on a case by case basis. It seems that not many of the mediators and moderators specific to sustainable tourism have been identified, so this might be an interesting avenue for future research.

*Suggestion 3: chose appropriate measurement techniques and instruments.* There are no measures of social psychological factors (attitudes included) that are valid across

contexts and times, although some have been used successfully in a variety of contexts and situations. Over the years various attitude measurement techniques have been developed to address different research needs and in different contexts. The potential utility and limitations of some techniques and instruments are well known (this paper provides some references as a starting point for readers wishing to explore this issue further). If measures are not chosen carefully, there is the risk that a poor choice of measure will be mistaken for problems with the construct.

*Suggestion n° 4: select the appropriate theoretical framework.* In other words, do not consider attitudes in isolation. Social psychology has long abandoned the idea that attitudes are the sole direct, strong predictors of social behavior, as the research data do not support this hypothesis. The attitude construct is best used within a broader model of human behavior. This paper provides the references to the models used most frequently in the environment and sustainable tourism fields. In principle, there is no reason to think that new and better models of the relationship between attitudes and behavior cannot be designed, but the utility and information potential of studies conducted to validate these hypothetical new models would be vastly increased if they were to take into account existing models or compare the new models with existing ones.

*Suggestion 5: increase the interdisciplinary relevance of studies.* Although academic interest in tourism publications has increased generally in recent years, thus paralleling growing interdisciplinary recognition (e.g. Buckley, 2019), some authors (e.g. Wardle and Buckley, 2014; Bauer, 2015) have noted that the number of citations of tourism research in non-tourism disciplines as opposed to tourism disciplines is relatively low. While in some fields (e.g. psychology) part of this neglect effect could be due to persisting prejudices concerning the relevance tourism studies (e.g. Pearce 1987; see also Berno and Ward 2005),

other barriers might be linked to the way in which studies are designed and reported in the tourism field. In general, it is the opinion of the author of this paper that any attempt to include a psychosocial measure in studies of sustainable tourism has to be commended, and that authors in other fields have the right to use the construct in a way they deem more relevant to their field and context. It is, however, unfortunate that many studies on attitudes conducted in this field are difficult to translate into other disciplinary contexts (and into the psychological one in particular) due to poor alignment of the methods used and/or the way in which the studies are reported in articles. Regarding the former, authors interested in increasing the interdisciplinary relevance of their studies should avoid practices that are not recognized in some disciplinary contexts, such as, for example (for survey methods) the partial use of previously validated scales (i.e. the practice of arbitrarily picking items from existing scales) or the use of *ad hoc* created measures not previously tested for validity and reliability (for further recurring violations, see also Dolnicar 2006). It is also important to give an accurate and detailed description of the research design applied and the measures used to assess the constructs investigated (possibly including the exact item wording), because in certain academic contexts the scientific validity of a study also relies on its potential replicability.

*Suggestion 6. Actively, contribute to existing theoretical and methodological knowledge of attitude content, structure and functioning.* Theoretically and methodologically accurate studies in the tourism domain will help to increase our knowledge of attitudes. For example, tourism appears to be a particularly appropriate context for studying issues relating to attitude stability over time and across situations, investigating on the role of contextual factors on the attitude-behavior relationship, and shedding further light on cross-cultural differences in attitude formation and change.

Tourism studies have often focused on cross-cultural comparisons but their implications have tended to be limited to the tourism field. Researchers in this field could thus focus not only on what attitudes can do for tourism, but also on what tourism studies can do for increasing our understanding of attitudes that are relevant to sustainability and other behavioral domains.

### **Limits of this overview**

Given the impressive volume of the social-psychological literature on attitudes, this review has, inevitably, failed to address a number of important issues. A crucial one is attitude change. This topic has been the subject of considerable attention from social psychologists, because of its paramount importance for applicative purposes. It is strictly linked to the studies about attitude origins and formation, and includes the structures and processes that guide their functioning. Some of these issues have been addressed in recent reviews in social psychology (for e.g. Albarracín, and Shavitt 2018; Bohnert, and Dickel 2011) as well as in the domain of sustainable tourism (e.g. Ardoin, Wheaton, Bowers, Hunt, and Durham 2015) but, clearly, the topic merits a more focused discussion in the latter field.

Another aspect missing from this paper is a critical analysis of existing research on tourists' attitudes combined with results obtained in the sustainable tourism field. The material retrieved and discussed here could be used to perform systematic reviews and meta-analyses of the literature that would better serve such an aim. Indeed, the goal of this paper was to encourage colleagues in the tourism field to endorse a more pro-active approach to the study of attitudes by keeping up with the latest achievements and possibly providing their own original contributions to the existing debate. The references reported

here could serve as a starting point in this process, but can by no means be considered exhaustive of what is a vast research field. Those who chose to engage in this endeavor will soon learn that there is no standard way of conceptualizing and investigating attitudes. Thus, no easy suggestions can be offered here, as the ability to use this construct can improve only with practice. They will also learn that attitudes cannot explain all aspects of human behavior, nor particular behaviors in all circumstances (e.g. Gifford 2011; Gifford, and Nilsson, 2014). Social psychologists have been working hard to disentangle the many possible determinants of individual and group behavior. These include factors such as values, worldviews, norms, identity, traits and others, all of which researchers should learn to distinguish. The literature on these is not included in this review either, although it should be highly familiar to those interested in understanding and/or influencing tourists' behavior in relation to sustainability (for recent discussions of the psychological contribution to the tourism domain in general, see, e.g., Pearce, and Packer 2013; Skavronskaya, Scott, Moyle, Le, Hadinejad, Zhang, Gardiner, Coghlan, and Shakeela 2017).

## References

- Aiello, A., and M. Bonaiuto 2003. "Rhetorical Approach and Discursive Psychology: The Study of Environmental Discourse." In *Psychological Theories for Environmental Issues*, edited by M. Bonnes, T. Lee, and M. Bonaiuto. Aldershot, UK: Ashgate Publishing Ltd.
- Abelson, R.P., D.R. Kinder, M.D. Peters, and S.T. Fiske. 1982. "Affective and Semantic Components in Political Person Perception." *Journal of Personality and Social Psychology* 42(4): 619-630.
- Ajzen, I. 1991. "The Theory of Planned Behavior." *Organizational Behavior and Human Decision Processes* 50: 179-211.
- Ajzen, I. 2001. "Nature and Operation of Attitudes." *Annual Review of Psychology* 52: 27-58.
- Ajzen, I. 2011. "The Theory of Planned Behavior: Reactions and Reflections." *Psychology and Health* 26 (9): 1113-27.

- Ajzen, I. 2015. "The Theory of Planned Behavior is Alive and Well, and not Ready to Retire: A Commentary on Sniehotta, Pesseau, Araújo-Soares". *Health Psychology Review* 9 (2): 131-37.
- Ajzen, I., and M. Fishbein. 1969. "The Prediction of Behavioral Intentions in a Choice Situation". *Journal of Experimental Social Psychology* 5: 400-16.
- Ajzen, I., and M. Fishbein. 1977. "Attitude-Behavior Relations: A Theoretical Analysis and Review of Empirical Research". *Psychological Bulletin* 84: 888-918.
- Ajzen, I., and M. Fishbein. 2005. "The Influence of Attitudes on Behavior". In *The Handbook of Attitudes*, edited by D. Albarracin, B.T. Johnson, and M. Zanna, 173-221. Mahwah, N.J.: Lawrence Erlbaum.
- Ajzen, I., and S. Sheikh. 2013. "Action versus Inaction: Anticipated Affect in the Theory of Planned Behavior". *Journal of Applied Social Psychology* 43: 155-62.
- Albarracin, D., and S. Shavitt. 2018. "Attitudes and Attitude Change". *Annual Review of Psychology* 69: 299-327.
- Alessa, L., S.M. Bennett, and A.D. Kliskey. 2003. "Effects of Knowledge, Personal Attribution and Perception of Ecosystem Health on Depreciative Behaviors in the Intertidal Zone of Pacific Rim National Park and Reserve". *Journal of Environmental Management* 68 (2): 207-18.
- Allport, G.W. 1935. "Attitudes". In *A Handbook of Social Psychology*, edited by C. Murchison. Worcester Mass.: Clark University Press.
- Allport, G.W., and R.L. Schanck. 1936. "Are Attitudes Biological or Cultural in Origin?" *Journal of Personality* 4(3): 195-205.
- Allport, G.W. 1954. "The Historical Background of Modern Social Psychology". In *Handbook of Social Psychology*, vol. 1, Theory and Method, edited by G. Lindzey, Cambridge. Mass.: Addison-Wesley.
- Antimova, R., J. Nawijn, and P. Peeters. 2012. "The Awareness/Attitude Gap in Sustainable Tourism: A Theoretical Perspective". *Tourism Review* 67 (3): 7-16.
- Ardoin, N.M., M. Wheaton, A.W. Bowers, C.A. Hunt, W.H. Durham. 2015. Nature-based Tourism's Impact on Environmental Knowledge, Attitudes, and Behavior: A Review and Analysis of the Literature and Potential Future Research. *Journal of Sustainable Tourism* 23(6): 838-858.
- Baker, M.A., E.A. Davis, and P.A. Weaver. 2014. "Eco-friendly Attitudes, Barriers to Participation and Differences in Behavior at Green Hotels." *Cornell Hospitality Quarterly* 55(1): 89-99.
- Baldner, C. 2018. "Morality and Environment: Analyzing the Effects of the Moral Foundations on Attitudes toward the Environment in Italy". *Rassegna di Psicologia* xxxv 1: 67-77.
- Ballantyne, R., and J. Packer. 2011. "Using Tourism Free-Choice Learning Experiences to Promote Environmentally Sustainable Behavior: The Role of Post-Visit 'Action Resources'". *Environmental Education Research* 17 (2): 201-15.
- Ballantyne, R., J. Packer, and K. Hughes. 2009. "Tourists' Support for Conservation Messages and Sustainable Management Practices in Wildlife Tourism Experiences". *Tourism Management* 30: 658-64.

