

Article

Who Walks the Walk and Talks the Talk? Understanding What Influences Sustainability Behaviour in Business and Leisure Travellers

Rachel Dodds¹ and Mark Robert Holmes^{2,*} 

¹ Ted Rogers School of Hospitality and Tourism Management, Ryerson University, Toronto, ON M5B 2K3, Canada; r2dodds@ryerson.ca

² School of Hospitality, Food and Tourism Management, Gordon S. Lang School of Business and Economics, University of Guelph, Guelph, ON N1G 2W1, Canada

* Correspondence: mholme07@uoguelph.ca; Tel.: +1-519-824-4120 (ext. 56309)

Abstract: While there is considerable research into what drives tourists to travel sustainably, little has been done to examine business travellers and how they differ from leisure travellers. The purpose of this paper is to fill this gap by looking to understand these differences and what drives them. Specifically, this paper looked to understand the influence that demographics, travel characteristics, and everyday behaviour (pro-ecological actions, frugal consumption patterns, and altruistic behaviours) have on sustainable travel behaviour, and if these influences held true for both business and leisure travellers. To facilitate this investigation, a quantitative study of 869 Canadian travellers in March of 2020 was undertaken. This research found that demographics and travel characteristics to contribute to the prediction of sustainable travel behaviour, but the greatest prediction power came from everyday behaviour. Beyond confirming that everyday behaviour is still the greatest indicator of sustainable travel domestically or abroad, this research found that this influence does not change whether the travel is for business or leisure.



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1. Introduction

Tourism's impact on the environment and the potential for sustainable travel are timely points of discussion and investigation [1,2] as adopting more sustainable practices contributes to the essential Sustainable Development Goals (SDGs). Often, 'sustainable tourists' have been recognized as the most desirable tourists due to their more environmentally friendly behaviours, greater yield or more amenable behaviour [3–7]. For example, these 'sustainable tourists' are more likely than other segments to satisfy the entirety of the "triple bottom line" [6] (p. 176) by aiding social initiatives, the local environment, and supporting the local economy.

Regardless of whether a tourist is, or is not, concerned about the environment or community, researchers have noted that there are challenges faced by tourists in translating their attitudes into sustainable behaviour while travelling [2,8–13]. Beyond Madrigal [14] finding that personal values are a significant predictor of travel behaviour, Han et al. [15] found pro-environmental habits at home to be a strong predictor of pro-environmental behaviours (PEBs). Holmes et al. [5] also found this to be true with other sustainability behaviours while on vacation. Liu et al. [2], however, found an unclear relationship between habits at home and habits while travelling and suggested a possible explanation is that vacation is an escape from everyday routine. Taken together, this set of literature demonstrates inconsistencies in findings surrounding the divergence in behaviour between what is done at home and when travelling.

There is also a gap in the literature when examining leisure versus business traveller behaviour. While leisure travellers have begun to increase their uptake of sustainable travel

opportunities, business travellers have yet to see significant growth in this area [16,17]. Limited research has investigated daily behaviours of consumers compared to what effect these have (if any) on their behaviours when business travellers are engaged in tourism; further, the results have been mixed and behaviours are often context specific [2,13,18].

It is, therefore, unclear from the literature what is understood to be a ‘sustainable tourist’, and few studies provide a clear connection between a tourist’s home behaviour regarding the environment, and whether similar behaviour is transposed while travelling. A possible reason for this ambiguity may be that sustainable consumers are considered across the entire population of tourists, rather than a distinguished and identifiable segment, such as for leisure and business, or sustainable traveller and typical traveller [5]). As other researchers have highlighted, intentions and attitudes are not sufficient for explaining behaviour [8,10]. Therefore, this study aims to determine whether predictors of behaviour versus action hold true and also determine if there is a clear distinction between leisure versus business travellers.

2. Literature Review

There are a variety of explanations for why the inconsistency between attitude and behaviour within travel exists. Hibbert et al. [19] propose that this attitude–behaviour gap has increased where behaviour at home and abroad do not align as individuals are progressively becoming more mobile. These authors note that different self’s manifest contingent on the situation, which could explain the discrepancy between an individual’s attitude and behaviour at home and on vacation. Such a contingency was also found by Liu et al. [2] who found that greater degrees of ‘daily green behaviours’ moderated a greater propensity to conduct such behaviours while traveling, supporting a notion that one’s habits can influence the attitude–behaviour gap even across a different context. They also found a relationship between subjective norm and those with less ‘daily green behaviour’, suggesting that, for some travellers, an environment that encourages pro-environmental behaviours (PEBs) may be necessary to keep a greener-self manifested while travelling. These, and other studies (see, e.g., [20]) suggest that the attitude–behaviour gap is still a challenge, and that it is an obstacle for educating tourists and changing their environmental behaviours. If the potential pro-sustainable behaviour of tourists is to be understood, the way forward will require a deeper investigation into travellers’ attitudes and their actual behaviours.

