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An animal welfare literacy framework for tourism

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ABSTRACT

As the expanding consciousness platform advances in tourism research and practice, the inclusion of animal welfare has increasingly become a topic of debate. However, research indicates that tourists continue to have difficulty assessing animals' welfare at wildlife tourism attractions, and so there is an immediate need for more education on such impacts. The purpose of this paper is to fill this education knowledge gap by introducing an environmental literacy framework, i.e., "what an environmentally literate person should know and be able to do," in progressing from animal welfare *illiteracy* in tourism to *literacy*. The framework is applied to elephant tourism in Thailand using current knowledge on elephant welfare physiology, behaviour, and ethics.

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Introduction

As the expanding consciousness platform (Fennell, 2018) advances in tourism theory and practice, the welfare of animals has steadily become a topic of debate. Indeed, countless animals are used annually in tourism, and their welfare has become a moral marker for not-for-profit charities and tourism operators who claim to be the vanguard for their responsible use. Examples include the registered UK charity, Wild Welfare, which has the mission to "end the suffering of captive wild animals around the world, by uniting the world's leading animal welfare organisations and captive wildlife facilities in providing expert, practical and sustainable solutions to improve animal welfare" (Wild Welfare, 2021). The tourism operator, Responsible Travel, takes the position that "We constantly try to improve our knowledge of animal welfare in tourism and talk to travellers, tour operators and animal welfare and wildlife organisations to make sure that we are up to date with current information" (Responsible Travel, 2021, online).

Animal welfare is defined as an area of activism, science, and political action in which activists seek to improve conditions for animals, especially animals reliant on human care (Wood, 2021). Such includes pets, zoo animals, animals used for testing, animals slaughtered for food, and often wild animals impacted by human behaviour. Welfare is the central pillar of scholarly work on animal ethics in tourism and stands as the most rational approach to levelling the playing field on animal-human interactions in an industry bent on pleasure and profit. It is arguable and defensible that it is in the best interests of industry to protect the welfare of animals because, simply stated, animals are good for business. Scholarly work is well underway on core issues around animal welfare in tourism, with Carr and Broom's (2018) book representing the most definitive statement on the topic to date.

However, although animal welfare is advancing in tourism theory and practice, it does so without a comprehensive "grammar" that speaks to the welfare needs of animals. This grammar is deemed essential because tourists have difficulty assessing animals' welfare and conservation needs at wildlife tourism attractions (WTAs) because education programs are misleading, tourists do not

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have the knowledge to assess their impacts, are influenced by authority figures (e.g., WTAs' staff), and by the distortion of ethical standards in the promotional materials of WTAs (Moorhouse, Dahlsjö, Baker, D'Cruze, & MacDonald, 2015; Moorhouse, D'Cruze, & MacDonald, 2017). Given the magnitude of impacts on animals at WTAs, there is an urgent need for tourism industry literacy to help eliminate these impacts (Moorhouse et al., 2015).

Based on the scenario outlined above, I argue that a focus on literacy will dramatically increase knowledge, skills, attitudes, and behaviours and allow tourists to make better-informed decisions on which animal venues to visit, if at all. A literature review confirms that although literacy has been investigated in other facets of tourism studies research (Tustin & Conradie, 2016), it is lacking in animal welfare. In moving this agenda forward, I use and adapt knowledge from environmental literacy, i.e., "what an environmentally literate person should know and be able to do" (McBride, Brewer, Berkowitz, & Borrie, 2013) to progress from animal welfare *illiteracy* in tourism. I do this by (1) developing a tourism and animal welfare literacy framework and (2) applying it to the case of elephant tourism in Thailand. A focus on literacy is timely given that the 24th General Assembly of the UNWTO has elected to put education (and innovation) at the heart of tourism's restart in the wake of Covid-19 (UNWTO, 2021), even though animal welfare has yet to surface as a UNWTO priority (Fennell, 2014).

Literacy

Literacy is allied to education, with the former being a desired outcome of the latter in creating a citizenry capable of awareness and change (Eadie, 2011; Garcia & Cater, 2020). Literacy is often defined in the context of possessing basic functional skills, like reading and writing (Keefe & Copeland, 2011). However, the Oxford English Dictionary (online) provides a more contemporary definition of literacy as "use competence or knowledge in a particular area." In this capacity, McBride et al. (2013) argue that the literate citizen has "the ability to understand, make informed decisions, and act with respect to complex topics and issues facing society today" (McBride et al., 2013, p. 2). UNESCO emphasises this more complex interpretation of literacy as "a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society" (UNESCO, 2004, page 13) as a fundamental human right (UNESCO, 2008). Thus, a literate individual can solve problems rather than just master skills, which many commentators argue is necessary for building a sustainable future (Dale & Newman, 2005).