- Ballantyne, R., J. Packer, and L.A. Sutherland. 2011. "Visitors' Memories of Wildlife Tourism: Implications for the Design of Powerful Interpretive Experiences". *Tourism Management* 32 (4): 770-79.
- Bamberg, S., I. Ajzen, and P. Schmidt. 2003. "Choice of Travel Mode in the Theory of Planned Behavior: The Roles of Past Behavior, Habit and Reasoned Action". *Basic and Applied Social Psychology* 25 (3): 175-87.
- Bamberg, S., and G. Möser. 2007. "Twenty Years after Hines, Hungerford, and Tomera: A New Meta-Analysis of Psycho-Social Determinants of Pro-Environmental Behavior." *Journal of Environmental Psychology* 27: 14-25.
- Barata, R., and P. Castro. 2013. "'I Feel Recycling Matters...Sometimes': The Negative influence of Ambivalence on Waste Separation among Teenagers". *The Social Science Journal* 50 (3): 313-20.
- Barr, S., and J. Prillwitz. 2012. "Green Travelers? Exploring the Spatial Context of Sustainable Mobility Styles". *Applied Geography* 32: 798-809.
- Barr, S., G. Shaw, and T. Coles. 2011. "Times for Unsustainability? Challenges and Opportunities for Developing Behavior Change Policy. A Case-Study of Consumers at Home and Away". *Global Environmental Change* 21: 1234-44.
- Barr, S., G. Shaw, T. Coles, and J. Prillwitz. 2009. "'A Holiday is a Holiday': Practicing Sustainability, Home and Away." *Journal of Transport Geography* 18: 474-81.
- Bauer, I. 2015. "Response to 'Tourism Citations in Other Disciplines'." *Annals of Tourism Research* 53: 99-104.
- Becken, S. 2004. "How Tourists and Tourism Experts Perceive Climate Change and Carbon-offsetting Schemes." *Journal of Sustainable Tourism* 12 (4): 332-45.
- Bell, A. 1994. "Climate of Opinion: Public and Media Discourse on the Global Environment." *Discourse and Society* 5: 33-64.
- Bergin-Seers, S., and J. Mair. 2009. "Emerging Green Tourist in Australia: Their Behaviors and Attitudes." *Tourism and Hospitality Research* 9 (2): 109-19.
- Berno, T. and C. Ward 2005. "Innocence Abroad. A Pocket Guide to Psychological Research on Tourism." *American Psychologist* 60: 593-600.
- Blake, D.E. 2001. "Contextual Effects on Environmental Attitudes and Behavior." *Environment and Behavior* 33 (5): 708-25.
- Boer, D., and R. Fischer. 2013. "How and when Do Personal Values Guide our Attitudes and Sociality? Explaining Cross-Cultural Variability in Attitude-Value Linkages." *Psychological Bulletin* 139 (5): 1113-47.
- Bohner, G., and N. Dickel. 2011. "Attitudes and Attitude Change." *Annual Review of Psychology* 62: 391-17.
- Bonaiuto, M., G.M. Breakwell, and I. Cano. 1996. "Identity Processes and Environmental Threat: The Effects of Nationalism and Local Identity upon Perception of Beach Pollution." *Journal of Community and Applied Social Psychology* 6: 157-75.



Bonnes, M., P. Passafaro, and G. Carrus. 2011. The Ambivalence of Attitudes towards Urban Green Areas: Between Pro-Environmental Worldviews and Daily Residential Experience." *Environment and Behavior* 43 (2): 207-32.

Bord, R.J., and J. O'Connor. 1997. "The Gender Gap in Environmental Attitudes: The Case of Perceived Vulnerability to Risk." *Social Science Quarterly* 78: 830-40.

Bramwell, A. (1989) *Ecology in the 20<sup>th</sup> century: a history*. New York: Yale University Press.

Bramwell B., J. Higham, B. Lane, and G. Miller. 2017. "Twenty-Five Years of Sustainable Tourism and the Journal of Sustainable Tourism: Looking Back and Moving Forward." *Journal of Sustainable Tourism* 25: 1-9.

Bramwell B., and B. Lane. 1993. "Sustainable Tourism: An Evolving Global Approach." *Journal of Sustainable Tourism* 1: 1-5.

Briñol P., and R.E. Petty. 2018. "The AEF: Reinforcing Our Knowledge about Attitudes Using a Physics Metaphor." *Psychological Inquiry* 29 (4): 203-207.

Brondi, S., M. Sarrica, A. Caramis, C. Piccolo, and B.M. Mazzara. 2016. "Italian Parliamentary Debates on Energy Sustainability: How Argumentative 'Short-circuits' Affect Public Engagement." *Public Understanding of Science* 25 (6): 737-753.

Brown, T.J. 1999. "Antecedents of Culturally Significant Tourist Behavior." *Annals of Tourism Research* 26 (3): 676-700.

Brown, T.J., S.H. Ham, and M. Hughes. 2010. "Picking up Litter: An Application of Theory-Based Communication to Influence Tourist Behavior in Protected Areas." *Journal of Sustainable Tourism* 18 (7): 879-900.

Brügger, A., F.G. Kaiser, and N. Roczen. 2011. "One for all? Connectedness to Nature, Inclusion of Nature, Environmental Identity and Implicit Association with Nature." *European Psychologist* 16: 324-33.

Buckley, R. 2019. "Tourism Publications as Newly Tradeable Commodities: Academic Performance, Prestige, Power, Competition, Constraints and Consents." *Annals of Tourism Research* 74: 121-133.

Budeanu, A. 2007. "Sustainable Tourist Behavior – A Discussion of Opportunities for Change." *International Journal of Consumer Studies* 31: 499-508.

Buijs, A., T. Hovardas, H. Figari, P. Castro, P. Devine-Wright, A. Fischer, C. Mouro, and S. Selge. 2012. "Understanding People's Ideas on Natural Resource Management: Research on Social Representations of Nature." *Society and Natural Resources* 25 (11): 1167-1181.

Butler, R.W. 1999. "Sustainable Tourism: A State of the Art Review." *Tourism Geographies* 1 (1): 7-25.

Butler, R. 2019. Sustainable Tourism in Sensitive Environments: A Wolf in Sheep's Clothing? *Sustainability* 10(6): 1789.

Byrd E.T. 2007. "Stakeholders in Sustainable Tourism and Their Role: Applying Stakeholder Theory to Sustainable Development." *Tourism Review* 62: 6-13.