2.1. Pro-Environmental Behaviours at Home and Travelling

Discussions around pro-ecological behaviour (PEB) are becoming increasingly common in the tourism sphere of inquiry, and while the definition of PEBs tend to differ slightly between studies, the commonality between most of them is that they are behaviours that either mitigate an individual’s impact on the environment or positively impact the environment [21]. PEBs almost unanimously include the environment in their measures of sustainability (see, e.g., Liu et al. [2]; Whitmarsh and O’Neill, [18]); however, some literature also expand the sustainability discussion of PEBs to include environmental as well as social considerations [5,22–24]. Other papers on PEB tend to measure a participant’s engagement in different daily behaviours often through self-reports [18,23–29]. Some even take this a step further, studying the connections between PEBs at home and PEBs while traveling [2,5,12,15,30,31].

Corral-Verdugo et al. [26] include numerous sustainability behaviours including pro-ecological actions, frugal consumption patterns, and altruistic behaviours. These components represent broader categories of sustainable behaviours aimed at protecting both natural and the human resources in the socio-physical environment. Holmes et al. [5] expanded on Corral-Verdugo et al.’s [26] work and notably demonstrated that these three components have explanatory value with respect to tourists’ sustainable behaviour while travelling.

2.2. Leisure vs. Business Traveller

In addition to attitudes versus behaviour, a common shortcoming in the literature is the lack of discussion about the business traveller segment and their behaviour while at home or traveling. PEB literature appears to, perhaps unintentionally, exclude PEBs done for work while traveling; however, Young et al. [32] provide potentially valuable insights in their review, proposing that environmental attitudes are not necessarily a prerequisite for PEBs while working. Instead, “once employees know why and how to switch off machines at the end of shifts. They may do so even without having pro-environmental attitudes, because of the work structure, systems, culture and rewards for doing so” (p. 700). As ‘context’ has been suggested as an important influence on PEBs (i.e., [2,13]), this could be a contributor to why daily PEBs at home do not appear to transpose when travelling. Further, from what Young et al. [32] highlight, one’s PEBs at work may follow different expectations than one’s behaviours at home. Together, the lack of literature on PEBs at home and PEBs while traveling for business and for leisure necessitates a greater investigation.

2.3. Frugality, Altruism and Egoism in Sustainable Travel Behaviour

There also appears to be an absence of literature on the connection between frugality and PEBs in business travellers. Juvan and Dolnicar [33], found that travellers of the older segment (over the age of 30 years old) found travel to be a necessary task for work even while acknowledging this behaviour’s negative environmental impact. Extrapolating from Young et al.’s [32] review, workers may simply follow their employer’s PEBs in policies and practices. Intuitively, there is an obvious motive for frugality in business travel: an employer could require that business travel be as cost-efficient as possible, and thus frugality would be emphasized. However, frugality may not be a concern as a business may just require the business trip to be undertaken regardless of the cost. In either case, there appears to be a gap in the understanding of the PEBs done during business travel. Altogether, equitable use of products and intentionally limiting personal product consumption are central themes of frugal behaviour [5]. Other studies have found that frugality tends to take second place to indulgence while on vacation [9], which could suggest an important dichotomy between leisure and business travel making.

In contrast to egoistic motives, altruism is the characteristics of actively behaving in ways to benefit other human beings [34,35]. Altruism’s connection to helping those outside the self, advances the sustainability cause because choices are made with consideration of their impact on other people; thus, it is core to pro-ecological motivation. According to Schultz [36], altruistic individuals can be characterized by a greater predilection to making sacrifices as well as possessing a greater perception of control; therefore, to an altruistic individual, pro-ecologically behaviour would be seen as a necessary action. Robust support across many studies has shown that greater degree of altruism and altruistic behaviours result in a greater incidence of PEBs at home [2,22–24,26,29,31,37], as well as when traveling and on vacation [2,5,12,13]. Conversely, egoistic travel attitudes resulted in less environmentally sustainable behaviour as was found in a study by Canavan [38]. Oliver et al. [12] also found that egoistic values related to a diminished ecological outlook. However, egoism under a broad definition of personal/utility gain was found to promote (rather than hamper) PEB while touring, so long as it was more useful to the individual [13].

