

The effect of short-term educational travel programs on environmental citizenship

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Short-term study abroad is the fastest growing area of international education and there is increasing interest in the role of modified applications of this form (e.g. faculty-led, field/environmental, and/or educational travel) in influencing global citizenship. Using an empirical database of over 650 students registered for a study abroad course in sustainable development offered in Australia and New Zealand, we explore the effect of short-term educational travel programs on environmental citizenship. We also identify differences among key student characteristics (past study abroad experience, gender, and program destination) in influencing citizenry. Results show that participation in the educational travel program significantly moderates (decreases) the difference in environmental citizenship scores for first-timers (vs. those with past experience in study abroad) and program destination, but increases the difference in environmental citizenship for males vs. females. Implications for destination image and national brand marketing of environmental-oriented educational travel programs are discussed.

Keywords: educational travel; environmental citizenship; study abroad; international education; destination image

Introduction

Reflecting an increase in demand for faculty-led, short-term study abroad programs over the past decade (Institute of International Education Open Doors Report 2010), there have been a number of studies demonstrating the impact of such programs on student learning outcomes, including intercultural awareness and understanding (Carlson and Widaman 1988; Chieffo and Griffiths 2004; Kehl and Morris 2007; Litvin 2000, 2003; Nyaupane, Teye, and Paris 2008; Steinberg 2002; van't Klooster et al. 2008), personal development (Harrison 2006; Schroth and McCormack 2000; Zorn 1996), and/or functional knowledge and learning (Duke 2000; McKeown 2009; National Survey of Student Engagement 2007; Sutton and Rubin 2004; Vande Berg et al. 2004).¹ Arguably, these studies have been, in part, a response to questions concerning the legitimacy of study abroad as a valid academic pursuit and, in particular, the value of short-term programs in promoting the range and/or extent of learning outcomes associated with either traditional, semester- or year-long, international immersions and/or on-campus courses (cf. Engle and Engle

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2003; Kehl and Morris 2007; Steinberg 2002). A common conclusion in much of this outcome-based research, however, is that well-structured study abroad programs, of *any* duration, have the potential to create an extraordinary learning opportunity for students that, in many ways, surpasses the impact of traditional campus-based instruction (e.g. Chieffo and Griffiths 2004; McKeown 2009; McLaughlin and Johnson 2006; National Survey of Student Engagement 2007). In our empirical study, of an environmental-oriented study abroad program offered by several US institutions and utilizing a relatively large sample size, we explore the effect of participating in short-term educational travel on environmental citizenship and identify differences among key student characteristics (past study abroad experience, gender, and program destination) in influencing citizenry.

Environmental education and educational travel

Given an increasing focus in environmental education research on the role of academic institutions to promote and deliver global education (Blewitt 2005; Jensen 2002; Jurin and Hutchinson 2005; Rickinson 2006; Sherren 2008), the link between educational travel (as an instructional medium for promoting global citizenship) and environmental education is clearly topical. Indeed, there are increasing calls for environmental education programs to explore issues of social justice, civics, and ‘right relationships’ (i.e. with others as well as with Earth’s ecosystems) implying stronger ties with programs that nurture global citizenship (Mueller 2009; Scheunpflug and Asbrand 2006).² Similarly, some have argued for the development of informal curricula (that can include study abroad) as a way of embedding education for sustainable development (Hopkinson, Hughes, and Layer 2008). To date, however, there exists little empirical research on the effects of education for sustainable development on students’ (study abroad or otherwise) learning outcomes (Brody and Ryu 2006; Flint 2001).

Environmental citizenship and educational travel

Over the past decade, there have been increasing calls to develop the capacity of US students to think and act globally (Stearns 2009), as manifested in (a) academia through the growing number of universities and colleges with reference to promoting a global citizenry in their mission statement and (b) the federal government level with remarks such as by former US Secretary of State, Richard W. Riley that, ‘Since 9/11, it has become clear that the country cannot afford to remain ignorant about other countries’ (cited in Peppas 2005, 145). Such calls are likely to strengthen with anticipated passage of the Senator Paul Simon Study Abroad Foundation Act, an outcome of the bi-partisan Lincoln Commission that concluded in its report to Congress,

What nations don’t know can hurt them. The stakes involved in study abroad are that simple, that straightforward, and that important. For their own future and that of the nation, college graduates today must be internationally competent. (Commission on the Abraham Lincoln Study Abroad Fellowship Program 2005)