- Byrka, K., and F.G. Kaiser. 2015. "The Campbell Paradigm as a Conceptual Alternative to the Expectation of Hypocrisy in Contemporary Attitude Research." *Journal of Social Psychology* 155 (1): 12-29.
- Campbell, D.T. 1963. "Social Attitudes and Other Acquired Behavioral Dispositions." In *Psychology: A Study of a Science*, Vol. 6, edited by S. Kock, 94-172. New York, NY: McGraw-Hill.
- Carman, C.J. 1998. "Dimensions of Environmental Policy Support in the United States." *Social Science Quarterly* 79: 717-733.
- Carrus, G., P. Passafaro, and M. Bonnes. 2008. "Emotions, Habits and Rational Choices in Ecological Behaviors: The Case of Recycling and Use of Public Transportation." *Journal of Environmental Psychology* 28 (1): 51-62.
- Castro, P., M. Garrido, E. Reis, and J. Menezes. 2009. "Ambivalence and Conservation Behavior: An Exploratory Study on the Recycling of Metal Cans." *Journal of Environmental Psychology* 29: 24-33.
- Castro, P., and M.L. Lima. 2001. "Old and New Ideas about the Environment and Science an Exploratory Study." *Environment and Behavior* 33 (3): 400-423.
- Chen, A., and N. Peng. 2012. "Green Hotel Knowledge and Tourists' Staying Behavior". *Annals of Tourism Research* 39: 2203-2219.
- Chen, B., Y. Nakama, and Y. Zhang. 2017. "Traditional Village Forest Landscapes: Tourists' Attitudes and Preferences for Conservation." *Tourism Management* 59C: 652-662.
- Chen, M-F., and P-J. Tung. 2014. "Developing an Extended Theory of Planned Behavior Model to Predict Consumers' Intention to Visit Green Hotels." *International Journal of Hospitality Management* 36: 221-30.
- Chen, M.K. 2013. "The Effect of Language on Economic Behavior: Evidence from Savings Rates, Health Behaviors and Retirement Assets." *American Economic Review* 103 (2): 690-731.
- Cheung, S.F., D. K-S. Chan, and Z. S-Y Wong. 1999. "Reexamining the Theory of Planned Behavior in Understanding Wastepaper Recycling." *Environment and Behavior* 31: 587-612.
- Clarke, J. 1997. "A Framework of Approaches to Sustainable Tourism." *Journal of Sustainable Tourism* 5 (3): 224-33.
- Coglan, A., and A.K. Kim. 2012. "Interpretive Layering in Nature-based Tourism: A Simple Approach for Complex Attractions." *Journal of Ecotourism* 11(3): 173-187.
- Cohen, S.A., J.E.S. Higham, and C.T. Cavaliere. (2011) "Binge Flying. Behavioral Addiction and Climate Change." *Annals of Tourism Research* 38 (3): 1070 - 89.
- Conway, J.K., K. Keniston, and L. Marx. 1999. "The New Environmentalisms." In *Earth, Air, Fire, Water. Humanistic Studies of the Environment*, edited by J.K. Conway, K. Keniston, and L. Marx (Eds.). Boston, MA: University of Massachusetts Press.
- Corral-Verdugo, V., G. Carrus, M. Bonnes, G. Moser, and J.B.P. Sinha. 2008. "Environmental Beliefs and Endorsement of Sustainable Development Principles in Water Conservation: Toward a New Human Interdependence Paradigm Scale." *Environment and Behavior* 40 (5): 703-25.
- Costarelli, S., and P. Colloca. 2004. "The Effects of Attitudinal Ambivalence on Proenvironmental Behavioral Intentions." *Journal of Environmental Psychology* 24: 279-88.

- Craig, C.S., S.P. Douglas. 2006. "Beyond National Culture: Implications of Cultural Dynamics for Consumer Research." *International Marketing, Review* 23 (3): 322-42.
- Cruz, A.M. 2017. "The Relationship of Political Ideology and Party Affiliation with Environmental Concern: A Meta-Analysis." *Journal of Environmental Psychology* 53: 81-91.
- Curtin, P. A., and E. Rhodenbaugh. 2001. "Building the News Media Agenda on the Environment: a Comparison of Public Relations and Journalistic Sources." *Public Relations Review* 27: 179–195.
- Dalege, J., D. Borsboom, F. van Harreveld, and H.L.J. van der Maas. 2018. "The Attitudinal Entropy (AE) Framework as a General Theory of Individual Attitudes." *Psychological Inquiry* 29 (4): 175-193.
- Dalton, G.J., D.A., Lockington, and T.E. Baldock. 2008. "A Survey of Tourist Attitudes to Renewable Energy Supply in Australian Hotel Accommodation." *Renewable Energy* 33: 2174-85.
- Davis, J., and J.R. Green. 2009. "Interdependence with the Environment: Commitment, Interconnectedness and Environmental Behavior." *Journal of Environmental Psychology* 29: 173-80
- De Dominicis, S., G. Carrus, M. Bonaiuto, M. Bonnes, P. Perrucchini, and P. Passafaro. 2017. "Evaluating the Role of Protected Natural Areas for Environmental Education." *Applied Environmental Education and Communication* 16:3 171-85.
- De Dominicis, S., W.D. Crano, U. Ganucci Cancellieri, B. Mosco, M. Bonnes, Z. Hohman, and M. Bonaiuto. 2014. "Vested Interest and Environmental Risk Communication: Improving Willingness to Cope With Impending Disasters." *Journal of Applied Social Psychology* 44: 364-74.
- De Groot, J., and L. Steg. 2007. "General Beliefs and the Theory of Planned Behavior: The Role of Environmental Concern in the TPB." *Journal of Applied Social Psychology* 37 (8): 1817-36.
- Demarree, K.G., S.C., Wheeler, P. Briñol, and R.E. Petty. 2014. "Wanting Other Attitudes: Actual-Desired Attitude Discrepancies Predict Feelings of Ambivalence and Ambivalence Consequences." *Journal of Experimental Social Psychology* 53: 5-18.
- Deng, J., G.J. Walker, and G. Swinnerton. 2006. "A Comparison of Environmental Values and Attitudes between Chinese in Canada and Anglo-Canadians." *Environment and Behavior* 38 (1): 22-47.
- Devine-Wright, P., and S. Clayton. 2010. "Introduction to the Special Issue: Place, Identity and Environmental Behavior." *Journal of Environmental Psychology* 30 (3): 267-70.
- Dickinson, J.E., and J.A. Dickinson. 2006. "Local Transport and Social Representations: Challenging the Assumptions for Sustainable Tourism." *Journal of Sustainable Tourism* 14 (2): 192-208.
- Dietz, T., Stern, P.C., and G.A. Guagnano. 1998. "Social Structural and Social Psychological Bases of Environmental Concern." *Environment and Behavior* 30: 450-71.
- Dolnicar S. 2006. "Are We Drawing the Right Conclusions? The Dangers of Response Sets and Scale Assumptions in Empirical Tourism Research." *Tourism Analysis*, 11 (3): 2006.
- Dolnicar S. 2018. "A Reflection on Survey Research in Hospitality." *International Journal of Contemporary Hospitality Management* 30 (11): 3412-3422.
- Dolnicar, S., G.I. Crouch, and P. Long. 2008. "Environment-Friendly Tourists: What Do We Really Know About Them?" *Journal of Sustainable Tourism* 16 (2): 197-210.

- Dunlap, R.E., and K.D. Van Liere. 1978. "The 'New Environmental Paradigm'." *The Journal of Environmental Education* 9: 10-19.
- Dunlap, R.E., K.D. Van Liere, A.G. Mertig, and R.E. Jones. 2000. "Measuring Endorsement of the New Environmental Paradigm: A Revised NEP Scale." *Journal of Social Issues* 56: 425-42.
- Eckersley R. 1989. "Green Politics and the New Class. Selfishness or Virtue?" *Political Studies*: 37 205-223.
- Eom, K., H.S. Kim, D.K. Sherman, and K. Ishii. 2016. "Cultural Variability in the Link between Environmental Concern and Support for Environmental Action." *Psychological Science* 27 (10): 1331-1339.
- Fairweather, J.R., C. Maslin, and D.G. Simmons. 2005. "Environmental Values and Response to Ecolabels among International Visitors to New Zealand" *Journal of Sustainable Tourism* 13 (1): 82-98.
- Falk, J.H., R. Ballantyne, J. Packer, and P. Benckendorff. 2012. "Travel and Learning: A Neglected Tourism Research Area." *Annals of Tourism Research* 39 (2): 908-927.
- Fazio, R.H., and M.A. Olson. 2003. "Implicit Measures in Social Cognition Research: Their Meaning and Use." *Annual Review of Psychology* 54: 297-327.
- Fazio, R.H., and R.E. Petty. 2008. "Attitudes: Their Structure, Function and Consequences." Psychology Press, New York, NY.
- Fazio, R.H., and M.P. Zanna. 1978. "Attitudinal Qualities Relating to the Strength of the Attitude-Behaviour Relationship. *Journal of Experimental Social Psychology* 14: 398-408.
- Felix, R., C. Hinsch, P.A. Rauschnabel, and B. B. Schlegelmich. 2018. "Religiousness and Environmental Concern: A Multilevel and Multi-Country Analysis of the Role of Life Satisfaction and Indulgence." *Journal of Business Research* 91: 304-312.
- Fennell, D.A. 2019. "Sustainability Ethics in Tourism: The Imperative next Imperative." *Tourism Recreation Research* 44 (1): 117-130.
- Fishbein, M. 1967. "Attitude and the Prediction of Behavior." In *Readings in Attitude Theory and Measurement*, edited by M. Fishbein, 477-492. New York: Wiley.
- Fishbein, M., and I. Ajzen. 1974. "Attitude towards Objects as Predictors of Single and Multiple Behavioral Criteria." *Psychological Review* 81: 59-74.
- Floyd, M.F., H. Jang, and F.P. Noe. 1997. "The Relationship between Environmental Concern and Acceptability of Environmental Impacts among Visitors to Two U.S. National Park Settings." *Journal of Environmental Management* 51: 391-412.
- Gao, Y.(L.), A.S. Mattila, and S. Lee. 2016. "A Meta-Analysis of Behavioral Intentions for Environment-Friendly Initiatives in Hospitality Research". *International Journal of Hospitality Management* 54: 107-115.
- Geiger, N., J.K. Swim, and J. Fraser. 2017. "Creating a Climate for Change: Interventions, Efficacy and Public Discussion about Climate Change." *Journal of Environmental Psychology* 51: 104-16.
- Gerrard, M., F.X. Gibbons, A.E. Houlihan, M.L. Stock, and E.A. Pomery. 2008. "A Dual-Process Approach to Health Risk Decision Making: The Prototype Willingness Model." *Developmental Review* 28 (1): 29-61.

