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HOMETOWN AND ECOLOGICAL BEHAVIOUR: IS THERE ANY LINK?

Amar Hisham Jaaffar (a)*, Noor Awanis Muslim (a) & Nurul Huda Ahmad Razali (a)
*Corresponding author

(a) College of Business Management & Accounting, Universiti Tenaga Nasional, Sultan Haji Ahmad Shah Campus, Pahang, Malaysia, AHisham@uniten.edu.my

Abstract

Human and business activities are having severe impact on our planet such as climate change and habitat destruction. Recently a increasing number of studies are demonstrating that human behaviour can play dominant role in mitigating the impact of human and business activities on our planet. One of the important behaviour for human is known as ecological behaviour. The objective of this study is to examine the linkages between individual's area of hometown on their environmental concern and ecological behaviour among undergraduates from private university in Malaysia. Based on the perspective of Value-Belief Norm (VBN) Theory, an empirical preliminary study of the determinants of ecological behaviour was conducted. A total of 77 undergraduates were used as a respondents in this study. This study proved that environmental concern improve ecological behaviour. Furthermore the area of individual hometown influence their ecological behaviour in positive directions. The results of this study will inspire further research to explore why the differences of individual's hometown area influence them to behave ecologically.

Keywords: Ecological behaviour, hometown, undergraduates, environmental concern.

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1. Introduction

Climate scientist have been warning us that we are in store for many more of the environmental catastrophe such as mega-hurricane. This is because sea surface temperature are abnormally high. Those warmer waters create the ripest conditons for mega hurricane and creates more storm energy and more water vapors that turns into heavy rain. Because of the climate change will increase the risk of mega hurricane, we need to improve our lifestyle and behaviour to be greener and eco-friendly. Environmental knowledge, awareness and concern of the individual have been regarded as important triggers to ecological behaviour and intentions to implement green lifestyles (Chan et al., 2017). Nevertheless, as the environmental issues remain pervasive, the study on individual ecological behaviour must be continued by assessing the new potential determinant of the individual ecological behaviour.

2. Problem Statement

Individual ecological behaviour represents as the preferences of the individual to have eco-friendly lifestyles. The disctinction between individual ecological behaviour and non-ecological behaviour are no solely based on the preferences of the individual, but have been found to be influenced by their social demographic factors (e.g. education, income, and age) (Jaaffar, 2016; Urban & Ščasný, 2012). This demonstrates that the cultivation of ecological behaviour not only originate from their environmental knowledge, awareness, and concern but from the normative and informational social influence as well (Fornara et al., 2016). Hence, this study investigate the effect of individual place attachement to their area of hometown togerther with individual environmental concern and ecological behaviour. This study will shed the light on the effect of individual place attachement on the ecological behaviour.

3. Research Questions

RQ1 : Does the area of undergraduate's hometown influence their environmental concern and ecological behaviour?

RQ 2: Does undergraduate's environmental concern influence their ecological behaviour?

4. Purpose of the Study

The main motivation of this study is to investigate the associationship between the area of individual's hometown and their environmental concern as well as ecological behaviour. The VBN Theory will be used as the underpinning theory of this current study. This theory describes that the moral norm of the person influence their behaviour and connected to the series of belifs and values that stimulated them (Stern et al., 1999).

4.1. Ecological Behaviour

Ecological behaviour is described as individual action that "contribute towards environmentalpreservation and/or conservation" (Axelrod & Lehman, 1993, p. 153). Reduce, reuse, and recycle (3R); electricity and water conservation; plant more vegetation; consume energy effiency product;

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and joint environmental groups are among the examples of individual ecological behaviour. The ecological behaviour can be manifest into three levels of institution including society; organization; and individual. At the society level, ecological behaviour is demonstrated in eco-friendly community; at the organization level, is apparent in eco-friendly business; and at the individual level is evident in eco-friendly life. Individual that have knowledge on environmental matters will aware and concern to their planet and subsequently behave ecologically (Chan et al., 2017).