The three hypotheses this paper looks to examine are as follows:

Hypothesis 1 (H1). *Business and leisure travellers will differ in their sustainable travel behaviour.*

Hypothesis 2 (H2). *The relationship between frugality and sustainable travel behaviour will be significant for the leisure traveller.*

Hypothesis 3 (H3). *The relationship between frugality and sustainable travel behaviour will not be significant for the business traveller.*

Hypothesis 4 (H4). *The relationship between altruism and sustainable travel behaviour will be positively significant for the leisure traveller.*

Hypothesis 5 (H5). *The relationship between altruism and sustainable travel behaviour will be positively significant for the business traveller.*

3. Materials and Methods

To determine sustainability behaviours as well as the difference between business versus leisure travellers, this research employed structured surveys of a panel population. The population was asked questions pertaining to demographics, everyday behaviour, typical reason for travel (business versus leisure), and sustainable travel behaviour. Everyday behaviour was captured drawing on three separate constructs developed by Corral-Verdugo et al. [26,39]. The three constructs are comprised of questions pertaining to pro-ecological behaviour (e.g., “I wait until I have a full load before doing laundry”), frugality (e.g., I wear the same clothing from past season), and altruism (e.g., “I help elders or the handicapped cross the street”). Typical reason for travel was measured by asking the participants if they typically travel for business and leisure, and then to respond to questions pertaining to their choice. To capture sustainable travel behaviour, questions such as “Tourists have a responsibility to do what they can to protect the environment,” were asked, derived from the work of Juvan and Dolnicar [33] and Passafaro et al. [40]. All constructs were captured using 5-point Likert-type scales as used by Corral Verdugo et al. [39].

The survey developed for this study was administered by the company Dynata through the online survey tool Qualtrics. The research protocol was approved by the research ethics board at Ryerson University. A total of 2886 Canadian travellers completed the survey between mid-February and mid-March of 2020. Screening questions were used to ensure those panel participants were Canadian travellers, over the age of 18, who had traveled at least once in the past year. After cleaning the data set (80% completion rate and duplication of response), 869 respondents were retained for analysis.

This research looked to understand if those who typically travel for business are significantly different at home and travelling than those who travel for leisure. To facilitate this understanding, two different methods of analysis are employed. First, Mann–Whitney U tests were run to investigate if demographics, as well as every day and travel behaviours of those who travel are significantly different from those who travel for leisure. Second, a regression was employed to understand the influence that is typically travelling for business or leisure has on travelling sustainably, when demographics were controlled for.

4. Results

The respondents to the survey were slightly heavily male (57.6%) and heavily Canadian born (82.4%). There was a fairly even split of age ranges and education levels, with a higher frequency of \$100,000 + income level respondents (see Table 1a,b). In regard to travel characteristics, one-third of respondents travel alone (32.1%), one-third travel with their partner/spouse (31.5%), and the remainder travelling with friends, colleagues, or family. Close to half (45.7%) of travellers travel in all seasons. More than half (54.3%) of travellers sometimes revisit the same destination, and there is a fairly even split of travellers typically travelling for business (54.1%) and leisure (45.9%).

Beyond looking at the overall frequencies, this study looked to see if the demographic profiles, everyday behaviour, and sustainable travel behaviour of travellers differ based on their typical travel for business or leisure. To test these differences, given the nonparametric nature of some of the variables, Mann–Whitney U tests were undertaken. As can be seen in Table 1a,b below, business travellers are more commonly men, well educated, with higher incomes. While those who travel for business are more likely to be altruistic, leisure travellers are more likely to be frugal. When it comes to pro-ecological behaviour, business

travellers are more likely to point out unecological behaviour to someone, talk with friends about environmental problems, and buy products in refillable packages; on the other hand, those who typically travel for leisure are more likely to collect and recycle used paper, not buy prepared foods, and not use insecticides (see Table 2a–c). Looking at past sustainable travel behaviour, those who typically travel for business are more likely to travel sustainably (see Table 3). (Those who typically travel for leisure are likely to walk the walk, those who typically travel for business are more likely to walk the walk and talk the talk.) This finding supports research Hypothesis 1, which proposed that business and leisure travellers will differ in their sustainable travel behaviour. This could be linked to the companies' environmental travel policy (i.e., paying for carbon offset), and their desire to consume the local culture (i.e., adapting dress policy, speaking the language, eating at local restaurants).