Being literate plays an essential function in navigating the many practical aspects of our lives. Using food production and consumption as an example, Ronto (2016) argues that we must be literate in our awareness of food, nutrition and food processes (declarative knowledge), but must also possess procedural knowledge, i.e., skills and strategies in attending to "how to" accomplish an end, and the attitude, motivation and confidence to apply declarative and procedural knowledge (see Sumner, 2013; Velardo, 2015). Poor declarative knowledge has been investigated by Wrenn (2018), who discovered how food-illiterate American students are on the topic of animal slaughter, despite having exposure to lecture material on speciesism and the food system (see Kline, 2018 on the ethics of food consumption in tourism). Two-thirds of students underestimated the number of animals killed for consumption. The medium response was 65 million animals killed per year—only 0.006 % of the 10 billion killed. Coyle (2005) found that although American citizens have a good awareness of simple environmental topics, a more complex understanding of issues is limited. The study found that outdated or incorrect environmental myths significantly influenced 80 % of Americans, and only 12 % of Americans passed a basic quiz on energy.

Environmental literacies

Environmental literacies (EL) emerged out of the environmental education movement, which has a central goal of making the citizenry aware, knowledgeable and active in matters of the natural world (Volk and McBeth, 1998). The Stockholm Declaration of 1972 provided the foundation for organisations such as UNESCO to assume a leadership role in further developing environmental education. UNESCO observed that an environmentally educated global citizenry would help to:

develop a world population that is aware of and concerned about the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones." In addition, UNESCO-UNEP set forth awareness, knowledge, skills, attitudes, evaluation ability, and participation (UNESCO-UNEP, 1976, p. 2; UNESCO, 1978).

Four other international meetings were fundamental to the development of a more progressive agenda on environmental education, including The Belgrade Charter (1975), The Intergovernmental Conference on Environmental Education (Tbilisi Declaration) (1977); The International Strategy for Action of Environmental Education and Training (1987); and Agenda 21 (1992). The Tbilisi Declaration (UNESCO, 1977) outlined five essential components to realise environmental education objectives, forming what has been referred to as the AKASA framework—awareness, knowledge, attitudes, skills, and action. There is broad consensus in the literature that these five components are germane to environmental literacy. Following Elder (2003) and O'Brien (2007, p. 11–12), environmental literacy (EL) involves:

 Awareness: the idea of holding a general impression or consciousness about something without knowing much about it. Once an awareness level is reached, a desire to improve knowledge increases.

- Knowledge: reflects a more intellectual framework. It is more than to retain acquired information about an issue; but to comprehend, apply, analyse, synthesise and evaluate situations. Being knowledgeable provides input for building and changing attitudes.
- Attitude: expressing appreciation and concern about environmental issues and becoming susceptible to developing personal skills to address these issues.
- Skills: developing personal abilities such as problem-solving and critical thinking to address environmental issues and action plans.
- Action: the last component of environmental literacy. It represents the idea of acting in favour of the environment.

Following closely to the initial configuration of EL through the Tbilisi Declaration's AKASA framework—indeed most EL frameworks follow closely to this initial design—the environmentally literate agent possesses.

the knowledge, intellectual skills, attitudes, experiences and motivation to make and act upon responsible environmental decisions. Environmentally literate students understand environmental processes and systems, including human systems. They can analyse global, social, cultural, political, economic, and environmental relationships and weigh various sides of environmental issues to make responsible decisions as individuals, members of their communities, and citizens of the world. (Cited in North American Association for Environmental Education (NAAEE) (2000/2004), adapted from Maryland Partnership for Children in Nature, April 2009).

Negev, Sagy, Garb, Salzberg, and Tal (2008) illustrate in Table 1 that the breadth of knowledge required to be an environmentally literate individual range from global to national issues (we could also make explicit regional and local contexts). To assimilate these issues into a knowledge context, knowledge of general ecological principles is needed. Attitudes include an awareness of the consequences of these issues and the willingness to act, in concert with a sensitivity to environmental issues and one's affection for nature. The framework also includes a moral dimension involving one's sense of responsibility to these issues. Finally, Table 1 illustrates a behavioural dimension that includes consumption patterns, feelings about conservation, environmental activism, including water recycling, conserving electricity, and outdoor leisure pursuits.

Environmental literacy should not be confused with hybrid forms of literacy, including ecological literacy and ecoliteracy, which have complicated the environmental literacy landscape (McBride et al., 2013; see also Simmons, 1995). Ecological literacy emphasises ecological concepts through scientific inquiry and ecological systems thinking (Klemow, 1991), which often manifest in lists of frequently mentioned ecological terms, suggesting that the whole discipline of ecology should not be taught to the citizenry (McBride et al., 2013). On the other hand, ecoliteracy, based on an initial framing by Orr (1992), focuses more on the sustainable development rhetoric with education designed to mesh principles of ecology with sustainable societies (Capra, 1997).

Tourism and literacy

Although literacy has not been a dominant research theme in tourism, studies have advanced on, for example, adult literacy education for tourism development in reaching Sustainable Development Goal 11 (Agboeze & Nwankwo, 2017), curriculum development (Hsieh & Hsieh, 2015), and tourist geographic literacy (Chang, Huang, & Tsaur, 2019). In addition, Chapman (2009) argues for higher standards of ethical literacy for hunters in the wake of several transgressions over the shooting of out-of-season animals as well as the shooting of fellow hunters, while Tustin and Conradie (2016) investigated the avi-tourism literacy rates of school children in South Africa (see also Fang et al., 2018; Price, 2003; Saputro & Ardhiansyah, 2018). Central to the current paper is work by Garcia and Cater (2020) on achieving ocean literacy. These scholars argue, following Aqua (2015), that an ocean-literate individual is "one who understands the importance of the ocean to humankind; can communicate about the ocean in a meaningful way; and can make informed and responsible decisions regarding the ocean and its resources" (p. 2). Garcia and Cater (2020) use an educational program based on literacy to address the lack of knowledge in marine stakeholders, reinforcing the connection between education and literacy outlined at the beginning of this section.