4.2. Environmental Concern

When the person have curiosity on many aspects of environmental issues surround their planet, the person is deemed to have environmental concern (Zimmer et al. 1994).Currently the most environmental issues that concerned the most people in the Earth are air,water,soil and land polution; climate change; deforestration; increased of carbon footprint; and household and industries waste. Individual with environmental concerns may always curious about the environmental issues and try to find possible action to overcome the environmental problems. The person concerned on the environmental will make them to behave ecologically (Chan et al., 2017). Environmental concern also may originited from the hometown attachement of the individual as the previous studies informed that the place attachement may increased individual sense of environmental responsibility(Vaske & Kobrin, 2001).

4.3. The Area of Hometown as a Place Attachment

Individual can have the sense of attachment of their hometown when their have personel recognition with the area of their hometown depend on their emotional levels as individual or as a part of a community (Eisenhauer et al., 2000).Place attachment evolves through a person association, denotation, and appreciative of a specific place or area of their hometown (Vaske & Kobrin, 2001). The large amount of research on place attachement have focused on rural, urban, scenic, and resedential settings(Ryan, 2005).Individual feel more comfortable in the type of area they grew up and be familiar with (Adevi & Grahn, 2011). Moreover, individual place origin or hometown can yield powerful attachment and meaning even when individual is at a distance from it (Scannell & Gifford, 2017). It can be assumed that the individual's area of hometown is one of the sources of the person place attachment.

Research on environmental psychology described that the person connection with the nature exist since the person childhood day (Chawla, 1999). The person place attachment was developed since the childhood day because the person always engaged in actual activities with their hometown vicinity, as well as potential experiences. Previous research demonstrated that children often prefer green natural setting compare to man-made environment(Jones & Cunningham, 1999).Moreover, the individual which attached highly to the nature in their hometown may experience an emotional affinity with their hometown nature and try to preserves it by engaging in pro-environmental activities (Hartig et al., 2001). The green area in the individual's hometown can increase the place attachment of the individual and will encourage individual engagement with eco-friendly lifestyles such as behaving ecologically(Vaske & Kobrin, 2001).

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4.4. Research Framework of the Study and Hypothesis Development

From the VBN point of view, a person behave ecologically because the sense of moral obligation to their hometown by feeling responsible for the effects of their actions on the nature of their hometown (Stern, 2008).When an individual have strong level of place attachement, they will influenced by their hometown nature values such as utilarian, naturalistic, ecological-scientific, aesthetic, symbolic, humanistics, moralistic, dominionistic, and negativistic(Kellert & Wilson, 1995). When an individual comes to believe that their values of nature of their hometown is threatened, they can relief that threat by appropriate action such by behaving ecologically.

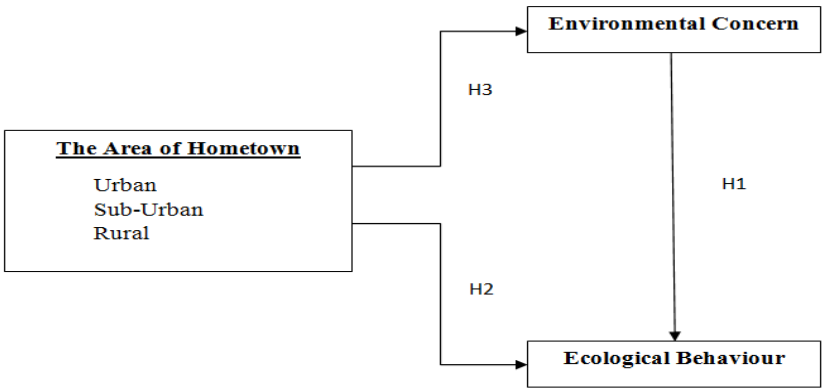

Figure 01. Theoretical Framework

Based on the literature reviews and theoretical framework in Figure 1, the study following research hypothesis are proposed:

H1: The individual environmental concern positively and significantly influence their ecological behaviour.