Table 1. (a): Descriptive Statistics of Demographics and Travel Characteristics and Differences between Business and Leisure Travellers. (b): Descriptive Statistics of Travel Characteristics and Differences between Business and Leisure Travellers.

a: Descriptive Statistics of Demographics and Travel Characteristics and Differences between Business and Leisure Travellers.						
Variable	N	Mean	Business	Leisure	Z	Sig.
Female	869	0.424	0.321	0.544	−6.614	0.000
Canadian Born	868	0.824	0.851	0.792	−2.263	0.024
1928 to 1945	869	0.020	0.015	0.025	−1.078	0.281
1946 to 1964	869	0.265	0.243	0.291	−1.603	0.109
1965 to 1980	869	0.340	0.357	0.318	−1.214	0.225
1981 to 1996	869	0.308	0.343	0.268	−2.365	0.018
1997 to 2020	869	0.068	0.043	0.098	−3.221	0.001
High School or Less	869	0.205	0.138	0.283	−5.272	0.000
College Diploma	869	0.230	0.196	0.271	−2.614	0.009
University Degree	869	0.349	0.383	0.308	−2.302	0.021
Graduate Degree	869	0.216	0.283	0.138	−5.175	0.000
<\$30,000	869	0.162	0.094	0.243	−5.953	0.000
\$30,000–\$49,999	869	0.153	0.115	0.198	−3.389	0.001
\$50,000–\$69,999	869	0.170	0.164	0.178	−0.551	0.581
\$70,000–\$99,999	869	0.175	0.194	0.153	−1.574	0.115
\$100,000–\$149,999	869	0.253	0.313	0.183	−4.383	0.000
\$150,000+	869	0.086	0.121	0.045	−3.982	0.000
b: Descriptive Statistics of Travel Characteristics and Differences between Business and Leisure Travellers.						
Variable	N	Mean	Business	Leisure	Z	Sig.
Travelling Alone	868	0.321	0.486	0.128	−11.259	0.000
Travelling Partner/Spouse	868	0.315	0.186	0.466	−8.870	0.000
Travelling Family	868	0.199	0.105	0.311	−7.578	0.000
Travelling Friends	868	0.062	0.038	0.090	−3.150	0.002
Travelling Colleagues	868	0.099	0.181	0.003	−8.779	0.000
Travelling Other	868	0.004	0.004	0.003	−0.440	0.660
Travelling Winter	869	0.134	0.094	0.181	−3.749	0.000
Travelling Spring	869	0.091	0.106	0.073	−1.721	0.085
Travelling Summer	869	0.259	0.226	0.298	−2.437	0.015
Travelling Fall	869	0.060	0.036	0.088	−3.191	0.001
Travelling All Seasons	869	0.457	0.538	0.361	−5.228	0.000
Repeat Never	869	0.295	0.223	0.378	−4.993	0.000
Repeat Repeat	869	0.543	0.581	0.499	−2.420	0.016
Repeat Sometimes	869	0.158	0.192	0.118	−2.969	0.003
Repeat Frequently	869	0.158	0.192	0.118	−2.969	0.003

Table 1. Cont.

b: Descriptive Statistics of Travel Characteristics and Differences between Business and Leisure Travellers.							
Variable	N	Mean	Business	Leisure	Z	Sig.	
Frequency of Travel	Domestic Travel	822	9.690	12.623	5.981	−11.619	0.000
	International Travel	749	8.840	11.022	6.243	−7.417	0.000
Typically Travel for	Business	869	0.541				
	Leisure	869	0.459				

Table 2. (a): Everyday Behaviours Descriptive Statistics and Differences between Business and Leisure Travellers. **(b):** Pro-Ecological Behaviour Descriptive Statistics and Differences between Business and Leisure Travellers. **(c):** Frugality Descriptive Statistics and Differences between Business and Leisure Travellers.

a: Everyday Behaviours Descriptive Statistics and Differences between Business and Leisure Travellers.							
Variable	N	Mean	Business	Leisure	Z	Sig.	
Donate clothing to the less fortunate	868	3.603	3.629	3.571	−0.864	0.387	
Assist a person in need on the street	867	3.068	3.133	2.993	−2.033	0.042	
Contribute financially such as Red Cross	867	3.190	3.345	3.008	−4.724	0.000	
Visit the sick at hospitals/homes	867	2.238	2.444	1.995	−5.264	0.000	
Help elders or the handicapped crossing the street	867	2.904	2.987	2.807	−2.366	0.018	
Guide people asking for directions	868	3.672	3.706	3.631	−1.026	0.305	
Provide some money to the homeless	867	2.630	2.799	2.431	−4.447	0.000	
Participates in fund collection rallies	868	2.864	3.105	2.582	−6.658	0.000	
Donate blood when required	864	2.265	2.585	1.889	−7.505	0.000	
Cooperate with colleagues	867	3.803	3.949	3.632	−3.233	0.001	
b: Pro-Ecological Behaviour Descriptive Statistics and Differences between Business and Leisure Travellers.							
Variable	N	Mean	Business	Leisure	Z	Sig.	
Wait until I have a full load before doing laundry	866	4.013	3.981	4.050	−1.771	0.077	
Drive on highway at speeds under 100 kph	868	2.712	2.840	2.561	−3.297	0.001	
Collect and recycle used paper	867	4.085	3.985	4.203	−3.646	0.000	
Point out unecological behaviour to someone	867	2.706	2.836	2.553	−3.366	0.001	
Do not buy prepared food (AI)	868	3.371	3.256	3.506	−3.527	0.000	
Buy products in refillable packages	865	2.903	2.968	2.827	−2.003	0.045	
Buy seasonal produce	869	3.593	3.619	3.561	−0.721	0.471	