Although there is a critical gap in the literature on the connection between tourism, animals and literacy, there is a robust body of research on tourism, animals, and education. Several examples of this triad exist, including Orams (1997) and Lück (2003) on marine mammal education and interpretation. von Essen, Lindsjö, & Berg (2020) indicate, briefly, that education is needed for better animal welfare in tourism. However, a directional change in this literature towards literacy seems vital given

 Table 1

 Components of environmental literacy categories. Adapted from Negev et al. (2008).

Knowledge	Attitudes	Behaviour
Global issues	Awareness	Consumption patterns
National issues	Willingness to act	Individual conservation
General ecological principles	Sensitivity to: environmental issues and affection for nature	Environmental activism
	Sense of responsibility	Leisure involving nature

the sheer number of animals drawn into the tourism industry for pleasure and profit (Moorhouse et al., 2015) as captives, used in competition, pursued for sport and subsistence, wildlife viewing, and animals used for work and companionship. Moreover, literacy shares characteristics with interpretation in the form of raising awareness and increasing knowledge to foster proenvironmental behaviours, and the intention to adopt environmental practices after ecotourism and park experiences (Hughes, Packer, & Ballantyne, 2011). Ballantyne and Packer (2011) argue that the adoption of such attitudes and behaviours is rare. Defined, interpretation is "An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information" (Tilden, 2009, p. 17). Although linked, literacy's departure from interpretation would be in using a range of educational devices including "factual information" to build awareness, knowledge, attitudes, skills and action (solving problems and inducing change).

Animal welfare

Animal welfare includes a constellation of scientific (physiology, behaviour and emotions) and moral perspectives to measure the quality and quantity of animal care, i.e., to assess how an animal is coping with its environment (Hill & Broom, 2009). The Five Freedoms model of animal welfare assesses freedom from hunger and thirst, discomfort, pain/injury/disease, fear and distress, and the freedom to express natural behaviours (Bansiddhi, Brown, Thitaram, Punyapornwithaya, & Nganvongpanit, 2020). The more refined Five Domains model measures physiological, behavioural and emotional factors according to (1) nutrition; (2) environment; (3) health; and (4) atypical or abnormal behaviours such as stereotypies and social isolation; and (5) a composite measure based on the preceding four factors provides an assessment of an animal's mental state (Mellor et al., 2020).

A survey of the general literature on animal welfare illustrates the importance of a literate citizenry. Hawkins, Williams, and Scottish Society for the Prevention of Cruelty to Animals (2017) investigated students aged 7–13 and found that a program of animal welfare interventions showed a significant positive impact on animal knowledge. The authors argued that such programs are needed for the early prevention of animal cruelty. Several animal welfare literacy courses are now being offered in primary and secondary school institutions. For example, World Animal Protection has for over a decade been teaching children from the ages of 5 to 16 (as well as adults with lower literacy rates and animal care workers) about protecting the welfare of animals (World Animal Protection, 2021). The British Columbia SPCA, in their Animal lessons for intermediate students, has several resources for teachers, including "The farm-food connection" and "Including animals in social justice" with a section on "Animal welfare: understanding the terms and discovering the issues" (BCSPCA, 2021). The Alberta Teachers' Association has programs on Animal-assisted literacy in which young students enjoy reading more in one-on-one situations in the presence of a dog (Friesen, 2010). Humane education programs instil a sense of empathy and compassion in young learners towards "the kind, compassionate, and responsible treatment of human and animal life" (Ascione, 1997, p. 57).

In the university setting, although veterinary science is the discipline that perhaps should be most sensitive to animal welfare as a core educational theme, research does not bear this out. de Boo and Knight (2005) found that veterinary associations of five developed countries have fallen behind the public in the desire for animal welfare reform—confirming that consumers are becoming more concerned with the welfare of animals, which is having an impact on their purchasing habits (Foresight, 2011). A decade after de Boo and Knight (2005), MacKay, Langford, and Waran (2015) share the observation that animal welfare education amongst veterinary students is not of a quality sound enough to prepare them for practice (see also Main, 2010). Animal welfare literacy for veterinary students is critical because there is an erosion of perceived sentience of animals like dogs and cats as students progress through the curriculum, i.e., later-year students felt that animals were not sentient (Paul & Podberscek, 2000), suggesting desensitisation of students towards animals as they move through the curriculum.

Animal welfare and tourism

Animal welfare is the principal moral platform in tourism research and practice because it legitimises the use of animals under the banner of quality and quantity of care (see ABTA, 2021, for practical examples).

