

# The Influence of Place Attachment Dimensions on Pro-Environmental behaviour intention among Local Tourists in Mahe, Seychelles

Georges Yazmeen Mary Christie L  
Asia Pacific University, Malaysia  
yazygirl@hotmail.co.uk.

Thanam Subramaniam  
Asia Pacific University, Malaysia  
thanam@staffemail.apu.edu.my

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## Abstract

Environmental issue has been recognised as one of the critical issues faced by the tourism industry in the world today. Human's involvement in transits tourism destination as a commercial tourism highly damaging and destroying the nature and contributed to the global environmental issue. Nurturing place attachment and pro-environmental behaviour among local communities and tourists have been acknowledged as a solution to overcome the environmental issue in the previous literature, however, it is still at infancy level and not fully explored in different tourism sector and nations, including the Seychelles. Hence, this paper is aimed to analyse the influence of place attachment dimensions in pro-environmentally behaviour intention among local tourists in Mahe, Seychelles. A preliminary study was carried out among 50 local tourists in Mahe, Seychelles to examine the relationship between the four dimensions of place attachment on pro-environmental behaviour intention. This study adopted quantitative method, where survey questionnaire was distributed among local tourists in Mahe, Seychelles. The results indicated that all four dimensions were significantly influenced the pro-environmental behaviour intention among local tourists. However, the outcomes of the study limited to a small number of sample size and behavioural intention. Therefore, it is recommended to explore this study with large sample size, actual pro-environmental behaviour and a different tourism sector.

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## 1.0 INTRODUCTION

Tourism is recognised as one of the fastest growing industries and representing 10% of the world's total Gross domestic product (GDP) (UNWTO, 2018). Tourism builds a link between sectors in the economy and thus creates diversification. However, this diversification involves a range of actions and activities that creates a growing issue for sustainable tourism industry which needs each activity or section to be practicing sustainability to function (United Nations Conference on Trade and Development, 2013). Although the awareness on sustainability of tourism destination has been identified and focused in most of the agenda nowadays, negative impacts on environment and tourism resources

cannot be ignored and become main challenges to tourism industry and authorities (Jarvis, Weeden and Simcock, 2018). Omar (2015) found the environmental deterioration and the devaluation of the various living species that form part of nature occurs as a result of lacking awareness and human responsibility. The Republic of Seychelles is made up of islands situated in the western Indian Ocean of Africa's east coast. The 115 islands are made up of either granite ones, coral atolls or reef islands. Seychelles forms part of SIDS (Small Island Developing States) which is an assembly of island countries due its isolated location and size, isolation are victims to global climate changes. According to the Report of Sustainable Development of Small Island Developing States highlighted that SIDS are vulnerable to global

change, sea level rising and climate variability. As their population, infrastructure, agricultural land is mostly concentrated in the coastal areas, possible rise in sea level will have vital and profound effects on their living conditions and economies; meaning the survival of certain low-lying countries will be threatened” (United Nations, 1994).

Seychelles has a significant priority to uphold the protection of the environment for sustainability. It is home to a wide range of endemic species and contributes a significant part in “global biological diversity conservation.” Although climate change is identified as the primary threat to the nation which could affect both “livelihood and ecosystem health”, the islands’ biodiversity is also mainly jeopardized due to human negative impact. The beach is a vital element that plays a crucial role to both the ecosystem and one of the important contributing factors in attracting the tourist numbers. Without its protection a chain effect of issues could arise such as pollution ending up in the ocean affecting the marine life which can negatively reduce the numbers of endangered creatures (Aspenfelt, 2015). The growth and development of Seychelles highly depends on the sustainability of tourism sector. However in the recent years, serious environmental issues have been recognised as a big challenge in Seychelles. The massive tourism promotional strategies has initiated overcrowding and environmental degradation issues in Seychelles, especially in Mahe (Orangesmile.com, 2019; Pcusey.sc, 2019). Lack of pro-environmental behaviour and place attachment has been identified as main contributor to this environmental issue. Although several studies have addressed pro-environmental behaviour in relation to environmental issue and place attachment (Masud et al., 2016; Ramdas & Mohamed, 2014; Ramkissoon & Mavondo, 2015; Ramkissoon et al., 2013), none of them has been conducted in Seychelles. Hence, the paper is aimed to examine the influence of place attachment dimensions (including place identity, place dependence, place affect and place social bonding) towards pro-environmentally responsible behaviour amongst local tourists in Mahé Seychelles.