- Gifford, R. 2011. "The Dragons of Inaction: Psychological Barriers that Limit Climate Change Mitigation and Adaptation." *American Psychologist* 66 (4): 290-302.
- Gifford, R., and A. Nilsson .2014. "Personal and Social Factors that Influence Pro-environmental Concern and Behavior: A Review." *International Journal of Psychology* 49 (3): 141-157.
- Gifford, R., et al. 2009. "Temporal Pessimism and Spatial Optimism in Environmental Assessments: An 18-Nation Study." *Journal of Environmental Psychology* 29: 1-19.
- Guadagno, R.E., and R.B. Cialdini. 2010. "Preference for Consistency and Social Influence: A Review of Current Research Findings." *Social Influence* 5 (3): 152-63.
- Guth, J.L., J.C. Green, L. Kellstedt, and C.W. Smidt. 1995. "Faith and the Environment: Religious Beliefs and Attitudes on Environmental Policy." *American Journal of Political Science* 39 (2): 364-82.
- Han, H. 2014. "The Norm Activation Model and Theory-Broadening: Individuals' Decision-Making on Environmentally-Responsible Convention Attendance." *Journal of Environmental Psychology* 40: 462-71.
- Han, H. 2015. "Travelers' Pro-Environmental Behavior in a Green Lodging Context: Converging Value-Belief-Norm Theory and the Theory of Planned Behavior." *Tourism Management* 47: 164-77.
- Han, H., L.T.J. Hsu, J.-S. Lee. 2009. "Empirical Investigation of the Roles of Attitudes toward Green Behaviors, overall Image, Gender and Age in Hotel Customers' Eco-Friendly Decision-Making Process." *International Journal of Hospitality Management* 28 (4): 519-28.
- Han, H., L.T.J. Hsu, J.-S. Lee, and C. Sheu. 2011. "Are Lodging Customers Ready to Go Green? An Examination of Attitudes, Demographics and Eco-Friendly Intentions." *International Journal of Hospitality Management* 30 (2): 345-55.
- Han, H., L.T.J. Hsu, and C. Sheu. 2010. "Application of the Theory of Planned Behavior to Green Hotel Choice: Testing the Effect of Environmental Friendly Activities." *Tourism Management* 31: 325-34.
- Han, H., J. Hwang, J. Kim, and H. Jung. 2015. "Guests' Pro-environmental Decision-Making Process: Broadening the Norm Activation Framework in a Lodging Context." *International Journal of Hospitality Management* 47: 96-107.
- Han, H., J. Hwang, and S. Lee. 2017. "Cognitive, Affective, Normative and Moral Triggers of Sustainable Intentions among Convention-Goers." *Journal of Environmental Psychology* 51: 1-13.
- Han, H., J. Hwang, S. Lee, and J. Kim. 2019. "Word-of-Mouth, Buying, and Sacrifice Intentions for Eco-cruises: Exploring the Function of Norm Activation and Value-Attitude-Behavior." *Tourism Management* 70: 430-443.
- Han, H., and S.S. Hyun. 2017a. "Drivers of Customer Decision to Visit an Environmentally Responsible Museum: Merging the Theory of Planned Behavior and Norm Activation Theory." *Journal of Travel and Tourism Marketing* 34 (9): 1155-68.
- Han, H., and S.S. Hyun. 2017b. "Fostering Customers' Pro-Environmental Behavior at a Museum." *Journal of Sustainable Tourism* 25: 1240-56.
- Han, H., M. Jae, and J. Hwang. 2016. "Cruise Travelers' Environmentally Responsible Decision-Making: An integrative Framework of Goal-Directed Behavior and Norm Activation Process." *International Journal of Hospitality Management* 53: 94-105.

- Han, H., W. Kim, and K. Kiatkawsin. 2017. "Emerging Youth Tourism: Fostering Young Travelers' Conservation Intentions." *Journal of Travel and Tourism Marketing* 34 (7): 905-18.
- Han, H., and Y. Kim. 2010. "An Investigation of Green Hotel Customers' Decision Formation: Developing an Extended Model of the Theory of Planned Behavior." *International Journal of Hospitality Management* 29: 659-668.
- Han, H., W. Kim, and S. Lee. 2018. "Stimulating Visitors' Goal-Directed Behavior for Environmentally Responsible Museums: Testing the Role of Moderator Variables." *Journal of Destination Marketing and Management* 8: 290-300.
- Han, H., M.J. Lee, B-L. Chua, and W. Kim. 2019. "Triggers of Traveler Willingness to Use and Recommend Eco-friendly Airplanes." *Journal of Hospitality and Tourism Management* 38: 91-101.
- Han, H., M.J. Lee, and W. Kim. 2018. "Promoting Towel Reuse Behavior in Guests: A Water Conservation Management and Environmental Policy in the Hotel Industry." *Business Strategy and the Environment* 27(8): 1302-1312.
- Han, H., B. Meng, and W. Kim. 2017. "Emerging Bicycle Tourism and the Theory of Planned Behavior." *Journal of Sustainable Tourism* 25: 292-309.
- Han, H., H.G.T. Olya, J.(J.) Kim, and W. Kim. 2018. "Model of Sustainable Behavior: Assessing Cognitive, Emotional and Normative Influence in the Cruise Context." *Business Strategy and the Environment* 27(7): 789-800.
- Han, H., and H.J. Yoon. 2015. "Hotel Customers' Environmentally Responsible Behavioral Intention: Impact of Key Constructs on Decision in Green Consumerism." *International Journal of Hospitality Management* 45: 22-33.
- Han, H., J. Yu, and W. Kim. 2018. "Youth Travelers and Waste Reduction Behaviors while Traveling to Tourist Destinations." *Journal of Travel & Tourism Marketing* 35(9): 1119-1131.
- Hansen, A. 1991. "The Media and the Social Construction of the Environment." *Media, Culture, and Society* 13: 443-458.
- Hardy A.L., and R.J.S. Beeton. 2001. "Sustainable Tourism or Maintainable Tourism: Managing Resources for More than Average Outcomes." *Journal of Sustainable Tourism* 9: 168-192.
- Hares, A., J. Dickinson, and K. Wilkes. 2010. "Climate Change and the air Travel Decisions of UK Tourists." *Journal of Transport Geography* 18: 466-73.
- Hatfield, J., and R.F.S. Job. 2001. "Optimism Bias about Environmental Degradation: The Role of the Range of Impact of Precautions." *Journal of Environmental Psychology* 21: 17-30.
- Hepler, J., and D. Albarracín. 2013. "Attitudes without Objects: Evidence for a Dispositional Attitude, its Measurement and its Consequences." *Journal of Personality and Social Psychology* 104 (6): 1060-76.
- Hepler, J., and D. Albarracín. 2014. "Liking More Means Doing More: Dispositional Attitudes Predict Patterns of General Action." *Social Psychology* 45 (5): 391-398.
- Higgins-Desbiolles, F. 2018. "Sustainable Tourism: Sustaining Tourism or Something More?" *Tourism Management Perspectives* 25: 157-160.