The ascendance of welfare as the principal animal-human theoretical platform is confirmed by Rickly and Kline (2021), who discuss several welfare issues of animals made to work in tourism. It is also confirmed in Winter's (2020) comprehensive overview of animal ethics in tourism, where animal welfare was the main focus of 18 of 74 papers investigated. Other theoretical perspectives such as ecofeminism, ecocentrism and animal rights were represented far less. Examples of conceptual papers in tourism and animal welfare include Fennell (2013); how tourism companies are addressing animal welfare (Jones & Comfort, 2021); trade associations and animal welfare (Font, Bonilla-Priego, & Kantenbacher, 2019); and challenges in reconciling universalism as a value type between ecocentric and animal welfare perspectives (Sneddon, Lee, Ballantyne, & Packer, 2016). In addition, species-or taxa-specific papers include the welfare implications of civets in the Indonesian civet coffee tourism industry (Carder, Proctor, Schmidt-Burbach, & D'Cruze, 2016); that equestrian tourists demand a high level of horse welfare from service providers (Notzke, 2019); studies on cetaceans (Bach & Burton, 2017; O'Connor, Campbell, Cortez, & Knowles, 2009); and welfare of animals at zoos (Carr, 2018).

A popular area of research in tourism involving animals is work on pro-environmental intentions and behaviours. Clark, Mulgrew, Kannis-Dymand, Schaffer, and Hoberg (2019) found that incorporating moral norms and environmental identity into a theory of planned behaviour model was instrumental in predicting pro-environmental intentions of whale watchers to engage in sustainable environmental behaviours. A follow-up study found that pro-environmental behaviours (PEB) intentions increased after participation in whale watching tours that were engaging and reflecting (Hoberg, Kannis-Dymand, Mulgrew, Schaffer, &

Clark, 2021). Tourists with more compassion and empathy towards wildlife (a mutualistic orientation) could better engage and reflect on the experience (see also Cavagnaro, Staffieri, & Huisman, 2016). Conversely, tourists with doministic orientations viewed animals as objects for entertainment, possessed low awareness of consequences, and were less likely to engage and reflect. Studies also test pro-environmental theory according to moral obligation (altruistic feelings towards the natural world) and moral disengagement (excuses to disengage from PEB morally). Wu, Font, and Liu (2021) found that high moral obligation tourists were more willing to practice PEBs than their counterparts.

A recent article by Kline and Fischer (2021) broadens the scope of consideration on the traditional role that welfare, and indeed other forms of ethics, plays in our thinking on the use of animals in tourism. These authors stress the need to apply non-moral values thinking based on research by of Wolf (1982), as a means by which to incorporate "usable" alternative tools in inspiring ethical behaviour at animal-based attractions. Such an approach loosens us up from the more rigid hard and fast maximalist ethical principles such as utilitarianism, rights, and justice by shedding light on the unrealistic expectation that knowledge and morality are the main paths to change. Moral pluralism is advocated by Kline and Fischer (2021) in our pluralistic world, which corroborates work by Fennell and Malloy (1995) in the tourism ethics context, as well as in the tourism and animal ethics domain (Fennell & Sheppard, 2020).

On balance, the few preceding examples underscore the importance of examining how values play a role in the cognitive and affective "grammar" of ecotourists and wildlife tourists. Advancing knowledge on tourists with a more robust moral outlook can be bolstered by the research on alternative hedonism (Soper, 2008), the environmental subject (Agrawal, 2005), and akrasia (Fennell, 2015). Soper (2008) argues that hedonism, defined as maximising pleasure and minimising pain, often amounts to self-interest, which has deleterious impacts on others. In contrast, alternative hedonism suggests that people gain pleasure by purchasing products that are good for people and the planet, i.e., there is a greater good beyond personal pleasure. Agrawal (2005) describes the environmental subject as someone who has experienced a significant transformation in their environmental concern through life experiences. From being socialised and framing beliefs in their youth about the acceptability of environmental neglect to later experiencing massive interventions like over-utilisation of forests, citizens adapt by challenging their beliefs structure and incorporating new ways of thinking and participating in programs to build a sustainable future.

A philosophical perspective gaining traction in animal-human interactions research in tourism is akrasia (Fennell, 2015). Akrasia reflects a weakness of will when we act against our better judgments or place pleasure over the opportunity to express our moral knowledge. For example, even though we know that option "A" is right, and option "B" is wrong, we choose "B" because we succumb to the immediate pleasure that it brings us. Ziegler et al. (2018) discovered that most respondents in whale shark tours supported whale shark feeding, despite knowing the ethical consequences of their actions. Rizzolo (2021) found that tourists who had live animal encounters were primarily unaware of their impacts on animals. Tourists who were aware of the consequences of their actions were being akratic. Rizzolo suggests that education and regulation are needed immediately to curb negative impacts.