## 2.0 LITERATURE REVIEW

### a. Place Identity

Place identity is the link between oneself and a place that possesses a collection of “memories, interpretations, ideas and related feelings about physical settings as well as types of settings” (Proshansky, Fabian and Kaminoff 1983). Not all-natural settings contain a strong connection with an individual’s self-identification process, but individuals often relate with areas which mirror their own identities. Place identity serves the purpose of helping individuals maintain their self-identity. (Deanne Brocato, 2019). Ramkissoon et al (2013; 2012) and Hinds and Sparks (2008) found there is a relationship between place identity and pro-environmental behaviour. This means that the more a person experiences place identity for the environment the stronger the environmental responsible behaviour will be.

### b. Place Affects

Place affect is the emotional bonds someone has towards the environment. The link between people and place has been proven to be effective (Ramkissoon, 2015). Researchers suggest that affective links generates a sense of well-being psychologically for people. It is also related with environmental sustaining behaviours, actions and attitudes. Ramkissoon et al (2013) revealed a positive and significant between place affect and pro-environmental behaviour. In addition, Pooley and O’Connor (2000) found place attachment has been identified as an important predictor of protecting local forests. Ramkissoon et al (2013) further highlighted the lack of studies been conducted in relation to place affect and pro-environmental behaviour.

### c. Place Dependence

Williams et al (1992) defined place dependence as a person’s awareness of a setting being unique to itself, the places ability to supply sought after experiences and how based on these unique qualities sets it apart from other places. The study further states that people can depend on precise natural settings that provides facilities or resources towards their experience which they desire to have. For example, a person who desires to

witness the largest nut in the worlds natural habitat will depend on the Vallee de Mai in Seychelles to offer this unique experience as this nut called the Coco de Mer only grows in that natural location (Ramkissoon et al., 2013). The more someone relates him or her with the physical attributes of an area the less likely that person will wish to change the area for someplace else. A study by Bricker and Kerstetter's (2000), revealed that place dependent attributes present in visitors where worried with sustainability. Yet another study by Kyle et al (2003) showed no effect relationship of place dependence with the attitudes of people with encouraging and participating in sustainable activities. Overall, research regarding the relationship between place dependence and pro-environmental responsible behaviour has not been continuously studied to show conclusive results and so little about the direct effect it has is known.

**d. Place Social Bonding**

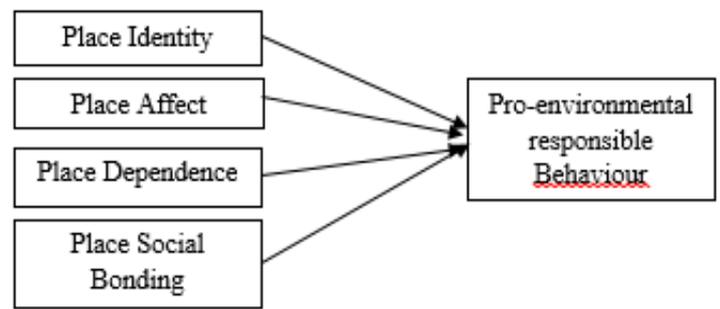
Scannell and Gifford (2010) referred place social bonding as social ties or communal bonds that are created through people-place interaction and shared experiences. Wiles (2005); Hidalgo and Hernandez (2001); and Ramkissoon et al (2013) indicated a positive and significance relationship between place social bonding and pro-environmental behaviour. According to them, the studies on the effect of place social bonding on environmental responsible behaviours has been done in few categories and there is little understanding gathered about it. Overall, there is still missed opportunities to indicate the relationship between these two variables and understand how people-place bonding contributes to pro-environmental-behaviour.