- Higham, J.E.S., and S.A. Cohen. 2011. "Canary in the Coalmine: Norwegian Attitudes towards Climate Change and Extreme Long-Haul Air Travel to Aotearoa/New Zealand." *Tourism Management* 32: 98-105.
- Hill, J., W. Woodland, and G. Gough. 2007. "Can Visitor Satisfaction and Knowledge about Tropical Rainforests be Enhanced through Biodiversity Interpretation, and does this Promote a Positive Attitude Towards Ecosystem Conservation?" *Journal of Ecotourism* 6(1): 75-85.
- Hibbert, J.F., J.E. Dickinson, S. Gössling, and S. Curtin. 2013. "Identity and Tourism Mobility: An Exploration of the Attitude-Behavior Gap." *Journal of Sustainable Tourism* 21:7 999-1016.
- Hodgkinson, S.P., and J.M. Innes. 2001. "The Attitudinal Influence of Career Orientation in 1<sup>st</sup>-Year University Students: Environmental Attitudes as a Function of Degree Choice." *Journal of Environmental Education* 32 (3): 37-40.
- Holbert, R. L., N. Kwak, and D.V. Shah. 2003. "Environmental Concern, Patterns of Television Viewing, and Pro-environmental Behaviors: Integrating Models of Media Consumption and Effects." *Journal of Broadcasting and Electronic Media* 47:2 177-196.
- Huang, Y-C., and C-H. Liu. 2017. "Moderating and Mediating Roles of Environmental Concern and EcoTourism Experience for Revisit intention." *International Journal of Contemporary Hospitality Management* 29 (7): 1854-72.
- Huffman, A.H., B.R. Van Der Werff, J.B. Henning, and K. Watrous-Rodriguez. 2014. "When Do Recycling Attitudes Predict Recycling? An investigation of Self-Reported versus Observed Behavior." *Journal of Environmental Psychology* 38: 262-70.
- Hughes, K., J. Packer, and R. Ballantyne. 2011. "Using Post-Visit Action Resources to Support Family Conservation Learning Following a Wildlife Tourism Experience." *Environmental Education Research* 17 (3): 307-28.
- Hughes, M., and A. Morrison Saunders. 2005. "Interpretation, Activity Participation, and Environmental Attitudes of Visitors to Penguin Island, Western Australia." *Society and Natural Resources* 18(7): 611-624.
- Hultman, M., A. Kazeminia, and V. Ghasemi. 2015. "Intention to Visit and Willingness to Pay Premium for EcoTourism: The Impact of Attitude, Materialism and Motivation." *Journal of Business Research* 68: 1854-161.
- Hunter C. 1997. "Sustainable Tourism as an Adaptive Paradigm". *Annals of Tourism Research* 24: 850-867.
- Hurst, M., H. Dittmar, R. Bond, and T. Kasser. 2013. "The Relationship between Materialistic Values and Environmental Attitudes and Behaviors: A Meta-Analysis." *Journal of Environmental Psychology* 36: 257-269.
- Iso-Ahola, S.E. 1982. "Toward a Social Psychological Theory of Tourism Motivation: A Rejoinder." *Annals of Tourism Research* 9 (2): 256-62.
- Jurowski, C., M. Uysal, R.D. Williams, and F.P. Noe. 1995. "An Examination of Preferences and Evaluations of Visitors Based on Environmental Attitudes: Biscayne Bay National Park." *Journal of Sustainable Tourism* 3: 73-86.

- Juvan, E., and S. Dolnicar. 2014a. "The Attitude Behavior Gap in Sustainable Tourism." *Annals of Tourism Research* 48: 76-95.
- Juvan, E., and S. Dolnicar. 2014b. "Can Tourists Easily Choose a Low Carbon Footprint Vacation?" *Journal of Sustainable Tourism* 22 (2): 175-94.
- Juvan, E., and S. Dolnicar. 2017. "Drivers of Pro-Environmental Tourist Behaviors are not Universal." *Journal of Cleaner Production* 166: 879-90.
- Kaiser, F.G. 2006. "A Moral Extension of the Theory of Planned Behavior: Norms and Anticipated Feelings of Regret in Conservationism." *Personality and Individual Differences* 41: 71-81.
- Kaiser, F.G., A. Brügger, T. Hartig, F.X. Bogner, and H. Gutscher. 2014. "Appreciation of Nature and Appreciation of Environmental Protection: How Stable are these Attitudes and which Comes First?" *Revue Européenne de Psychologie Appliquée* 64: 269-77.
- Kaiser, F.G., K. Byrka, and T. Hartig. 2010. "Reviving Campbell's Paradigm for Attitude Research." *Personality and Social Psychology Review* 14 (4): 351-67.
- Kaiser, F.G., and U. Fuhrer. 2003. "Ecological Behavior's Dependency on Different forms of Knowledge." *Applied Psychology: An International Review* 52 (4): 598-13.
- Kaiser, F.G., and H. Gutscher. 2003. "The Proposition of a General Version of the Theory of Planned Behavior: Predicting Ecological Behavior." *Journal of Applied Social Psychology* 33: 586-603.
- Kaiser, F.G., T. Hartig, A. Brügger, and C. Duvier. 2013. "Environmental Protection and Nature as Distinct Attitudinal Objects: An Application of the Campbell Paradigm." *Environment and Behavior* 45: 369-98.
- Kaiser, F., G., G. Hübner, and F.X. Bogner. 2005. "Contrasting the Theory of Planned Behavior with the Value-Belief-Norm Model in Explaining Conservation Behavior." *Journal of Applied Social Psychology* 35 (10): 2150-70.
- Kaiser, F.G., B. Oerke, and F.X. Bogner. 2007. "Behavior-Based Environmental Attitude: Development of an Instrument for Adolescents." *Journal of Environmental Psychology* 27 (3): 242-51.
- Kaiser, F.G., and P.W. Schultz. 2009. "The Attitude Behavior Relationship: A Test of three Models of the Moderating Role of Behavioral Difficulty." *Journal of Applied Social Psychology* 39 (1): 186-207.
- Kaiser, F.G., P.W. Schultz, and H. Scheuthle. 2007. "The Theory of Planned Behavior without Compatibility? Beyond Method Bias and Past Trivial Associations." *Journal of Applied Social Psychology* 37 (7): 1522-1544.
- Kaiser, F.G., and M. Wilson. 2004. "Goal-Directed Conservation Behavior: The Specific Composition of a General Performance." *Personality and Individual Differences* 36 (7): 1531-44.
- Kang, K.H., L. Stein, C.Y. Heo, and S. Lee. 2012. "Consumers' Willingness to Pay for Green Initiatives of the Hotel Industry." *International Journal of Hospitality Management*, 31, 564-572.
- Kazeminia, A., M. Hultman, and R. Mostaghel. 2016. "Why Pay More for Sustainable Services? The Case of EcoTourism." *Journal of Business Research* 69: 4992-97.
- Kellert, S.R. 1997. "Kinship to Mastery. Biophilia in Human Evolution and Development." Island Press, Washington, DC.



- Khoo-Lattimore, C., and B. Prideaux. 2013. "ZMET: A Psychological Approach to Understanding Unsustainable Tourism Mobility." *Journal of Sustainable Tourism* 21(7): 1036-1048.
- Kiatkawsin, K., and H. Han. 2017. "Young Travelers' Intention to Behave Pro-environmentally: Merging the Value-Belief-Norm Theory and the Expectancy Theory." *Tourism Management* 59: 76-88.
- Kibbe, A., F. Bogner, and F.G. Kaiser. 2014. "Exploitative vs Appreciative Use of Nature – Two Interpretations of Utilization and their Relevance for Environmental Education." *Studies in Educational Evaluation* 41: 106-12.
- Kim, A.K.J., D. Airey, and E. Szivas. 2011. "The Multiple Assessment of Interpretation Effectiveness: Promoting Visitors' Environmental Attitudes and Behavior." *Journal of Travel Research* 50 (3): 321-34.
- Kim, D. 2011. "Are We Really Measuring what We Think We Are Measuring? Assessing Attitudes towards Destinations with the Implicit Association Test." *International Journal of Tourism Research* 13 (5): 468-81.
- Kim, D., and Z. Chen. 2011. "Are People Aware of their Attitudes toward Destination? Understanding the Implicit Association Test in Tourism Research." *Tourism Analysis* 15: 299-313.
- Kim, H., M. Borges, and J. Chon. 2006. "Impacts of Environmental Values on Tourism Motivation." *Tourism Management* 27 (5): 957-67.
- Kim, S., and V. Filimonau. 2017. "On Linguistic Relativity and Pro-Environmental Attitudes in Tourism." *Tourism Management* 63: 158-69.
- Kim, Y., and H. Han. 2010. "Intention to Pay Conventional-Hotel Prices at a Green Hotel – A Modification of the Theory of Planned Behavior." *Journal of Sustainable Tourism* 18 (8): 997-1014.
- Klineberg, S.L., M. Mckeever, and B. Rothenbach. 1998. "Demographic Predictors of Environmental Concern: It Makes a Difference how It's Measured." *Social Science Quarterly* 79 (4): 734-53.
- Ko J.T.G. 2001. "Assessing Progress of Tourism Sustainability." *Annals of Tourism Research* 28: 817-820.
- Kredentser M.A., R.L. Fabrigar, S.M. Smith, and K. Fulton. 2012. "Following What People Think We Should Do versus What People Actually Do: Elaboration as a Moderator of The Impact of Descriptive and Injunctive Norms." *Social Psychological and Personality Science* 3: 341-47
- Landry, N., R. Gifford, T.L. Milfont, A. Weeks, and S. Arnocky. 2018. "Learned Helplessness Moderates the Relationship Between Environmental Concern and Behavior." *Journal of Environmental Psychology* 55: 18-22.
- Lanzini, P., and J. Thøgersen. 2014. "Behavioral Spillover in the Environmental Domain: An Intervention Study." *Journal of Environmental Psychology* 40 381-90.
- Lee, T.H., and F-H. Jan. 2018. "Eco-Tourism Behavior of Nature-Based Tourists: An Integrative Framework." *Journal of Travel Research* 57 (6): 792-810.
- Lee, W.H., and G. Moscardo. 2005. "Understanding the Impact of EcoTourism Resort Experiences on Tourists' Environmental Attitudes and Behavioral Intentions." *Journal of Sustainable Tourism* 13 (6): 546-65.