An animal welfare literacy framework for tourism

The literature from the preceding discussion provides a backdrop for constructing an animal welfare literacy framework using elephant tourism in Thailand as a case study (Table 2). Elephant tourism in Thailand is selected because of its popularity and the many embedded moral issues tied to its practice (Taylor, Hurst, Stinson, & Grimwood, 2020). I use the AKASA framework discussed earlier as the primary environmental literacy model and amplify its effect through added features of EL models by McBride et al. (2013) and Negev et al. (2008). The framework is developed according to research by Duffy and Moore (2011) on global-local governance, Bansiddhi, Brown, Thitaram, Punyapornwithaya, and Nganvongpanit (2020), Bansiddhi, Brown, and Thitaram (2020), Rizzolo and Bradshaw (2018) on the physiological and behavioural impacts of tourism on animal welfare, Fennell and Sheppard (2020), Taylor et al. (2020) on ethical issues of elephant tourism, and Fennell, Moorhouse, D'Cruze, & MacDonald (In press) on criteria on welfare, conservation and governance at wildlife tourism attractions. Table 2 shows how tourists can progress from illiteracy to literacy by attending to the model's five principal components. In this model, welfare is liberally extended to include governance and conservation based on the belief that both have a bearing on the welfare of animals used in tourism (see Fennell et al., In press). Thus, political action/inaction and religious beliefs (under governance) will directly impact how elephants are ultimately treated.

Awareness

Tourists hold a general impression or consciousness about animal welfare. Once an awareness level is reached, a desire to improve knowledge increases (Elder, 2003; O'Brien, 2007). Awareness, however, can also be expressed in the vernacular of akrasia (Fennell, 2015). Ignorance suggests that tourists are wholly unaware of their impact on the welfare of elephants, and so there is the question of whether they should be held accountable for their actions (Velasquez, 1992). Those who do know—operators—should be held accountable but choose not to educate tourists on the impacts of their actions (Moorhouse, D'Cruze, & MacDonald, 2017). Weak akrasia refers to the pleasure of the moment as tourists get temporarily intoxicated over the opportunity to experience an elephant show or ride, expressing that "we may never have this opportunity again," so get caught up in the moment. However, research indicates that tourists often regret animal-human experiences after the fact. For example, Curtin and Wilkes (2007) found that many weeks after a swim-with-dolphin tour, tourists had second thoughts about their participation, citing worry over impacts on dolphins. Strong akrasia indicates that a tourist is fully aware of how elephant camps and shows

Table 2 Components of elephant welfare literacy

Components	Elephant literacy for tourists
Awareness Knowledge	 A. Ignorance: Wholly unaware of welfare impacts B. Awareness: Tourists hold a general impression or consciousness about elephant welfare without knowing much about it. Once an awareness level is reached, a desire to improve knowledge increases. This awareness is also subject to: C. Weak akrasia: Temporary pleasure replaces the use of moral knowledge^h D. Strong akrasia: Fully aware of impacts but seek pleasure and entertainment^h A. Tourists have a good general knowledge of animal welfare issues
	 Five Freedoms; Five Domains^b Wildlife tourism attractions welfare criteria^e
	B. Specific knowledge of elephant welfare issues in Thailand ^{a,b,c}
	 Physiological, emotional and behavioural impacts to elephants from tourism Mahout-operator, mahout-elephant relationships^a
	C. General knowledge of conservation issues
	• e.g., Conservation education messages, conservation benefits of captivity ^e
	D. Specific knowledge of elephant conservation issues
	• e.g., Number of elephants in the wild versus captivity ^a
	E. Knowledge of Thai governance and global governance
Attitude	 Social, economic, political, and religious realities framing elephant uses. Federal acts, policies, and industry associations (e.g., Cruelty Prevention and Welfare of Animals Act)^{b,f} Stakeholder involvement: N.G.O., donor, tourism industry, community initiatives, destination management organisations, CSR, community benefits and regulation^e An appreciation, sensitivity, and concern about elephant welfare and conservation translate into the possibility of a responsible attitude towards issues.^k
Skills (& strategies) Action	 Openness to change and challenge one's value set and moral standpoint on elephant tourism. Openness to developing skills to address elephant issues Willingness to challenge the legitimacy of circuses and other elephant shows. Willingness to reframe conspicuous consumption (e.g., a picture of you on the back of an elephant on your mantelpiece) Possessing personal abilities to understand the welfare problems facing elephants in Thailand.
	 Embrace a long-term learning approach based on several sources that lead to different pathways, progressions and dosages¹ Compare new knowledge against one's value set (e.g., codes of ethics)^k Research excursions that reinforce these values (behavioural intentions)^j In general, tourists act in favour of the environment, and more specifically, in the interests of elephants used for tourism in Thailand.^k
	A. Consumption ^d
	 Recognise that sanctuaries need revenue to exist^a Choose sanctuaries proven to place the interests of animals over the interest of profit and entertainment.ⁱ Adopt characteristics of alternative hedonism and the sustainable citizen^{m,n} Adopt pro-environmental behaviours, i.e., actions that are more environmentally friendly^j Avoid social costs from others who possess stronger environmental values, attitudes and behaviours.
	B. Individual welfare (and conservation) ^d
	 Choose sanctuaries that emphasise welfare, conservation and education over other venues based only on entertainment and profit at the expense of elephants.^k Always understanding and following regulations, policies and legislations as well and codes of ethics^g Encourage others to do the same.
	C. Environmental activism ^d
	• Support international (e.g., Born Free Foundation), national and or local organisations that work to secure elephant welfare and agency ^a
	D. Leisure involving nature ^d
	 Choose vacations that ethically support nature and those operators who take a responsible and sustainable approach to nature generally and elephants specifically.^k Make responsible and sustainable tourism a regular practice.

a Rizzolo and Bradshaw (2018).
 b Bansiddhi, Brown, Thitaram, Punyapornwithaya, and Nganvongpanit (2020).