A commonly held belief is that study abroad promotes a worldview, a global mindset, or awareness of global issues (Dolby 2007); yet, there is limited empirical evidence to this effect (Annette 2002; Ingraham and Peterson 2004; Kehl and

Morris 2007; Peterson 2002; Stearns 2009). Global citizenship, a term which embraces both the psychological and behavioral dimensions associated with the type of world-mindedness thought to result from international transformative learning experiences, refers to actions and beliefs that nurture environmentalism, justice, and civic obligations (Dobson 2003; Dower and Williams 2002; Winn 2006). Moreover, contemporary thinking is that the environmental arena is where these issues of global citizenship – social responsibilities, obligations, and justice – are best considered (Bryant 2006; Dobson 2003; Dower and Williams 2002; Noddings 2005; Peterson 2002; Shallcross and Robinson 2006). Indeed, the global nature of many environmental issues such as climate change, energy utilization, ozone depletion, and biodiversity transcend national boundaries with effects distributed across the planet. It follows, therefore, that the civic obligation and justice concerns expressed by citizens most appropriately concern the sustainable consumption and use of earth's resources. As such, global citizens are not simply international by reason of their world travel but as a result of their environmental footprint – the quantity of nature required and consumed to sustain their lifestyle behaviors.

As a way of demonstrating the strong global/environmental citizenship connection, Dobson (2003) contrasts 'good citizens', as those who accept a political obligation to act in a just and fair manner, with 'good Samaritans', who principally act out of duty, using the context of climate change:

[I]f global warming is principally caused by wealthy nations, and if global warming is at least a part cause of strange weather, then monies should be transferred as a matter of compensatory justice rather than as aid or charity . . . globalization then changes the source and nature of obligation. (31)

Similarly, Dower (2003) recognizes the strong ties between global and environmental citizenship by acknowledging the importance of moral engagement in community organizations – members of environmental groups demonstrate a strong sense of duty and obligation to act in ways that are consistent with the goals of a global society.

Moreover, environmental and global obligations are not only civic, but also non-reciprocal; i.e. the obligation benefits people who have no immediate relationship to the self (and typically will be complete strangers) and often live in distant places (Dobson 2003; Schattle 2005, 2008). Schattle (2008), for example, proposes that environmentalism is one of four fundamental 'ideological constellations' that characterize global citizenship by emphasizing the moral relations between people and nature. As such, global citizens are people 'who can go out into the world and make a difference with regard to developing and sustaining the earth's natural resources' (cited in Schattle 2008, 81–82).

In the international education field, there is conflicting, albeit limited, evidence of how study abroad may promote global citizenship. Kehl and Morris (2007) found that global mindedness was higher among those who had engaged in a semester-length study abroad than either those who intended to study abroad (but had not yet done so) and those who studied abroad on a short-term program (of <8 weeks). Their study however was limited to a small number of private institutions, did not control for the study abroad destination and/or academic focus of the program, and respondents varied in the length of time between program participation and testing. In contrast to the findings by Kehl and Morris (2007), Chieffo and Griffiths (2004)

demonstrated that students who participated in short-term programs, even as short as one-month, produce significantly higher levels of global awareness as compared to those who remained on campus. They conclude that future studies should focus on a particular program destination/region and specific academic theme, as well as adopt a pre- and post-treatment, concerns stressed by Brody and Ryu (2006) in their examination of the impact of sustainable development coursework on the environmental behaviors of graduate students.

Past experience

There is increasing evidence of a first-time effect in study abroad; i.e. students who study overseas attain broad learning outcomes that appear to be lacking in their non-travel peers (Anderson 2003; McKeown 2009; National Survey of Student Engagement 2007). McKeown demonstrated that where study abroad was the first meaningful international experience for the student, they exhibited levels of intellectual development that were no different to those of more experienced travelers. Moreover, this pattern occurred even after only a short duration, as little as two weeks, of being abroad. Similarly, the National Survey of Student Engagement (2007) found that the length of time abroad made no significant difference in the extent to which students used deep learning approaches, affirming the *Just do it* ideology; i.e. it is more important that students have a study abroad experience, of any duration, than none at all.