- Leone, L., M. Perugini, and A.P. Ercolani. 2004. "Studying, Practicing and Mastering: A Test of the Model of Goal-Directed Behavior (MGB) in the Software Learning Domain." *Journal of Applied Social Psychology* 34 (9): 1945-76.
- Liefländer, A.K., F. X. Bogner, A. Kibbe, and F.G. Kaiser. 2015. "Evaluating Environmental Knowledge Dimension Convergence to Assess Education Programme Effectiveness." *International Journal of Science Education* 37 (4): 684-702.
- Lita, R.P., S. Surya, M. Ma'ruf, and L. Syahrul. 2014. "Green Attitude and Behavior of Local Tourists towards Hotels and Restaurants in West Sumatra, Indonesia". *Procedia Environmental Sciences* 20: 261-270.
- Little, P.E. 1999. "Environments and Environmentalisms in Anthropological Research: Facing a New Millennium." *Annual Review of Anthropology* 28: 253-84.
- Lu, A.C.C., D. Gursoy, and G. Del Chiappa. 2016. "The Influence of Materialism on Ecotourism Attitudes and Behaviors." *Journal of Travel Research* 55 (2): 176-89.
- Luo, Y., and J. Deng. 2008. "The New Environmental Paradigm and Nature Based Tourism Motivation." *Journal of Travel Research* 46: 392-402.
- Luttrell, A., R.E. Petty, P. Briñol, and B.C. Wagner. 2016. "Making it Moral: Merely Labelling an Attitude as Moral Increases its Strength." *Journal of Experimental Social Psychology* 65: 82-93.
- Luzar, E.J., A. Diagne, C. Gan, and B.R. Henning. 1995. "Evaluating Nature-Based Tourism Using the New Environmental Paradigm." *Journal of Agricultural and Applied Economics* 27: 1-8.
- Luzar, E.J., A. Diagne, C. Gan, and B.R. Henning. 1998. "Profiling the Nature-Based Tourist: A Multinomial Logit Approach." *Journal of Travel Research* 37: 48-56.
- Manaktola, K., and V. Jauhari. 2007. "Exploring Consumer Attitude and Behavior towards Green Practices in the Lodging Industry in India." *International Journal of Contemporary Hospitality Management* 19 (5): 364-377.
- Mannetti, L., A. Pierro, and S. Livi. 2004. "Recycling: Planned and Self-expressive Behavior." *Journal of Environmental Psychology* 24 (2): 227-236.
- Margetts, E.A., and Y. Kashima. 2017. "Spillover between Pro-Environmental Behaviors: The Role of Resources and Perceived Similarity." *Journal of Environmental Psychology* 49: 30-42.
- Martin, C., and S. Czellar. 2017. "Where do Biospheric Values Come From? A Connectedness to Nature Perspective." *Journal of Environmental Psychology* 52: 56-68.
- Mayer, F.S., and C.M. Franz. 2004. "The Connectedness to Nature Scale: A Measure of Individuals' Feeling in Community with Nature." *Journal of Environmental Psychology* 24: 503-15.
- McCool, S., R. Butler, R. Buckley, D. Weaver, and B. Wheeler. 2013. "Is Concept of Sustainability Utopian: Ideally Perfect but Impracticable?" *Tourism Recreation Research* 38 (2): 213-242.
- Mcdonald, S., C.J. Oates, P.J. Alevizou, C.W. Young, and K. Hwang. 2012. "Individual Strategies for Sustainable Consumption." *Journal of Marketing Management* 28: 445-68.
- Mckercher, B., S.F.H. Pang, and B. Prideaux. 2011. "Do Gender and Nationality Affect Attitudes towards Tourism and the Environment?" *International Journal of Tourism Research* 13: 266-300.

- Mehmetoglu, M. 2010. "Factors Influencing the Willingness to Behave Environmentally Friendly at Home and Holiday Settings." *Scandinavian Journal of Hospitality and Tourism* 10: 430-47.
- Meleddu, M., and M. Pulina. 2016. "Evaluation of Individuals' Intention to Pay a Premium Price for Ecotourism: An Exploratory Study." *Journal of Behavioral and Experimental Economics* 65: 67-78.
- Meng, B., and K. Choi. 2016a. "The Role of Authenticity in Forming Slow Tourists' Intentions: Developing an Extended Model of Goal-Directed Behavior." *Tourism Management* 57: 397-10.
- Meng, B., and K. Choi. 2016b. "Extending the theory of planned behavior: testing the effects of authentic perception and environmental concerns on the slow-tourist decision-making." *Current Issues in Tourism* 19(6): 528-544.
- Meng, B., and H. Han. 2016. "Effect of Environmental Perceptions on Bicycle Travellers' Decision-Making Process: Developing an Extended Model of Goal-Directed Behavior." *Asian Pacific Journal of Tourism Research* 21: 1184-97.
- Milfont, T.L., and J. Duckitt. 2010. "The Environmental Attitudes Inventory: A Valid and Reliable Measure to Assess the Structure of Environmental Attitudes." *Journal of Environmental Psychology* 30: 80-94.
- Milfont, T.L., J. Duckitt, and C. Wagner. 2010a. "A Cross-Cultural Test of the Value-Attitude-Behavior Hierarchy." *Journal of Applied Social Psychology* 40 (11): 2791-2813.
- Milfont, T.L., J. Duckitt, and C. Wagner. 2010b. "The Higher Order Structure of Environmental Attitudes: A Cross-Cultural Examination." *Interamerican Journal of Psychology* 44 (2): 263-73.
- Miller, J.R. 2005. "Biodiversity Conservation and the Extinction of Experience." *Trends in Ecology and Evolution* 20 (8): 430 – 34.
- Montoya, R.M., R.S. Horton, J.L. Vevea, M. Citkowicz, and E.A. Lauber. 2017. "A Re-Examination of the Mere Exposure Effect: The Influence of Repeated Exposure on Recognition, Familiarity and Liking." *Psychological Bulletin* 143 (5): 459-98.
- Morren, M., and A. Grinstein. 2016. "Explaining Environmental Behavior across Borders: A Meta-Analysis." *Journal of Environmental Psychology* 47: 91-106.
- Moscovici, S., M. Zavalloni. 1969. "The Group as a Polarizer of Attitudes." *Journal of Personality and Social Psychology* 12:2 125-135.
- Newcomb, M.T. 1943. "Personality and Social Change: Attitude Formation in a Student Community." Ft Worth TX, US: Dryden Press.
- Nimri, R., A. Patiar, and S. Kensbock. 2017. "A Green Step Forward: Eliciting Consumers' Purchasing Decisions Regarding Green Hotel Accommodation in Australia." *Journal of Hospitality and Tourism Management* 33: 43-50.
- Oates, C.J., and S. McDonald. 2014. "The Researcher Role in the Attitude-Behavior Gap." *Annals of Tourism Research* 46: 168-170.
- Oleksy, T., and A. Wnuk. 2016. "Augmented Places: An Impact of Embodied Historical Experience on Attitudes towards Places." *Computers in Human Behavior* 57: 11-16.
- Olsson, D., and N. Gericke. 2017. "The Effect of Gender on Students' Sustainability Consciousness: A Nationwide Swedish Study." *The Journal of Environmental Education* 48 (5): 357-370