<sup>Bansiddni, Brown, Thitaram, Punyapornv
Duffy and Moore (2011).
Negev et al. (2008), Main (2010).
Fennell et al. (2022).
Bansiddhi, Brown, and Thitaram (2020).
McBride et al. (2013).
Fennell (2015).</sup>

compromise the welfare of elephants yet ignore these known impacts and thus sacrifice the welfare of elephants to pursue their own immediate and long-term interests.

Knowledge

Knowledge reflects an intellectual approach and is more than retaining acquired information about animal welfare; and includes comprehending, applying, analysing, synthesising, and evaluating situations as a precursor to changing attitudes. Table 2 shows that tourists should educate themselves, or be educated, on the Five Freedoms, Five Domains, and welfare criteria introduced by (see Fennell et al., in press). Specific knowledge on elephant welfare is the goal of aware tourists seeking knowledge on and understanding the physiological, behavioural, and emotional impacts tourism can have on elephants. Such knowledge includes premature weaning/separation from mothers, phajaan ritual, social isolation, limited nutrition, prolonged chaining, and prolonged labour under physical duress/injury (Rizzolo & Bradshaw, 2018). It also includes positive/negative reinforcement, stereotypies, lesions, stress, eye, foot, leg problems, obesity, malnutrition (Bansiddhi, Brown, Thitaram, Punyapornwithaya, & Nganvongpanit, 2020; Rizzolo & Bradshaw, 2018).

Tourists should also possess a base of general knowledge on conservation in understanding animal-human interactions and the toll that anthropogenic impacts have on species, populations and ecosystems. Such might also include conservation education messages, tourist use of animals that impact conservation status, conservation benefits of captivity, how fees contribute to habitat and research (Fennell et al., in press). More specifically, knowledge should be attained on the number of elephants in the wild versus captivity, conservation education at camps, and domesticated status of elephants (Rizzolo & Bradshaw, 2018).

Fennell et al. (2022) observed that of the three main categories of criteria that tourists could use to rate the performance of WTAs, governance is the most difficult for tourists to detect over conservation and animal welfare (see also de Mori et al., 2019). However, there are several publications that tourists can access in better understanding the nature of the politics, economics, cultural and religious climate of Thailand (e.g., travel guidebooks). Governance also includes an understanding of national acts and policy statements on the use of animals. Examples include the Cruelty Prevention and Welfare of Animals Act, National Elephant Institute of Thailand, Elephant Alliance Association, Asian Captive Elephant Working Group (Bansiddhi, Brown, & Thitaram, 2020; Bansiddhi, Brown, Thitaram, Punyapornwithaya, & Nganvongpanit, 2020). Furthermore, knowing which stakeholders are involved and affected by elephant tourism is also of value in understanding tourism benefits and costs. For example, knowing about how operators are integrating corporate social responsibility measures, reporting mechanisms, truth in marketing, provision of jobs to local people, the pursuit of best practice, inducing local people to support welfare and conservation, volunteer programs, and if the venue follows a code of ethics or certification scheme is of considerable importance.

Attitude

Elder (2003) and O'Brien (2007) positioned attitude as the idea of expressing feelings of appreciation and concern about environmental issues and becoming susceptible to the development of personal skills to address these issues. As part of their environmental literacy framework, Negev et al. (2008) felt that individuals should be sensitive to environmental issues, and have affection and demonstrate a sense of responsibility for nature. Tourists should also be open to change and to challenging their value set, testing their moral standpoint as it applies to elephant tourism, and be open to developing personal skills to address these issues, i.e., a willingness to challenge the legitimacy of circuses and other elephant shows, as well as the conspicuous consumption that goes with it (e.g., the picture of you on the back of an elephant that sits on your mantelpiece).

Attitude, broadly conceived, has been captured in research by Taylor et al. (2020) on the development of an ethic of care in those who have spent time volunteering in elephant sanctuaries. Taylor et al. (2020) write that:

While volunteering for elephant sanctuaries, the women witnessed the inadequate treatment of elephants living in nearby villages and were involved in the tourism industry. Elephants living within the vicinity of sanctuaries were tied to posts, hit, and in some cases 'horrifically beaten' according to Lindsay. She further elaborated that 'the elephants that are not on the project have chains wrapped around their neck and feet' and many bore the scars of previous beatings with bullhooks. Lindsay also noted the psychological components of the abuses witnessed wherein bullhooks would be hung on an elephant's ear 'as a reminder to the elephant that if they get out of line they will get a severe bloody beating' (Taylor et al., 2020, p. 121).

In these elephant volunteer stories, the volunteers advanced along a witnessing-questioning-connecting-advocating line that was transformational in developing an ethic of care. Such an approach corresponds well with Negev et al. (2008) and their sensitivity to environmental issues, affection, and responsibility for nature.

Notes to Table 2

- i Fennell and Sheppard (2020).
- ^j Tustin and Conradie (2016).
- k Taylor et al. (2020).
- ¹ Stanford Graduate School of Education (2021).
- ^m Soper (2008).
- ⁿ Agrawal (2005).