Table 2. Cont.

b: Pro-Ecological Behaviour Descriptive Statistics and Differences between Business and Leisure Travellers.						
Variable	N	Mean	Business	Leisure	Z	Sig.
Do not use clothes dryer (AI)	866	2.163	2.177	2.146	−0.785	0.433
Read about environmental issues	868	3.183	3.243	3.113	−1.698	0.090
Pre Ecological Behaviour—Talk with friends about environmental problems	863	2.936	3.034	2.820	−2.791	0.005
Do not use chemical insecticides (AI)	867	3.961	3.734	4.229	−6.325	0.000
Turn down air conditioning when leaving place	868	3.771	3.815	3.719	−0.369	0.712
Look for ways to reuse things	867	3.788	3.778	3.799	−0.523	0.601
Encourage friends and family to recycle	863	3.588	3.568	3.610	−0.793	0.428
Conserve gasoline by walking or bicycling	865	3.121	3.139	3.101	−0.512	0.609
c: Frugality Descriptive Statistics and Differences between Business and Leisure Travellers.						
Variable	N	Mean	Business	Leisure	Z	Sig.
Do not buy a new car if old one is still functional	867	3.807	3.783	3.836	−1.498	0.134
Wear the same clothing from a past season	867	4.228	4.134	4.340	−3.132	0.002
Do not buy jewelry	867	2.194	2.307	2.060	−3.313	0.001
Do not buy lots of shoes (AI)	867	3.897	3.729	4.096	−4.472	0.000
Do not buy more food than needed (AI)	865	3.595	3.446	3.773	−4.389	0.000
Do not use earnings for buying clothing (AI)	867	4.178	3.979	4.412	−5.373	0.000
Always eat meals at home	867	3.611	3.557	3.675	−2.007	0.045
Rather walk than drive	865	2.784	2.836	2.722	−1.790	0.073
Reuse notebooks and papers	862	3.399	3.400	3.398	−0.174	0.862
Live lightly even when affording luxuries	866	3.495	3.473	3.521	−0.667	0.505

Table 3. Past Sustainable Travel Behaviour Descriptive Statistics and Differences between Business and Leisure Travellers.

Variable	N	Mean	Business	Leisure	Z	Sig.
Locally owned accommodations	866	2.686	2.716	2.651	−0.649	0.516
Locally grown food and/or drink	868	3.083	3.021	3.155	−1.486	0.137
Chain food (e.g., McDonalds)	868	2.493	2.670	2.286	−4.562	0.000
Purchased Locally made arts and crafts	862	2.643	2.556	2.745	−2.208	0.027
Look up a company's environmental or fair-trade policy	866	2.211	2.381	2.013	−3.708	0.000
Walk or cycle instead of taking motorized transportation at the destination (taxi or renting a car)	864	2.988	2.925	3.063	−1.515	0.130

Table 3. Cont.

Variable	N	Mean	Business	Leisure	Z	Sig.
Avoid renting a private car	864	2.236	2.607	1.798	−8.765	0.000
Opt for a different destination that did not need flying to	863	2.596	2.630	2.554	−0.894	0.371
Purchase carbon offsets to mitigate your carbon footprint	861	1.979	2.178	1.744	−5.008	0.000
Use public transportation (i.e., bus, subway or tram)	864	2.685	2.650	2.727	−0.639	0.523
Adapt your dress style to meet the expectation of local people at the destination	865	3.088	3.336	2.796	−5.756	0.000
Go to places mostly locals go to (or very few tourists)	866	3.143	3.225	3.048	−2.522	0.012
Eat local foods and specialties in locally owned restaurant (instead of international food in known branded places)	867	3.421	3.448	3.389	−0.528	0.598
Stay in your hotel to relax	866	3.177	3.266	3.073	−2.900	0.004
Try using the local language (if not your first language)	864	2.865	3.047	2.650	−4.466	0.000
Intentionally interact with locals	866	3.155	3.220	3.078	−1.958	0.050
Does not keep the air conditioning or heater on when you leave the room	866	2.519	2.647	2.366	−3.206	0.001
Turn off the lights when you leave your accommodation	867	4.268	4.119	4.443	−5.361	0.000
Bring and use a refillable water bottle	867	3.518	3.406	3.649	−3.084	0.002
Does not ask for a plastic bag when shopping	865	2.413	2.543	2.259	−3.256	0.001
Does not take more food than you needed at a buffet	869	2.196	2.379	1.980	−4.567	0.000
Does not take more than one shower per day	865	2.155	2.331	1.947	−4.727	0.000
Participate in your hotel's reuse towel program	866	3.777	3.778	3.776	−0.411	0.681

Note. Construct questions pertaining to frugality, PEB and altruism were obtained from previous studies (see Holmes et al. [5]).