Gender

It is fairly widely accepted that females exhibit stronger pro-environmental beliefs and behaviors than males (Stern and Dietz 1994; Stern, Dietz, and Kalof 1993; Zelenzy, Chua, and Aldrich 2000), in part because of higher altruistic and cooperative behavior levels in women. However, it is generally unknown how such findings extend to study abroad and environmental citizenship; i.e. are females likely to express stronger or weaker levels of environmental citizenship as a result of studying abroad? It has previously been shown that the genders experience study abroad differently (Hoffa 2007) especially with respect to pre-departure concerns about accommodations and social contacts (Martin and Rohrllich 1991) and intercultural interest (Carlson and Widaman 1988), both of which are greater for females than males. Two studies on global mindedness and gender suggest disparate effects: Hett (1993) showed that females scored higher than males following participation in study abroad while the more recent study by Kehl and Morris (2007) suggested the opposite may be true.

Program destination

Few large sample empirical studies have been conducted on a single-themed (in this case, environmentally focused) study abroad program in a particular country/region of the world. Previous work has tended to either address a small group of students (with sample sizes less than ~50) in a single program and country or a larger sample size (e.g. ~200–300 students) across multiple countries and programs of varying length and disparate academic foci. In the latter, a destination/country effect is likely to be large and potentially spurious especially when dealing with cultures and

customs that are considerably different (e.g. semester-long language programs in Europe vs. short-term island programs on ecology in Peru). The somewhat limited body of research in this area suggests that student outcomes are dependent on the country visited. For example, Nyaupane, Teye, and Paris (2008) showed that attitude change toward hosts was more positive in students visiting the Netherlands and Austria, than for Fiji and Australia (where US students reported a stronger negative attitude toward their hosts) following participation in the respective program. Similarly, Litvin (2003) found that Singaporean students had more negative attitudes toward Egyptians but more positive attitudes toward Israelis after studying abroad in the respective country. One explanation is that the degree to which attitudes change post-program is dependent on pre-program expectations; i.e. extremely positive pre-trip attitudes are more difficult to strengthen (i.e. become more positive) simply because of their base level. Clearly, it is important to understand student perceptions both pre- and post-program as students who self-select for one country are not only likely to be different than for those who select an alternate destination, but the degree of change in the outcomes will also be dependent on the country selected.

Experiential learning and educational travel

‘It is reasonably clear that good citizens are made, not born. The question is how, by whom, [and] to what end’ (Galston 2001, 217). A number of studies suggest that experiential learning, particularly in the international context, has the potential to exert a transformational effect on environmental citizenship (e.g. Kaufmann et al. 1992; Lutterman-Aguilar and Gingerich 2002; McLaughlin and Johnson 2006; Pagano and Roselle 2009). Building on the earlier work of Dewey (1963), experiential learning concerns activities that actively engage the student and which are subject to critical analysis and reflection. According to Kolb (1984, 41) ‘learning is the process whereby knowledge is created through the transformation of experience’. Study abroad programs that adopt principles of experiential learning are arguably powerful mechanisms for nurturing environmental sustainability. McLaughlin and Johnson (2006), for example, have proposed a field course experiential learning model for short-term study abroad (with specific reference to the environmental sciences) in which the field learning is comprised of ‘hands-on experience, journal keeping, environmental science, and basic conservation research, participation in discussion groups, species assignments, and independent exploration’ (66). Such an approach, they argue, provides a framework for moving students beyond simply acquiring knowledge to the domains of application and integration. Similarly, Lutterman-Aguilar and Gingerich (2002) have identified ten key principles for guiding experiential pedagogy in study abroad, including several aspects common to the McLaughlin and Johnson approach: problem-based learning, critical analysis, active engagement, faculty facilitation, and peer-group discussion. Clearly, study abroad programs that incorporate some/all of these experiential education principles have the potential to influence environmental citizenship.

Educational travel, especially of a short-term nature, is becoming increasingly attractive for undergraduate students to gain an international experience for several reasons. First, they are generally less expensive than full-semester programs. Second, short-term programs are positioned outside of the traditional (Fall and Spring) semesters (typically during summer and/or winter breaks), meaning that students

can graduate early by taking additional credits than they normally would. Third, short-term programs are often perceived as being less threatening to students with no prior overseas experience as they are faculty-led and involve travel with peers from the same institution. A challenge, of course, is to ensure the programs are structured in such a way to nurture desired learning outcomes that are both personal and professional (Harrison 2006). Moreover, they present a 'springboard for longer and more in-depth overseas experience' (Engle and Engle 2003), and many higher education institutions are seeking not only to expand the number of students studying abroad but also to increase the proportion of the graduating body with two or more international experiences.

Purpose of study

We explore the effect of previous study abroad experience, gender, and destination on pre- and post-levels of environmental citizenship, before and after participation in a short-term, faculty-led, experiential-based, educational travel program to Australia or New Zealand.