- Olya, H., P. Bagheri, and M. Tumer .2019. "Decoding Behavioral Responses of Green Hotel Guests: A Deeper Insight into the Application of the Theory of Planned Behavior." *International Journal of Contemporary Hospitality Management*, in press. DOI 10.1108/IJCHM-05-2018-0374.
- Orams, M.B. 1997. "The Effectiveness of Environmental Education: Can We Turn Tourists into 'Greenies'?" *Progress in Tourism and Hospitality Research* 3: 295-306.
- Otto, S., and F.G. Kaiser. 2014. "Ecological Behavior across the Lifespan: Why Environmentalism Increases as People Grow Older." *Journal of Environmental Psychology* 40: 331-338.
- Packer, J., and R. Ballantyne. 2016. "Conceptualizing the Visitor Experience: A Review of Literature and Development of Multifaceted Model." *Visitor Studies* 19 (2): 128-43.
- Park, E., S. Lee, C-K. Lee, J.S. Kim, and N-J. Kim. 2018. "An Integrated Model of Travellers' Pro-environmental Decision-making Process: The Role of the New Environmental Paradigm". *Asia Pacific Journal of Tourism Research* 23 (10): 935-948.
- Park, E., S. Lee, and D.J. Peters. 2017. "Iowa Wetlands Outdoor Recreation Visitors' Decision-Making Process: and Extended Model of Goal-Directed Behavior." *Journal of Outdoor Recreation and Tourism* 17: 64-76.
- Passafaro, P., C. Cini, V. Diaco, O. Schirru, A. Boison, V. Gasparri, and S. Giannantoni. 2015a. "Understanding Preferences for Nature-Based and Sustainable Tourism: The Role of Personal Values and General and Specific Environmental Attitudes." *Current Research in Psychology* 6 (1): 1-14.
- Passafaro, P., F. Cini, L. Boi, M. D'Angelo, M.S. Heering, L. Luchetti, A. Mancini, V. Martemucci, G. Pacella, F. Patrizi, F. Sassu, and M. Triolo. 2015b. "The Sustainable Tourist: Values, Attitudes and Personality." *Tourism and Hospitality Research* 15 (4): 225-39.
- Passafaro, P., A. Rimano, M.P. Piccini, R. Metastasio, V. Gambardella, G. Gullace, and C. Lettieri. 2014. "The Bicycle and the City: Desires and Emotions, Versus Attitudes, Habits and Norms." *Journal of Environmental Psychology* 38C: 76-83.
- Pearce, P.L. 1987. "Psychological Studies of Tourist Behavior and Experience." *Australian Journal of Psychology* 39: 173-182.
- Pearce, P., and J. Packer. 2013. "Minds on the Move: New Links from Psychology to Tourism." *Annals of Tourism Research* 40 (1): 386-411.
- Perkins, H.E. 2010. "Measuring Love and Care for Nature." *Journal of Environmental Psychology* 30 (4): 455-63.
- Perugini, M., and R.P. Bagozzi. 2001. "The Role of Desires and Anticipated Emotions in Goal-Directed Behaviors: Broadening and Deepening the Theory of Planned Behavior." *British Journal of Social Psychology* 40 (1): 79-98
- Perugini, M., and R.P. Bagozzi. 2004. "The Distinction between Desires and intentions." *European Journal of Social Psychology* 34 (1): 69-84.
- Petty, R.E., and J.A. Krosnic. 1995. *Attitude Strength: Antecedents and Consequences*, Vol 4. Hillsdale, NJ: Erlbaum.
- Pienaar, E.F., D.K. Lew, and K. Wallmo. 2015. "The Importance of Survey Content: Testing for the Context Dependency of the New Ecological Paradigm Scale." *Social Science Research* 51: 338-49.

- Pillaud, V., N. Cavazza, and F. Butera. 2013. "The Social Value of Being Ambivalent: Self-Presentational Concerns in the Expression of Attitudinal Ambivalence." *Personality and Social Psychology Bulletin* 39: 1139-51.
- Powell, R.B., and S.H. Ham. 2008. "Can Ecotourism Interpretation Really Lead to Pro-Conservation Knowledge, Attitudes and Behavior? Evidence from the Galapagos Islands." *Journal of Sustainable Tourism* 16(4): 467-489.
- Pratkanis, A.R. 1989. "The Cognitive Representation of Attitudes." In *The Third Ohio State University, Vol. on Attitudes and Persuasion. Attitude Structure and Function*, edited by A.R. Pratkanis, S.J., Breckler, and A.G., Greenwald, 71-98. Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
- Prillwitz, J., and S. Barr 2011. "Moving Towards Sustainability? Mobility Styles, Attitudes, and Individual Travel Behavior". *Journal of Transport Geography* 19: 1590-1600.
- Rappaport, R.A. 1979. *Ecology, Meaning and Religion*. Berkeley, CA: North Atlantic.
- Ratliff, K.A., J.L. Howell, and L. Redford. 2017. "Attitudes Toward the Prototypical Environmentalist Predict Environmentally Friendly Behavior." *Journal of Environmental Psychology* 51: 132-40.
- Rauwald, K.S., and C.F. Moore. 2002. "Environmental Attitudes as Predictors of Policy Support Across Three Countries." *Environment and Behavior* 34 (6): 709-39.
- Redclift, M. 1987. *Sustainable Development: Exploring the Contradictions*. London, UK: Routledge.
- Rocklage, M.D., and Fazio, R.H. 2014. "Individual Differences in Valence Weighting: When, how and why They Matter." *Journal of Experimental and Social Psychology* 50 (1): 144-157.
- Roczen, N., C. Duvier, F.X. Bogner, and F.G. Kaiser. 2012. "The Search for Potential Origins of a Favorable Attitude toward Nature." *Psychology* 3 (3): 341-52.
- Rosch, E., E. Thompson, and F.J. Varela. 1992. *The Embodied Mind: Cognitive Science and Human Experience*. MIT Press.
- Rosenberg, M.J. and C.I. Hovland. 1960. "Cognitive, Affective and Behavioral Components of Attitudes." In *Attitude Organization and Change: an Analysis of Consistency among Attitude Components*, edited by M.J. Rosenberg, C.I. Hovland., W.J. McGuire, R.P. Abelson, and J.W. Brehm. New Haven, CT: Yale University Press.
- Russell, D.W., and C.A. Russel. 2010. "Experiential Reciprocity: The Role of Direct Experience in Value Perceptions." *Journal of Travel and Tourism Marketing* 27: 624-34.
- Sarigollu, E. 2009. "A Cross Country Exploration of Environmental Attitudes." *Environment and Behavior* 41 (3): 365-386.
- Sarrica, M., S., Brondi, P., Cottone, and B.M. Mazzara. 2016. "One, No One, One Hundred Thousand Energy Transitions in Europe: The Quest for a Cultural Approach." *Energy Research and Social Science* 13 (1):-14.
- Schuldt, J.P., S.H. Konrath, and N. Schwarz. 2011. "'Global Warming' or 'Climate Change'?" *Public Opinion Quarterly* 75 (1): 115-24.
- Schultz, P.W., and L.C. Zelezny. 1999. "Values as Predictors of Environmental Attitudes: Evidence for Consistency across 14 Countries." *Journal of Environmental Psychology* 19 (3): 255-65.