4.1. Component Confirmation

Prior to running the regression, each of the constructs were tested to ensure that their individual questions were able to measure the constructs satisfactorily. Given that each of the constructs have been previously tested (altruism (26, 39), frugality (39), pro-ecological behaviour (5, 26), and sustainable travel behaviour (5, 33, 40), each construct was verified through testing the Alphas, and removing items that improved the Alpha. The retained questions and subsequent Alphas can be seen in Table 4a–d below.

Table 4. (a): Altruism Alphas. (b): Pro-Ecological Behaviour Alphas. (c): Frugality Alphas. (d): Past Sustainable Travel Behaviour Alphas.

a: Altruism Alphas.		
	Original Alpha	Retained Alpha
Donate clothing to the less fortunate		
Assist a person in need on the street		
Contribute financially such as Red Cross		
Visit the sick at hospitals/homes		
Help elders or the handicapped crossing the street	0.853	0.862
Guide people asking for directions		
Provide some money to the homeless		
Participates in fund collection rallies		
Donate blood when required		
Cooperate with colleagues		
b: Pro-Ecological Behaviour Alphas.		
	Original Alpha	Retained Alpha
Collect and recycle used paper		
Point out unecological behaviour to someone	0.738	0.841

Table 4. Cont.

b: Pro-Ecological Behaviour Alphas.		
	Original Alpha	Retained Alpha
Buy products in refillable packages		
Buy seasonal produce		
Read about environmental issues		
Talk with friends about environmental problems		
Turn down air conditioning when leaving place		
Look for ways to reuse things		
Encourage friends and family to recycle		
Conserve gasoline by walking or bicycling		
Wait until have a full load before doing laundry		
Do not use chemical insecticides (AI)		
Drive on highway at speeds under 100kph		
Do not buy prepared food (AI)		
Do not use clothes dryer (AI)		
c: Frugality Alphas.		
	Original Alpha	Retained Alpha
Do not buy a new car if old one is still functional		
Wear the same clothing from a past season		
Always eat meals at home		0.705
Rather walk than drive		
Reuse notebooks and papers		
Live lightly even when affording luxuries	0.503	
Do not buy jewelry		
Do not buy lots of shoes (AI)		
Do not buy more food than needed (AI)		
Do not use earnings for buying clothing (AI)		
d: Past Sustainable Travel Behaviour Alphas.		
	Original Alpha	Retained Alpha
Locally owned accommodations		
Locally grown food and/or drink		
Chain food (e.g., McDonalds)		
Purchased Locally made arts and crafts		
Look up a company's environmental or fair trade policy		
Walk or cycle instead of taking motorized transportation at the destination (taxi or renting a car)		
Avoid renting a private car		
Opt for a different destination that did not need flying to		
Purchase carbon offsets to mitigate your carbon footprint		0.879
Use public transportation (i.e., bus, subway or tram)	0.867	
Adapt your dress style to meet the expectation of local people at the destination		
Go to places mostly locals go to (or very few tourists)		
Eat local foods and specialties in locally owned restaurant (instead of international food in known branded places)		
Stay in your hotel to relax		
Try using the local language (if not your first language)		
Intentionally interact with locals		
Does not ask for a plastic bag when shopping		
Does not take more food than you needed at a buffet		
Does not take more than one shower per day		

Table 4. Cont.

d: Past Sustainable Travel Behaviour Alphas.		
	Original Alpha	Retained Alpha
Does not keep the air conditioning or heater on when you leave the room		
Turn off the lights when you leave your accommodation		
Bring and use a refillable water bottle		
Participate in your hotel’s reuse towel program		

Greyed questions were omitted from the constructs.

4.2. Results of Regression Analyses

To test if the differences uncovered in the difference tests hold true when demographics are controlled for, a multi-step regression was undertaken (see Table 5). A hierarchical multi-step regression was run to understand the influence that demographics, travel characteristics, and everyday behaviour have on past sustainable travel behaviour (PSTB). The first model, looking at the influence of demographics was found to be significant and to show that females, older respondents, and the less educated were slightly less likely to travel sustainably than men, older respondents, and those with a graduate degree.