Methods

Sample and programs

The sample was comprised of undergraduate students from 10 US institutions who participated on a short-term (one month), faculty-led, educational travel program to Australia or New Zealand in May, June, or July in 2008 or 2009. Each program emphasized experiential learning through field-based modules and activities that required students to actively engage and critically analyze contemporary issues in sustainable development. The two programs used the same syllabus (including a set of learning objectives and course credits respective to each institution) on the interdisciplinary theme of Sustaining Human Societies and the Natural Environment and assessment criteria (comprised of field-based modules and a final exam). (The modules in Australia and New Zealand comprised sixteen 250-word essay questions on the academic topic of sustainable development and included a set of readings specific to each question and a background reading; students responded to each essay using material from the classroom lectures, field instruction, activities, and readings.) While the field sites in the two countries varied (in Australia the primary destinations were the Great Barrier Reef, the Outback, and the rainforest and in New Zealand, students traveled extensively throughout the South Island using an identical itinerary), both programs adopted the same delivery format (~25% classroom and ~75% field based), had a local field guide, and included faculty from the home institution who graded the assignments and led seminars and discussions on the field modules.

The academic focus in both countries was the interaction of humans and their environment, resulting in exploration of social issues (e.g. indigenous and contemporary cultures, political perspectives, etc.) and natural conditions (i.e. geology, biogeography, biology, and ecology of natural phenomena). While the programs emphasized mostly iconic tourism sites (rainforest, reef, and mountains), there was consideration given to sustainability projects throughout including, for example, forest measurement exercises, field sampling of marine biota and abiota, and service-learning projects (e.g. tree planting).

Research design and variables

A pre–post design was used in which students voluntarily completed a survey instrument on the first day (pre-test) and last day (post-test) of the program in the destination country. The pre-test measured levels of current/actual environmental citizenship, past study abroad experience, and gender while the post-test assessed intended environmental citizenship. The 7-item scale developed by Stern et al. (1999) was used to examine environmental citizenship with a response scale of yes/no (for current behavior) in the pre-test; while for the post-test, respondents were asked to indicate how likely is it they will perform the respective behaviors in the next 12 months on a 7-point Likert-type scale from 7 (extremely likely) to 1 (not at all likely). The pre-test scale was coded 0 (for no) and 1 (for yes) and therefore ranged from a low score of 0 to a high score of 7 (across all items in the scale), while the post-test scale ranged from 7 (all items scored ‘not at all likely’) to 49 (all items scored ‘extremely likely’). The items were as follows: read any newsletters, magazines, or other publications written by environmental groups; sign a petition in support of protecting the environment; give money to an environmental group; write a letter or call your member of Congress or another government official to support strong environmental protection; boycott or avoid buying products of a company because you feel that the company is harming the environment; vote for a candidate in an election at last in part because s/he was in favor or strong environmental protection; consider changing the car/vehicle you normally drive to a smaller engine size; become a member of any group whose main aim is to preserve or protect the environment.

In the post-test, item statements were modified to reflect a future intention to act; for example, instead of ‘Have you ever written a letter or called your member of Congress or another government official to support strong environmental protection?’ (pre-test), the revised (post-test) item read ‘In the next 12 months do you intend to write a letter or call your member of Congress or another government official to support strong environmental protection?’ Past study abroad experience was measured by asking the following question ‘Have you previously participated on a study abroad program? If yes, please state which country(ies) and the year(s) you participated’. Gender was self-reported male or female.

Analysis

An independent sample *t*-test was used (in SPSS version 17.0 2009) to explore differences in levels of past experience (yes or no), country (Australia or New Zealand), and gender (male or female) with a significance level of $p = .05$. Levene’s statistic tested for equality of variance in the two samples.

Results

Of the total sample of 695 students, 93.7% ($n = 651$) completed both surveys. The majority were female (68.3%), participated in the Australia program (64.8%), and had no prior study abroad experience (92.2%). Levene’s test showed no significant difference in the variances for each group, and variances were therefore assumed to be equal.

Table 1. Mean scores on environmental citizenship (actual and intended) for past study abroad experience, program destination, and gender.