**3.0 RESEARCH METHODOLOGY**

The purpose of this research is to examine the influence of place attachment dimensions pro-environmentally responsible behaviour amongst local tourists in Mahé Seychelles. This study will be a quantitative approach research document. According to Martyn Hammersley a quantitative approach is the process of collecting, analysing, interpreting and writing a report from the gathered data taken from a sample of the population

(Hammersley, 2013). The researchers collected the data using a survey questionnaire using five-point ordinal scale. The questionnaire was distributed to 383 from and 311 were responded too and the data was analysed using the SPSS software. The questionnaire consists of three parts, section A, section B and section C to G. Section A and B contain multiple choice questions. Section A contains the demographic questions where the respondents had to answer 6 statements, their gender, age, level of education, area of residence, occupation, monthly salary/allowance/pension. There are three statements in section B, to determine the respondent's standpoint and action for whether they love the beach or not, how often they visit the beach and if they apply any pro-environmentally responsible behaviour? Section C to G contain the four independent variables and dependent variables statements where the five-point ordinal scale had to be applied. Each item has been deducted as either "Strongly Agree", "Agree", "Partially Agree", "Disagree" and "Strongly Disagree" (Pienaar, et al., 2013). A pilot study was conducted on 9 respondents to identify any problems within the questionnaire.

The researcher used the framework showing the study of place identity, place affect, place dependence and place social bonding on pro-environmentally responsible behaviour as seen in diagram 1 below:



**Figure 1: Theoretical Research Framework**

**4.0 FINDINGS**

This section of the research paper contains the results according to the four research objectives to examine the influence of place attachment dimensions pro-environmentally responsible behaviour amongst local tourists in Mahé

Seychelles which are: place identity, place affect, place dependence and place social bonding. As mentioned earlier, a description of the respondent's demographic results is also portrayed. Approximately 383 possible respondents were contacted or reached out requesting for their participation and out of the 383 questionnaires, 311 questionnaires were filled and returned.

Table 1 illustrates that in terms of gender a larger quantity of the respondents were females at 60.5% accounting for 188 people compared to 39.5 % males which equals to 123 people.

	Frequency (n)	Percentage (%)
<b>Gender</b>		

Male	123	39.5
Female	188	60.5
Total	311	100.0

**Table 1: Gender distribution of respondents**

Table 2 shows out of these numbers the highest percentage which is at 28% (87 people) are aged between 18 and 25 years old and the second highest percentage of people to answer are aged above 51 years old at 21.5 % (67 people). 14.1% (44 people) are aged in between 26 and 30 years old, followed by 10.3% (32 people) aged between 31-35 years old, 9.3% (29 people) aged between 36 and 40 years old, 9% (28 people) aged between 41 and 45 years old and the least amount of people who answered at 7.7% are aged between 46 and 50 years old.

	Frequency (n)	Percentage (%)
<b>Age</b>		
18-25 years old	87	28.0
26-30 years old	44	14.1
31-35 years old	32	10.3
36-40 years old	29	9.3
41-45 years old	28	9.0
46-50 years old	24	7.7
51+ years old	67	21.5
Total	311	100.0

**Table 2: Age distribution of respondents**

Table 3 indicates the level of education attained by the respondents. The highest percentage is that for A-levels which stands at 26.4% (82 people) followed by the second largest, Bachelor's Degree

at 23.2% (72 people). IGCSE'S is at 21.5% (67 people) with diploma having 22.5% (70 people) and master's degree at 6.4% (20 people).

	Frequency (n)	Percentage (%)
<b>Level of education</b>		
IGCSE'S	67	21.5
A-level	82	26.4
Diploma	70	22.5
Bachelor's Degree	72	23.2
Master's Degree	20	6.4
Total	311	100.0

**Table 3: Level of education distribution of respondents**

In terms of the area of residence, table 4 indicates that most of the respondents live in the northern area of Mahé, having a total of 101 people (32.5%). East of Mahé is the second largest holder

of residence at 19.9% (62 people). South of Mahé has 16.1% of the respondents who live there, west of Mahé has 13.8% (43 people) and Victoria holds 17.7% (55) of the total respondents who live there.