Model 2 adds travel characteristics to the model resulting in a significant change to the R². The second model finds those who revisit the same destination frequently and those who travel for leisure are less likely to travel sustainably. Model 2 also finds the more travel a respondent undertakes, the more sustainable their past travel behaviour has been in a destination.

Lastly, Model 3 looks at how everyday behaviour influences a tourist’s sustainable travel behaviour. Model 3 derives the greatest explanatory power, accounting for 0.336 of the R². Out of the three constructs, the scores with the greatest influence on sustainable travel behaviour are, in order of influence, altruism (0.333), frugality (0.216), and pro ecological behaviour (0.182). It is of note that, although the significance of its influence went from $p < 0.01$ to $p < 0.10$, travelling for business still had a positive influence on sustainable travel behaviour as compared to those who typically travel for leisure.

Table 5. Stepwise Regression.

	Model 1—Demographics			Model 2—Demographics + Travel Characteristics			Model 3—Demographics + Travel Characteristics + Everyday Behaviour		
	B	Std. Error	Sig	B	Std. Error	Sig	B	Std. Error	Sig
Female	−0.021	0.012		−0.01	0.011		−0.03	0.008	***
Male									
Canadian Born	−0.008	0.014		−0.015	0.014		−0.006	0.01	
Not Canadian Born									
1928 to 1945	−0.122	0.05	*	−0.072	0.048		−0.073	0.035	*
1946 to 1964	−0.138	0.026	***	−0.093	0.025	***	−0.094	0.019	***
1965 to 1980	−0.12	0.026	***	−0.078	0.025	**	−0.069	0.018	***
1981 to 1996	−0.033	0.026		−0.019	0.025		−0.019	0.018	
1997 to 2020									
High School or Less	−0.051	0.018	**	−0.03	0.017		−0.004	0.013	
College Diploma	−0.062	0.017	***	−0.043	0.016	**	−0.017	0.012	
University Degree	−0.052	0.015	**	−0.039	0.014	**	−0.026	0.01	*
Graduate Degree									
<\$30,000	−0.067	0.024	**	−0.064	0.023	**	−0.029	0.017	
\$30,000–\$49,999	−0.024	0.023		−0.018	0.023		0	0.017	
\$50,000–\$69,999	−0.035	0.023		−0.036	0.022		−0.013	0.016	
\$70,000–\$99,999	−0.019	0.022		−0.017	0.021		0.002	0.015	

Table 6. Cont.

	All Respondents			Business Travellers			Leisure Travellers		
	B	Std. Error	Sig	B	Std. Error	Sig	B	Std. Error	Sig
1928 to 1945	−0.073	0.035	*	−0.087	0.053		−0.087	0.048	
1946 to 1964	−0.094	0.019	***	−0.086	0.030	**	−0.107	0.024	***
1965 to 1980	−0.069	0.018	***	−0.059	0.029	*	−0.085	0.024	***
1981 to 1996	−0.019	0.018		−0.007	0.029		−0.047	0.024	*
1997 to 2020									
High School or Less	−0.004	0.013		−0.001	0.019		−0.007	0.019	
College Diploma	−0.017	0.012		−0.020	0.016		−0.007	0.018	
University Degree	−0.026	0.010	*	−0.038	0.013	**	−0.006	0.017	
Graduate Degree									
<\$30,000	−0.029	0.017		−0.022	0.025		−0.029	0.028	
\$30,000–\$49,999	0.000	0.017		−0.016	0.023		0.006	0.028	
\$50,000–\$69,999	−0.013	0.016		−0.030	0.020		−0.004	0.029	
\$70,000–\$99,999	0.002	0.015		−0.008	0.020		0.013	0.028	
\$100,000–\$149,999	−0.010	0.014		−0.022	0.017		0.007	0.027	
\$150,000+									
Alone									
Partner/Spouse	0.011	0.011		0.013	0.014		−0.018	0.018	
Family	0.012	0.013		0.027	0.019		−0.017	0.020	
Friends	0.007	0.018		0.021	0.035		−0.022	0.025	
Colleagues	−0.017	0.014		−0.009	0.015		−0.011	0.094	
Other	−0.098	0.067		0.059	0.099		−0.285	0.095	**
Winter	0.018	0.012		0.034	0.020		0.005	0.016	
Spring	0.037	0.014	**	0.041	0.018	*	0.014	0.023	
Summer	0.029	0.010	**	0.041	0.014	**	0.003	0.014	
Fall	0.030	0.017		0.043	0.031		0.019	0.020	
All Seasons									
Repeat Never	0.029	0.013	*	0.042	0.018	*	0.000	0.019	
Repeat Sometimes	0.026	0.011	*	0.025	0.015		0.005	0.019	
Repeat Frequently									
Domestic Travel	0.001	0.000		0.001	0.001		0.000	0.001	
International Travel	0.001	0.000	***	0.001	0.001		0.002	0.001	**
Typically Travel for Business	0.019	0.010							
Typically Travel for Leisure									
Altruism	0.333	0.029	***	0.388	0.039	***	0.257	0.044	***
Pro Ecological Behaviour	0.182	0.036	***	0.152	0.051	**	0.228	0.053	***
Frugality	0.216	0.034	***	0.246	0.046	***	0.159	0.050	**
(Constant)—Past Sustainable Travel Behaviour	0.098	0.035	**	0.080	0.048		0.205	0.058	***
Adjusted R-square		0.599			0.644			0.486	