	Mean	SD	N	Mean	SD	N	t-Test	p
<i>Past study abroad experience</i>								
Environmental citizenship		No		Yes				
Actual	2.08	1.63	601	2.70	1.92	51	-2.22	.030
Intended	30.91	9.06	580	32.19	9.48	47	-.093	.353
<i>Program destination</i>								
		New Zealand		Australia				
Actual	2.47	1.76	203	1.89	1.56	374	3.93	<.001
Intended	30.27	9.51	207	31.34	9.51	386	-1.36	.174
<i>Gender</i>								
		Male		Female				
Actual	1.99	1.57	201	2.19	1.69	434	-1.47	.141
Intended	27.42	9.15	185	32.28	8.58	426	-6.31	<.001

Table 1 shows that participation in the study abroad program significantly moderates (decreases) the difference in environmental citizenship scores for first-timers vs. those with past experience in study abroad and for program destination, but increases the difference in environmental citizenship for males vs. females. Specifically,

- First-timers scored significantly lower than their counterparts ($F=2.22$, $p=.03$) on actual environmental citizenship (pre-test), but there were no difference between the groups in the post-test measure of intended environmental citizenship ($F=-.09$, $p=.353$).
- Students in the Australian program scored significantly lower than their counterparts ($F=3.93$, $p<.001$) on actual environmental citizenship (pre-test), but there was no difference between the groups in the post-test measure of intended environmental citizenship ($F=1.36$ and $p=.174$).

In contrast,

- There was no significant difference in gender on pre-test measures of actual environmental citizenship ($F=1.47$, $p=.141$).
- But after the program, females reported significantly higher levels of intended environmental citizenship ($F=6.31$, $p<.001$).

Discussion and conclusions

Before discussing the findings and considering implications of the study, several limitations should be noted. First, while we considered the transformative impacts of one particular form of international educational travel, our study did not map the longer lasting impacts of such travel. There is a need to develop more longitudinal research that tracks how environmental global citizenship develops through educational travel and is subsequently maintained, enhanced, or indeed extinguished over time. Second, we only considered how previous study abroad experiences affected

environmental citizenship of participants and did not consider aspects of the travel experience which could shape global citizenship. Factors such as perceived safety, single gender programs, and destination differences are likely to influence perceived environmental citizenship resulting from participation. Third, at a methodological level, our study could not measure within-subjects (i.e. repeated measures) effects as the dependent variable (environmental citizenship) was recorded using two different response scales – a dichotomous (yes/no) response in the pre-test and a linear scale (7-point Likert) in the post-test. Although there is considerable and long-standing evidence in the consumer behavior (and other related social-psychological) literature suggesting that behavioral intentions approximate actual behavior (e.g. Ajzen 1989; Ajzen and Fishbein 1980; Bickman 1972; Fishbein and Ajzen 1975; Hines, Hungerford, and Tomera 1987; Schwartz and Tessler 1972; Weigel 1983), the different response scales make it difficult to interpret within-subjects analysis (even with a log of the scale items). Moreover, we have limited our analysis and interpretation of the study findings to a comparison of the between-subjects effects for each of the dependent measures separately, recognizing, however, that there is some relationship between actual behavior and behavioral intentions that has implications for the effect of the study abroad program itself. Finally, there was no variable that accounted for possible differences in the design/implementation of the two programs (Australia and New Zealand). It is plausible that, regardless of using the same syllabus, delivery format, and academic model, perceived differences in the instructors (i.e. field instructor A vs. B, for example) and/or geographic locations (e.g. Great Barrier Reef in Australia vs. Fjordland National Park in New Zealand) could have influenced students' responses.

Our findings should be considered in light of a growing critical discourse on the relationship between educational travel programs (as an emerging form of tourism), study abroad, and global citizenship. Zemach-Bersin (2009), for example, raises concerns over the commodification of study abroad and global citizenship in which educational travel has been marketed as essentially an individual good. Universities are arguably complicit in such relations, particularly where the mandate is to increase numbers (or the percentage) of students abroad without consideration of the quality of the programs and/or effect on students and society. In addressing this issue, Dolby (2004) recognizes that, 'study abroad is not simply a private good or individual experience' (173) rather, in encountering themselves, study abroad students bring back home with them perspectives that help shape the future American citizenry (see also Dolby 2007). As such, well-designed educational travel programs that focus on the broader context of citizenship have the potential to explicitly demonstrate the importance of study abroad as a public good.

Our results confirm, but also extend, findings of previous studies. For example, a first-time effect is consistent with reports by Anderson (2003), McKeown (2009), and the National Survey of Student Engagement (2007). Likewise, females were more affected by the program, in terms of its impact upon their intentions to act as global citizens, than males, supporting the work of Hett (1993) and Hoffa (2007). However, our findings extend previous research that has focused solely on changes in student attitudes toward host countries (Sirakaya, Sonmez, and Choi 2001; Son and Pearce 2005) by linking destination choice to transformative processes within individual student cohorts.