Skills

This component entails developing critical thinking skills and strategies to understand elephants' welfare problems, i.e., the "how-to" of accomplishing the desired end (Ronto, 2016). Becoming educated on elephant tourism means sourcing the web, travel guidebooks, documentaries, or possibly the academic literature on elephant welfare and comparing this knowledge against tourists' value set (e.g., how certification or codes of ethics are used at these venues, if at all, correspond to tourist views on the protection of elephants). This stage also entails identifying excursions that reinforce these values through principles and practices that reflect responsibility and sustainability, which might ultimately lead to selecting environmental intentions and behaviours in the future (Tustin & Conradie, 2016).

Part of the skills component reflects three key themes identified by Ardoin, Wheaton, and Kannon (Stanford Graduate School of Education, 2021) on becoming environmentally literate. These include lifelong learning *pathways*, *progressions* through different stages of EL, and the *dosage* of EL according to the length of programs, repetition of EL messages and the intensity of these messages or programs. In the context of elephant tourism, "how-to" becomes wrapped up in exposure to several EL programs, repeatedly and with such intensity that they induce changes in the value set of agents.

Action

This final stage of the framework supports a principle of "do no harm" (von Essen et al., 2020) with the possibility of improving, either directly or indirectly, the welfare of elephants—turning the willingness to act into action. Negev et al. (2008) argued that EL behaviour involves four components: consumptive behaviour, individual conservation, environmental activism, and leisure involving nature. Being elephant welfare literate involves the recognition that sanctuaries need revenue to exist. Covid-19 has been hard on elephant venues because of the lack of international travel. In the face of Covid-19, the Thai Elephant Alliance Association writes, "No more tourists. Both elephants and mahouts are losing jobs. Some sites are unable to provide wages for mahouts and food for elephants. Mahouts have retreated to their remote villages" (Thai Elephant Alliance Association, 2021; see also Rizzolo & Bradshaw, 2018). The use and application of skills and strategies on elephant tourism may move tourists to choose only sanctuaries that place the interests of animals over the interests of profit and entertainment. Research also indicates that having altruistic value orientations compels individuals to choose travel packages suitable for the community and animal welfare (Cavagnaro et al. (2016).

Consistently choosing responsible venues (the Elephant Nature Park is internationally recognised as a top-tier elephant sanctuary: https://www.elephantnaturepark.org/) should induce other less altruistic enterprises to change their policies and practices in line with changing societal expectations. Enterprises that maintain outdated practices that inflict trauma on elephants (Rizzolo & Bradshaw, 2018; Taylor et al., 2020) should endure social costs in the form of poor ratings and diminished visitation as newer models of elephant tourism emerge. The previous discussion on alternative hedonism (Soper, 2008) and the environmental citizen (Agrawal, 2005) helps situate how the virtuous individual can have a transformative effect on the elephant tourism community by encouraging others to do the same. Such is operationalised through careful adherence to codes of ethics, regulations, policies, and legislation (McBride et al., 2013) and pointing out when such devices are poorly conceived or lacking. Taking proenvironmental behaviour further can take place through environmental activism in support of ethical organisations that place elephants' interests over profit and pleasure. These organisations can be local, regional, national, or international, but, in the end, they need to prove altruistic motives.

Strategies for improving animal welfare literacy in tourism

Schubel, Monroe, Schubel, and Bronnenkant (2009) provide a list of strategies designed to improve EL using the example of aquaria. Main conduits include signage, websites (podcasts, blogs, news, virtual reality), onsite at aquaria (interpreters, tours, camps), off-site through mobile exhibits, travelling classrooms, speakers, and street banners), restaurants, gift shops, cultural festivals, lecture series, films and videos, PSAs and radio, bumper stickers, and visitor greetings and goodbyes. More complex strategies involve cooperative relationships with major national and international organisations. In the context of animal welfare literacy in tourism, these could be supported and enhanced through the minimalist animal welfare platform approach, which actuates more practical mechanisms such as educational, promotional and policy-based measures over more restrictive forms of normative ethics (Kline & Fischer, 2021).

What is required in developing strategies to enhance animal welfare in tourism is the adoption of such approaches by the most prominent players in tourism. Many international tourism operators have already declared elephant tourism off-limits because of the trauma (phajaan) (Rizzolo & Bradshaw, 2018) that elephants endure in preparing them for a life serving humans. International hotels and airlines are logical conduits for information sharing, but there will be questions about the participation of Thai airlines and hotels because of the pro-elephant tourism lobby. As a result, the Thai government would be in the precarious position of needing to support tourism on the one hand (the nation's primary economic engine) and protecting the interests of elephants on the other (the country's national symbol (see Duffy & Moore, 2011). Destination marketing organisations and trade associations also have a role to play in elevating the agency and interests of animals (Font et al., 2019). However, such is constrained according to the notion of "ethical blindspots" (Moorhouse et al., 2017), where there is a disconnect between the intention to be ethically good and actual behaviour at WTAs—akrasia, as noted by Fennell (2015) and in Table 2. As a result, a

vicious circle has been created based on operators giving tourists what they desire and tourists failing to leave reputationally damaging feedback on operations because of the absence of awareness and knowledge.