	Frequency (n)	Percentage (%)
<b>Area of residence</b>		
North of Mahé	101	32.5
South of Mahé	50	16.1
West of Mahé	43	13.8
East of Mahé	62	19.9
In Victoria (town)	55	17.7
Total	311	100.0

**Table 4: Area of residence distribution of respondents**

For occupation, Table 5 shows the largest category of respondents are employees at 70.4% (219 people), followed by the second largest

respondents being 23.2% students (72 people) and 6.4% of the respondents are retired (20 people).

	Frequency (n)	Percentage (%)
<b>Occupation</b>		
Student	72	23.2
Employed full time	219	70.4
Retired	20	6.4
Total	311	100.0

**Table 5: Occupation distribution of respondents**

Table 6 shows that in terms of monthly salary or allowance or pension the largest number of respondents shown in figure 9 is at 41.5% (129 people) are receiving above SCR12,001

(Seychelles Rupees). 34.1% (106 people) receive between SCR8001 and SCR12,000. 10.6% (33 people) receive between SCR5001 and SCR8000 and 13.8% (43 people) gain less than SCR5000.

	Frequency (n)	Percentage (%)
<b>Monthly salary/allowance/pension</b>		
Less than SCR5000	43	13.8
SCR5001-SCR8000	33	10.6
SCR8001-SCR12,000	106	34.1
SCR12,001+	129	41.5

**Table 6: Monthly salary/allowance/pension distribution of respondents**

The Pearson Moment Correlations test was used in the study to examine the relationship between four dimensions of place attachment and pro-environmental behaviour. The outcomes (as illustrated in Table 7) indicated that all four dimensions of place attachment significantly influencing the pro-environmental behaviour of tourists in Mahe, Seychelles. Out of these four

dimensions, place affect highly influence the pro-environmental behaviour of tourist; followed by place identity (61.3%), place social bonding (57.2%) and place dependence (49.4%) respectively. This means if place identity increases 1 percent, it will influence the tourists' pro-environmental behaviour around 68.5 percent.

	Place Dependence	Place Identity	Place Affect	Place Social Bonding	Pro-environmental behaviour
Place Dependence	1	.655**	.600**	.491**	.494**
		.000	.000	.000	.000
		311	311	311	311

Place Identity		1	.803** .000 311	.441** .000 311	.613** .000 311
Place Affect			1	.500** .000 311	.685** .000 311
Place Social Bonding				1	.572** .000 311
Pro-environmental Behaviour					1

**Table7: Pearson Correlation Analysis**

## 5.0. CONCLUSION

It can be concluded that place identity, place affect and place social bonding illustrated a positive and significant relationship with pro-environmental behaviour; while place dependence showed non-significant relationship. Therefore, the hypotheses 1,2 and 4 accepted; while hypothesis 3 rejected. This findings also supported by Ramkissoon et al (2013; 2012); Nye and Hargreaves (2009); Bricker and Kerstetter (2000) and Ramkissoon and Mavondo (2015) who found positive and significant relationship between place dependence, place identity, place affect, place social bonding and tourist' pro-environmental behaviour. However, it is contradict with findings of several researchers who revealed negative and non-significance relationship between variables where place dependence failed to influence the tourist pro-environmental behaviour (Qu et al., 2017); while Junot et al (2017) and Uzzell et al (2002) illustrated negative relationship between place identity and pro-environmental behaviour. The limitation of the study cannot be ignored in the study where the study only conducted with 311 respondents in Mahe, Seychellas and only pro-environmental behaviour of tourists tested. Other variables related to tourism sector were excluded in this study. Hence, future studies should be conducted in other tourism destinations in Seychelles by including other variables such as behavioural intention, revisit and recommendations to others.

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