- Schwartz, S.H. 1977. "Normative Influence on Children." *Advances in Experimental Social Psychology* 10: 221-79.
- Shen, J., and T. Saijo. 2008. "Reexamining the Relations between Socio-Demographic Characteristics and Individual Environmental Concern: Evidence from Shanghai Data." *Journal of Environmental Psychology* 28 (1): 42- 50.
- Shin, Y.H., J. Im, S.E. Jung, and K. Severt. 2018. "The Theory of Planned Behavior and the Norm Activation Model Approach to Consumer Behavior Regarding Organic Menus." *International Journal of Hospitality Management* 69: 21-29.
- Sivacek, J., and W.D. Crano. 1982. "Vested Interest as a Moderator of Attitude-Behavior Consistency." *Journal of Personality and Social Psychology* 43: 210-21.
- Skavronskaya, L., N. Scott, B. Moyle, D. Le, A. Hadinejad, R. Zhang, S. Gardiner, A. Coghlan, and A. Shakeela. 2017. "Cognitive Psychology and Tourism Research: State of the Art." *Tourism Review* 72(2): 221-237.
- Song, H., and D.R. Ewoldsen. 2015. "Metacognitive Model of Ambivalence: The Role of Multiple Beliefs and Metacognitions in Creating Attitude Ambivalence." *Communication Theory* 25 (1): 23-45.
- Song, H.J., C-K. Lee, S.K. Kang, and S. Boo. 2012. "The Effect of Environmentally Friendly Perceptions on Festival Visitors' Decision-Making Process Using an Extended Model of Goal-Directed Behavior." *Tourism Management* 33: 1417-1428.
- Song, H., G-J. You, Y. Reisinger, C-K. Lee, and S-K. Lee. 2014. "Behavioral Intention of Visitors to an Oriental Medicine Festival: An Extended Model of Goal Directed Behavior." *Tourism Management* 42: 101-13.
- Spence, A., W., Poortinga, and N. Pidgeon. 2012. "The Psychological Distance of Climate Change." *Risk Analysis* 32 (6): 957 - 72.
- Staats, H. 2003. "Understanding Pro-Environmental Attitudes and Behavior. An Analysis and Review of Research Based on the Theory of Planned Behavior." In *Psychological Theories for Environmental Issues*, edited by M. Bonnes, T. Lee, and M. Bonaiuto. Aldershot, UK: Ashgate Publishing Ltd. (P.P. 171-201.
- Stanley, S.K., M.S. Wilson, and T.L. Milfont. 2017. "Exploring Short-Term Longitudinal Effects of Right-Wing Authoritarianism and Social Dominance on Environmentalism." *Personality and Individual Differences* 108: 174-77.
- Steg L., and C. Vlek 2009. "Encouraging Pro-environmental Behavior: An Integrative Review and Research Agenda". *Journal of Environmental Psychology* 29(3): 309-317.
- Steg. L., and I. Sievers. 2000. Cultural Theory and Individual Perceptions of Environmental Risks. *Environment and Behavior* 32(2): 250-269.
- Stern, P.C. 2000. "Toward a Coherent Theory of Environmentally Significant Behavior." *Journal of Social Issues* 56: 407-24.
- Stern, P.C., T. Dietz, T. Abel, and G.A. Guagnano. 1999. "A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism." *Human Ecology Review* 6 (2): 81-97.

- Stoll-Kleemann, S., T., O’Riordan, and C.C. Jaeger. 2001. “The Psychology of Denial Concerning Climate Mitigation Measures: Evidence from Swiss Focus Groups.” *Global Environmental Change* 11 (2): 107-17.
- Sundblad, E., A. Biel, and T. Gärling. 2009. “Knowledge and Confidence in Knowledge about Climate Change among Experts, Journalists, Politicians and Laypersons.” *Environment and Behavior* 41 (2): 281-02.
- Tam, K.-P. 2013. “Dispositional Empathy with Nature.” *Journal of Environmental Psychology*, 35: 92-104.
- Teng, Y.M., K.S. Wu, and H.H. Liu. 2015. “Integrating Altruism and the Theory of Planned Behavior to Predict Patronage Intention of a Green Hotel.” *International Journal of Hospitality and Tourism Research* 39(3): 299-315.
- Thøgersen, J. 1999. “Spillover Processes in the Development of a Sustainable Consumption Pattern.” *Journal of Economic Psychology* 20: 53–81.
- Thomas, G.O., R. Fisher, L. Whitmarsh, T.L. Milfont, and W. Poortinga. 2018. “The Impact of Parenthood on Environmental Attitudes and Behavior: A Longitudinal investigation of the Legacy Hypothesis.” *Population and Environment* 39 (3): 261-276.
- Thomas, W.I., and F. Znaniecki, 1918. *The Polish Peasant in Europe and America*. Vol. 1., Boston, MA: Badger.
- Thompson, S.G.C., and M.A. Barton. 1994. “Ecocentric and Anthropocentric Attitude toward the Environment.” *Journal of Environmental Psychology* 14: 149-57.
- Trafimow D, and K.A. Finlay. 1996. “The Importance of Subjective Norms for a Minority of People: Between Subjects and Within-Subjects Analyses.” *Personality and Social Psychology Bulletin* 22: 820–28
- UNESCO - United Nations Educational Scientific and Cultural Organization. 2010. “Convention Concerning the Protection of the World Cultural and Natural Heritage.” Paris, September, 3<sup>rd</sup>, 2010. Available at: <http://whc.unesco.org/archive/2010/whc10-34com-20e.pdf>. Retrieved January 30st, 2019.
- United Nation World Tourism Organization (UNWTO) 2007. “Davos Declaration on Climate Changes and Tourism – Responding to Global Challenges.” Davos, Switzerland 3-Oct 2007.
- Uysal, M., C. Jurowski, F.P. Noe, and C.D. Mcdonald. 1994. “Environmental Attitude by Trip and Visitor Characteristics: US Virgin National Park.” *Tourism Management* 15: 284-94.
- Uyeki E., and L. Holland. 2000. “Diffusion of Pro-environmental Attitudes.” *American Behavioral Scientist* 43 (4): 646-662.
- Van Den Berg, A.E., C.A. Vlek, and J.F. Coeterier. 1998. “Group Differences in the Aesthetic Evaluation of Nature Development Plans: A Multilevel Approach.” *Journal of Environmental Psychology* 18: 141-57.
- Van Liere, K.D., and R.E. Dunlap. 1981. “Environmental Concern. Does it Make a Difference How It Is Measured?” *Environment and Behavior* 13 (6): 651-76

- Verbeek, D., and H. Mommaas. 2008. "Transitions to Sustainable Tourism Mobility: The Social Practices Approach." *Journal of Sustainable Tourism* 16 (6): 629-44.
- Verma, V.K., and B. Chandra. 2018. "An Application of the Theory of Planned Behavior to Predict Young Indian Consumers' Green Hotel Visit Intention". *Journal of Cleaner Production* 172: 1152-1162.
- Verplanken, B., H. Aarts, A. Van Knippenberg, and C. Van Knippenberg. 1994. "Attitude Versus General Habit: Antecedents of Travel Mode Choice." *Journal of Applied Social Psychology* 24: 285-00.
- Wan, C., G.Q. Shen, and S. Choi. 2017. "Experiential and Instrumental Attitudes: Interaction Effect of Attitude and Subjective Norm on Recycling Intention." *Journal of Environmental Psychology* 50: 69-79.
- Wang, A.Y. 1999. "Gender and Nature, a Psychological Analysis of Ecofeminist Theory." *Journal of Applied Social Psychology* 29: 2410-2424.
- Wardle, C., and R. Buckley. 2014. "Tourism Citations in Other Disciplines." *Annals of Tourism Research* 46: 166-168.
- Warren, K.J. 1990. "The Power and Promise of Ecological Feminism." *Environmental Ethics* 12: 125-146.
- Weaver, D.B. 2017. "Sustainability and Mass Tourism: A Contradiction in Terms?". In *Mass Tourism in a Small World*, edited by D. Harrison, and R. Sharpley, 63-74. Wallingford UK: CABI.
- Wheeller, B. 2007. "Sustainable Mass Tourism: More Smudge than Nudge The Canard Continues." *Tourism Recreation Research*, 32 (3): 73-75.
- Williams, K.J.H., and J. Cary. 2002. "Landscape Preferences, Ecological Quality and Biodiversity Protection." *Environment and Behavior* 34: 257-274.
- World Travel and Tourism Council, and World Tourism Organization and the Earth Council (WTTC & UNWTO). 1996. "Agenda 21 for the Travel and Tourism Industry: Towards Environmentally Sustainable Development." London, UK: WTTC.
- Xu, F., and D. Fox. 2014. "Modelling Attitudes to Nature, Tourism and Sustainable Development in National Parks: A Survey of Visitors in China and the UK." *Tourism Management* 45: 142-58.
- Yan, J., A-K. Zschiegner, J. Xi, J. Barkmann, and R. Marggraf 2010. "Is the Chinese Tourist Ready for Sustainable Tourism? Attitudes and Preferences for Sustainable Tourism Services." *International Journal of Chinese Culture and Management* 3 (1): 86-106.
- Yang, J., J. He, and Y. Gu. 2012. "The Implicit Measurement of Destination Image: The Application of Implicit Association Tests." *Tourism Management* 33 (1): 50-52.
- Ye, S., G.N. Soutar, J.N. Sneddon, and J.A. Lee. 2017. "Personal Values and The Theory of Planned Behavior: A Study of Values and Holiday Trade-offs in Young Adults." *Tourism Management* 62: 107-109.
- Yen, J., K. Durrheim, and R.W. Tafarodi. 2018. "'I'm Happy to Own my Implicit Biases': Public Encounters with the Implicit Association Test." *British Journal of Social Psychology* 57: 505-523.
- Zajonc, R.B. 1968. "Attitudinal Effects of Mere Exposure." *Journal of Personality and Social Psychology Monographs* 9: 1-27.



Zanna, M.P., and J.K. Rempel. 1988. "Attitudes: A New Look at an Old Concept." In *Key Readings in Social Psychology. Attitudes: Their Structure, Function and Consequences*, edited by R.H. Fazio, and R.E. Petty, 7-15. New York, NY: Psychology Press.