Italics identifies omitted variable; *** significant at the 0.001 level; ** significant at the 0.01 level; * significant at the 0.05 level.

In summary, three of the five hypotheses were found to be supported. Supporting Hypotheses 1, business and leisure travellers were found to differ in their sustainable travel behaviour, with business travellers being more sustainable when travelling overall. In regard to Hypotheses 2 and 3, while it was thought that frugality might have only been a predictor of sustainable travel behaviour for leisure travellers, it was also found to be a predictor for business travellers. Lastly, altruism was found to be a significant predictor of sustainable travel behaviour (STB) for both business and leisure travellers, supporting Hypothesis 4 and 5.

5. Discussion and Conclusions

Prior work has found factors of demographics, travel behaviour, and everyday behaviour to influence sustainable travel behaviour. This research found demographics to still be an indicator of sustainable travel behaviour. Educated millennial travellers were found to be more sustainable which support past studies [5,41]. Travel characteristics were also found to add a modicum of explanatory power, finding that those who typically do not revisit the same destination and/or who travel more frequently, are more likely to travel sustainably. This suggests that travel destinations should look to target the well-travelled tourist in an attempt to attract those who travel more sustainably which supports in part Dodds's [42] theory of tourism experience is linked to sustainable travel.

While previous studies have questioned or found everyday behaviour to be the greatest indicator of sustainable travel [5,10,43], they have treated all travellers as a homogeneous group. Beyond confirming that everyday behaviour still has the greatest explanatory power for predicting sustainable travel behaviour, this study looked to investigate differences between leisure and business travellers. Focusing on Canadian travellers, and segmenting them based on their typical travel for business or leisure, this study found that business travellers tend to travel more sustainably than those who travel for leisure. This may be a result of businesses requiring sustainable travel as part of their company's policies. Further, this research found altruistic tendencies of travellers when at home to be the largest predictor of their sustainable behaviours when travelling. As such, DMOs should look to better understand their target market through tourist segmenting and market research, to attract those who are more altruistic in their everyday behaviour.

5.1. Conclusions

This research has three primary outcomes. First, this research found that business travellers are more likely to travel sustainably, which may suggest that businesses have an influence on sustainable travel behaviour. For this benefit to be realized and improved, there is a need to augment or increase corporate responsibility efforts within travel policies. Further, businesses need to be made aware of this relationship so that they can see the influence that they are having. Second, there needs to be more research into business travel and the influence businesses can have. For industry to also benefit from this research, this work needs to be disseminated through both academic and industry outlets. Lastly, the majority of work in this area is lacking, as most research either focuses on the leisure tourist or treats all tourists as a homogeneous group; therefore, there is a missed opportunity to understand the differences between sustainable travel behaviour of leisure and business travellers independent of each other. By better understanding the differences between the markets and the factors that attract them and drive them to travel sustainably, destinations can look to target those travellers who look to not only visit the destination but to undertake such visitation in a sustainable way.

5.2. Limitations and Future Research

This paper has a few limitations and suggests a number of recommendations. This study surveyed only Canadian travellers; as such, future research to look to expand the sample population to incorporate other countries and cultures to investigate if these findings hold true. Survey respondents in this study were asked to reflect on, and answer questions pertaining to their past travel experience, which may have been influenced by their ability to recall experiences that were further out. Future research should look to implement a two-stage process: first, asking respondents to answer questions pertaining to everyday behaviour, and second, asking participants to answer questions pertaining to their travel during their trip or upon return. Future research would also benefit from incorporating qualitative interviews that provide greater explanation for why everyday behaviour translates into sustainable travel behaviour. Lastly, future research could investigate how specific business policies and types influence employee travel behaviour and

the mediating and/or moderating role they may play between their employees everyday behaviours and sustainable travel outcomes.

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