Recent work on social contracts theory may provide a way forward to the dilemma mentioned above. Following Donaldson and Dunfee (1994), Fennell (2018) developed a pluralistic, integrated model of tourism ethics that juxtaposes universal ethics with local ethics. In such a model, a dominant macro social contract based on general principles governing tourism provides the framework around which several hypernorms such as altruism, recognition, autonomy/rights, justice, respect, and sustainability, can be operationalised. In addition, these guiding principles can inform a more recessive micro-social contract that allows local contexts to maintain philosophical, cultural, and religious distinctiveness—moral free space—while ruling out extreme forms of relativism. As literacy advances on elephant tourism in Thailand, we may begin to see how the welfare of elephants is severely compromised in the manner explained in this paper ("traumatised" in the words of Rizzolo & Bradshaw, 2018), as a form of extreme relativism that in the future will no longer be acceptable.

Another possibility for improving animal welfare literacy includes the tourism knowledge translation framework (TKT) that works towards getting recent, evidence-based research into the hands of practitioners and policymakers as quickly as possible (Fennell, 2021). This new knowledge could be disseminated to stakeholders through an animal welfare knowledge repository. For example, specific folders can be created for specific types of elephant welfare impacts of the nature and kind explained by Rizzolo and Bradshaw (2018), Bansiddhi, Brown, and Thitaram (2020), Bansiddhi, Brown, Thitaram, Punyapornwithaya, and Nganvongpanit (2020), Duffy and Moore (2011), and Fennell et al. (In press). Folders could also be developed for different theories of ethics as they apply to the use of animals in tourism: ecofeminism (Yudina and Fennell, 2013), ecocentrism (Burns, MacBeth, & Moore, 2011), utilitarianism (Dobson, 2011), animal rights (Hughes, 2001), justice (Fennell and Sheppard, 2020), and post humanism (Thomsen, 2021). The TKT framework has yet to be operationalised but holds considerable potential for bridging the gap between knowledge and practice for animals used in tourism.

Conclusion

Research indicates that tourists who visit wildlife tourism attractions do so without a solid foundation of animal welfare knowledge (Moorhouse et al., 2015, 2017). As a result, illiterate tourists simply do not know the extent to which their actions compromise animal welfare. Therefore, we might argue that illiteracy has been "acceptable" in the present day because of an absence, deliberate or not, of awareness and knowledge that would ultimately lead to changing attitudes, skills, and action. Given this state of affairs, the purpose of the present paper was to construct an animal welfare literacy framework and apply it to the case of elephant tourism in Thailand—a framework adaptable enough to be used for all animal uses in tourism.

While such a framework holds potential to make the lives of animals used in tourism better in theory, in practice, tourists may experience difficulty becoming literate in all categories of Table 2. Herein lies the challenge. For years, EL and animal welfare literacy programs (and research) have been adopted in fields such as food/agriculture (see Hawkins et al., 2017 on how animal welfare literacy is important for preventing animal cruelty). Animal welfare literacy has advanced through World Animal Protection (2021), the BCSPCA (2021), and many other organisations. Now is the time to explore how animal welfare literacy can be implemented as a core theme in tourism and hospitality program curricula and as part of a broader animal welfare theme in K-12 institutions. However, this is not enough. EL needs to permeate the industry according to the strategies for improving animal welfare literacy noted above, including industry standards and assessments designed to educate industry stakeholders. The Association of British Travel Agents (ABTA, 2021) has made a start through their animal welfare guidelines, but for ATBA members only. Destination management organisations, major sectors of the industry like accommodation and transportation, and NGOs all have a role to play. A new initiative that allows tourists to rate and share the welfare, conservation and governance practices of wildlife tourism attractions (Fennell et al., in press) holds potential in elevating the literacy of tourists. Avoiding social costs on the part of operators (and tourists) must be part of the landscape of change.

In the end, tourists, operators, policymakers and other stakeholders have to do better; they have to prioritise animal welfare literacy, and there must be the will to engage it as part of the responsible/sustainable tourism agenda. Unfortunately, several years after the publication of Fennell's (2014) call on the UNWTO to append an 11th Article on the welfare interests of animals used in tourism to their Global Code of Ethics for Tourism, there has been no action.

Building from the model developed here, future research should investigate the literacy of tourists who fit into different akratic categories of Table 2. And not unlike the ecotourism literature, studies could establish a continuum of animal welfare tourists from hard path (demanding higher ecological standards in ecotourism experiences) to soft path groups (ecotourism packaged alongside general interest tourism experiences) (Acott, LaTrobe, & Howard, 1998). It would be unsurprising to find that most elephant venue tourists would be either soft path or mass tourists with doministic orientations (Hoberg et al., 2021) and hence more resistant to appreciating the needs and interests of animals. Research should also compare animal welfare literacy of different operators of the same species, i.e., different elephant tourism operators, and between species, i.e., cetaceans compared to great apes. A logical next step is the development of an animal welfare scale in tourism designed to measure the many criteria identified in Table 2 and by Fennell et al. (2022). Other studies should be designed to benchmark current animal welfare conditions amongst tourism stakeholders and see how interventions can elevate literacy over time. Finally, research could also determine if tourists are desensitised through continual participation at animal attractions, which, in the end, sanctions and legitimises participation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.annals.2022.103461.

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