H2: The individual attachment to the area of their hometown positively and significantly influence their ecological behaviour.

H3: The individual attachement to the area of their hometown positively and significanly influence their environmental concern.

5. Research Methods

The preliminary survey was conducted to students from Malaysian private universities (Jaaffar et al., 2016). The targeted respondent is a undergraduate which currently enrolled in degree in accounting and finance. During the pilot study, 77 sets of questionnaire was succesfully collected during their lectures of whom 34 (44.2 per cent) were male, and 43 (55.8 per cent) were female. During the data collection process, the authors give detail instruction on how answer the questionnaire in the correct way (Ibrahim & Jaaffar, 2017). As for measuring Environmental Concern and Ecological Behaviour, this study used a five-point Likert scale ranged from strongly disagree to strongly agree. This study adopted the five items for measuring Environmental Concern from Minton and Rose (1997) and the six items for measuring Ecological Behaviour from Kaiser et al. (1999). The items of environmental concern consist of respondent's concern on (1) the regulation to industry to use recyclable materials; (2) the inclusion of the

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harmful effect of the product to environment in advertising or promotion activities; (3) the imposition of tax to environmental risk product; (4) environmental curriculum in all primary and secondary school. While, the items for student's ecological behaviour comprised of 1) recycling habits; 2) waste separation habits; 3) avoidance to use plastic bag; 4) financial contribution to environmental organizations; 5) reading books, publications, and other information about environmental problems; and 6) membership in environmental organization. The demographic section of the questionnaires consist of categorical measurement related to respondent's gender, parent and family information, hometown and travelling experiences. Table 1 descriptively show the type's hometown area reported by the respondents.

Table 01. Respondent's type of hometown area

Types of hometown area	Number	Percent
Urban	27	35.1
Sub-Urban	35	45.5
Rural	15	19.5

To analysed the data collected in this pilot study, the PLS were used. A PLS(path-modelling approach) was occupied employing the SmartPLS 3 software (Ringle et al., 2015). Based on the standard procedure of PLS reporting, firstly the measurement model was presented and secondly structural model for path testing was highlighted (Hair et al., 2011).

6. Findings

6.1. Measurement model

Table 2 showed that the lowest value of CR was 0.80 (EC) which was statistically acceptable. Table 1 also pointed out that the loading of six indicators ranged between the lowest of 0.69 (EB2) and the highest of 0.834 (EB7) while the AVE value for all constructs is acceptable (Fornell & Larcker, 1981). The internal consistency of all constructs are also acceptable (Hair et al., 2016). Based on those values, the quality of the measurement model was manisfested in this study.

Table 02. Reliability and validity of latent variables and observed variables.

LV	Fornell-Larcker Criterion		OV	IL	Alpha	CR
	EB	EC				
EB	0.718		EB1	0.701	0.845	0.881
			EB2	0.69		
			EB3	0.705		
			EB4	0.698		
			EB5	0.738		
			EB6	0.645		
			EB7	0.834		
EC	0.384	0.719	EC1	0.672	0.716	0.809
			EC2	0.623		
			EC3	0.773		
			EC4	0.794		

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Hometown	Hometown

Note: IL= Indicator's Loading, LV=Latent Variables, OV=Observed Variables, Alpha=Cronbach's Alpha, CR=Composite Reliability AVE=Average Variance Extracted, Fornell-Larcker Criterion for Discriminant Validity

6.2. The structural models

The analysis of PLS-SEM revealed that 2 out of 3 hypotheses were supported by significant relationships at p <0.05level (Table 3 and Figure 2). EC and the area of hometown was positively and significantly associated with EB, therefore, the findings confirmed hypothesis H1 and H3. Contrastingly, the area of hometown was not related to the EC. In this regards, these results rejected the hypotheses 2.