In effect, the Australian program attracted participants who had lower environmental citizenship scores than New Zealand program participants but had a stronger

impact on nurturing global citizenship than in the same program in New Zealand. However, consistent with the findings of Brody and Ryu (2006), it may also be argued that because students on the New Zealand program arrived in-country with relatively high environmental citizenship scores, it is arguably more difficult for their scores to improve, relative to students on the Australia program. These observations have important broad implications for environmental and international education, as well as tourism marketing. From an institutional perspective, it may be more efficient and effective to target resources to the Australia program where the effects of environmental education may be considered far greater (at least with respect to nurturing environmental citizenship, as a desired student learning outcome). Clearly, however, further exploration of the differences among the two programs – and students – is warranted before such conclusions may be definitively drawn.

In recent years, with the rapid growth in international education, scholars have focused their attention on the way international students select a particular location for their studies. Much of this literature has attended to long-term international students who undertake a large portion of their studies in a foreign destination (cf. Son and Pearce 2005; Wang and Davidson 2008). Similarly, a very large body of literature in tourism research has long recognized the importance of destination image in attracting visitors to particular destinations (see e.g. a meta-analysis of 152 related articles from 2000 to 2007 by Stepchenkova and Mills [2010]). As with the broader destination choice literature, this emerging body of research highlights how destination image plays a central role in destination choice. It also reveals that destination image is notoriously difficult to measure as a particular destination may hold multiple attributes that are often confused in the mind of the consumer or not known by the consumer. For example, it has been well documented that multiple attributes work collectively to create a destination image in the mind of a visitor, ultimately leading to an image that is either favorable or unfavorable which in turn effects destination choice (e.g. Milman and Pizam 1995). While destination image was not the primary focus of our study, clearly it appears that destination image played some role in destination choice. What is different about our study is that *destination choice was related to the propensity of students to be transformed*, in terms of their environmental citizenship.

For the past two decades, New Zealand has run effective and sustained tourism campaigns developing an iconic brand that positions the entire country as a destination where visitors will experience, what has been very successfully branded as, *100% Pure, Green and Clean* (Morgan, Pritchard, and Piggott 2002). This brand conjures images of untouched wilderness, majestic mountains and fjords, and, most importantly for students already interested in the environment, a place that embodies features of the ideal natural world. Given the strength of this destination image, it is not surprising that students who already hold strong environmental citizenship values choose such a place. Likewise, it is not surprising that those same students are unaffected by the experience, as they already possess values that are characteristics of environmental global citizenship. It is important to note, however, that this conclusion (albeit quite plausible) is at best conjecture since our study did not explicitly test for such relationships.

In contrast, Australia has struggled to present a strong single national brand image since the late 1980s when it capitalized upon the *Crocodile Dundee* image (Craik 2001). Destination branding of Australia has been criticized as being too diffuse, and therefore making it difficult for potential visitors to hold a clear image

of the destination (Echtner and Ritchie 1991; Winter and Gallon 2008). However, given that the students in this study who chose the Australian program were the ones whose global citizenship underwent the greatest transformation, a diffuse destination image may not be always be a negative attribute. We suggest that this is consistent with the idea that a diffuse destination image attracts visitors who are open to possibility and who are best positioned to go through what the educational travel literature describes as transformational learning.

Our findings provide an alternate perspective of how students select a destination for environmentally oriented education travel programs; i.e. a strong destination image and brand may indeed be detrimental to transformational learning. Clearly, to test the voracity of this finding, and generalizability to non-student populations, further research is needed that explores the relationship between transformational learning and destination image (in other contexts) for environmentally oriented education travel programs. Moreover, such relationships also need to be examined in the context of both travel-based educational (for-credit) programs and traditional on-campus (i.e. non-travel) courses. For example, to what extent is transformational learning dependent on an experiential modality? Finally, the inclusion of a qualitative research component would allow for much deeper exploration (and richer dataset) of the potential transformational impact of the programs and influence of location brand and destination choice.

Notes

1. It is unknown what per cent of faculty-led, short-term study abroad programs include an educational travel component, but anecdotal evidence suggests it is most, if not virtually all.
2. Some have raised concerns over the conversion of environmental education into education for sustainable development, leading to fundamental changes (and possibly constriction) in the philosophical direction of, what has become, an established field (see, e.g. Jickling and Wals 2008).

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