Table 03. The structural model path coefficents results

Hypotheses		M	SD	t-value	P Values	Inference
H1	EC -> EB	0.422	0.099	3.885**	0	Supported
H2	Hometown -> EB	0.254	0.106	2.384**	0.017	Supported
H3	Hometown -> EC	0.027	0.124	0.009	0.993	Supported

Note: M= Sample Mean, SD= Standard Deviation, t= t-value, p= p-values, *t-value is sig at p<0.05; **t-value is sig. at p<0.001

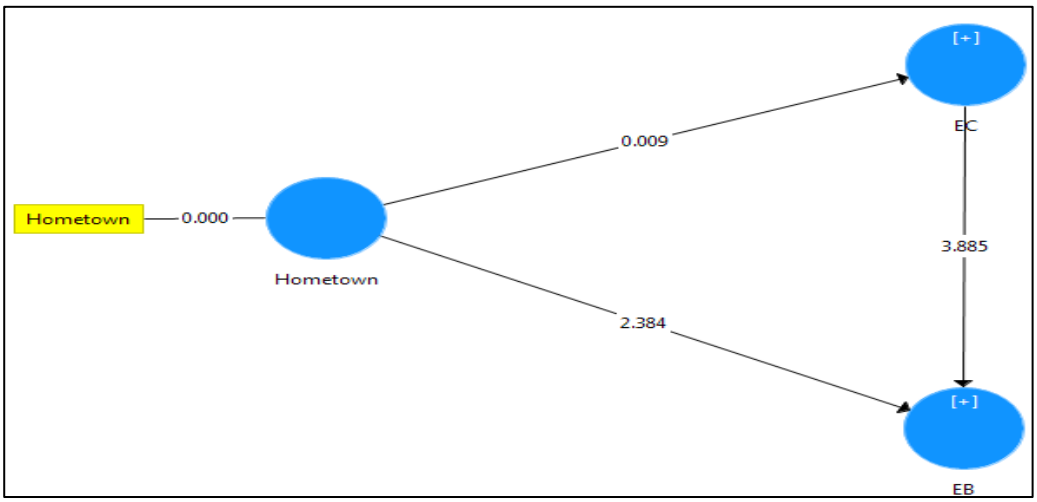

Figure. 02. Path coefficient t-statistics

7. Conclusion

Results revealed that environmental concern has positive significant relationship with ecological behaviour. This results shows that the increases in individual environmental concern are related to increase in their ecological behaviour (Jaaffar & Amran, 2017). Regarding to the antecedent of environmental concern and ecological behaviours, this study illustrates that hometown area only have significant positive influence on ecological behaviour compare to environmental concern. Individual place attachement on their hometown area presumably not increase their environmental concern because previous research posits that environmental knowledge and environmental awareness as the most importance factors for individual environmental concern (Chan et al., 2017). Furhermore, in line with the perspective of VBN Theory, individual place attachment on their hometown area may lead them to

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behave ecologically due to the sense of moral obligation and self-responsibility to their hometown (Stern, 2008).

This study extends the literatures by exploring the role of individual hometown area on environment concern and ecological behaviour by associating it with the concept of place attachement. Secondly, this study provided a critical insights to VBN Theory by illusrating that despited moral norms; values; and series of beliefs which derived from place attachement can stimulate the ecological behaviour, nevertheless, those factors are incompetent in inspiring environmental concern. Individual environmental knowledge and awareness may surpass the moral norms derived from place attachment. Thirdly, this study extends the literatures of individual ecological behaviour by exploring the influence of individual hometown area on ecological behaviour. Despite some contributions, this study have some limitations that can be improved by future study. Firstly, the single-item measure that represent the hometown's area (e.g. urban, sub-urban, and rural) hinder this study to identify which hometown area is more significant variable to ecological behaviour. Additional analysis such as Multi Group Analaysis in Smart PLS3 can be used to identify which hometown area is most important. Secondly, as this study is in preliminary stage,the number of responses should be increased to improve the predictive accuracy.

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