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RESEARCH ARTICLE

FACTORS INFLUENCING LOCALS PERCEPTION ON VALUING THE CONSERVATION OF GIANT PANDA IN MALAYSIA

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ABSTRACT

The conservation of Giant Panda has the potential to support various factors such as increase in protecting Giant Panda from exclusivity and economic perspectives especially tourism revenue in ecotourism and conservation (Ahmad *et al.*, 2016). Findings of this study focus to develop a new measurement scale for locals' perception about Giant Panda conservation. Previous studies on wildlife conservation perception were combining with newly found factors through local community to develop a new measurement scale. Data were analyzed through factors analysis. Significant variables found, extracted and regrouped accordingly to eight (8) factors groups and generated a new measurement scale. As a result, 35 statements were significantly contributed to determining the locals' perception on Giant Panda Conservation Centre (GPCC). The scale on locals' perception on conservation of Giant Panda would be indispensable to conduct further studies.

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INTRODUCTION

Wildlife is a part of our ecosystem (Egler, 1964). There are numerous number of endangered wildlife species around the world that needed to be saved from extinction (Vitousek *et al.*, 1997). In this modern society, wide-ranging large vertebrates are threatened by conversion and degradation of tropical forest and overharvesting of wildlife products (Macdonald *et al.*, 2013). Indeed, conservation is under the efforts exerted for everyone (Alshuwaikhat and Abubakar, 2008). The conservation of Giant Panda (GP) has the potential to support a substantial increase in protecting Giant Panda from exclusivity and in tourism revenue especially in ecotourism and conservation (Ahmad Shuib *et al.*, 2016). Circa in 1950s, it has been assigned as top need for species protection in China. Since then, it has been made an 'icon' species for wildlife conservation. GP lives in thick bamboo mountainous areas and primarily eats bamboo shoots and leaves. It used to be founded in Southwest China, i.e. Hunan, Hubei, Sichuan, Shaanxi and Gansu regions (Chu and Long, 1983). However, wild GP exist today only in three provinces of the Peoples Republic of China,

i.e. Sichuan, Shaanxi and Gansu territories. According to MOF and WWF study (MOF and WWF, 1989), the State forestry administration had discovered 16 patches population in 1987-88, however Fan and Song (Fan and Song, 1998) argued that in 1970s' its habitat was consist of 6 big patches. On 40th anniversary of diplomatic relationship, the Chinese government has approved to lend the GP for 10 years to the Malaysian government in June 2012 to strengthen the diplomatic ties and handed over two GP (namely Fu Wa and Feng Yi) in April (Ahmad Shuib *et al.*, 2016). The loan was made under the International Giant Panda Conservation Cooperation Agreement, which allows Malaysia the opportunity to conduct research on Giant Panda conservation, in addition to develop and train local expertise. Malaysia's Natural Resources and Environment Ministry (Meikeng and Sukumaran, 2014) said that the "panda deal" would "promote public awareness on panda conservation undertaken by China" and "encourage the public to appreciate and learn the importance of biodiversity and wildlife conservation in Malaysia". There were many studies conducted for visitor's valuation in Malaysia, however, there were very few studies to find out locals perception in wildlife conservation especially their willingness to pay for Giant Panda conservation in Malaysia.

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Local's perception towards conservation of Giant Panda:

Perceptions of wildlife conservation contain a variety of factors. Based on previous studies, the major factors affecting local community perceptions are policies implemented by the government and follow-up, actions taken by non-governmental organizations towards the issues, economic factors, and awareness-raising factors on the wildlife conservation. Wildlife Conservation is the practice of protecting wild plant and animal species and their natural surroundings (De Groot *et al.*, 2002). The goal of wildlife conservation is to ensure that nature will be around for future generations to enjoy and also to recognize the importance of wildlife and wilderness for humans and another species. Many countries have government agencies dedicated to wildlife conservation, which help to implement policies designed to protect wildlife. Numerous independent, non-profit organizations (NGOs) also promote various wildlife conservation causes. The strength and weakness links between locals, natural resources, biodiversity and tourism implicates other links as well (Williams, 2004). Many countries have government agencies dedicated to wildlife conservation, which help to implement policies designed to protect wildlife for future generations to enjoy and also to recognize the importance of wildlife and wilderness for humans and another species. Moreover, a study by Shima Karimi (Karimi, 2008) emphasised that an interference of government and private investment must be taken into consideration for future ecotourism in Isfahan. Ecotourism is one of the fastest expanding tourism markets. Generally, ecotourism means an involvement of travels to some places of natural history in respective undeveloped areas where activities are upheld and unbiased distribution of welfare to the local (Ziffer, 1989). In economic perspectives, ecotourism may lead as a tool for wildlife conservation (Ross and Wall, 1999). Economic value is an outline of the benefit offered by a good or service to an economic agent. Additionally, economic value is also one of many possible ways to define and measure value (Carson, 2000). The study conducted by Francis Okello (Okello, 2004) identify the following problems; the locals should have access the awareness, contribution and sensitized issues on ecotourism in which they will supports the idea of conservation of wildlife. Chandana Rao (Rao, 2013) studied on the tangible and intangible values of coast redwood forests as conservation as well as the management policies of California State Parks. As a result, there was a disparity in management policies and their implementation and improvements in tourist education were required. Those findings were useful not only for ecotourism, but also for conservation and community involvement. Meanwhile, Stone and Wall (Stone and Wall, 2004) has conducted a study on community development in Hainan, China. Although Hainan is endowed with the wealth of natural resources, it is one of China's most economically backward provinces. Therefore, this research is to enhance the capacity of ecotourism to generate benefits for both the local communities and destinations (the protected area), and thus contribute to the sustainable development of the region generally. As a result, Hainan is only at an early stage of ecotourism development. Hainan has not contributed revenues towards conversation efforts (dated 2002). Recommendations have been forwarded to enhance the ecotourism and thus to generate benefits throughout Hainan.

Research Question and Objectives: Based on the literature above, it can be concluded that, there are limited studies in focusing the measurement scales and factors which influence the perception of the local communities towards Giant Panda

conservation. To fulfill this literature gap, this study will investigate and measure the local in vicinity. The present study attempts to determine the factors that influence the locals' willingness to pay towards conservation of giant panda. This research has two specific objectives:

- To examine the determinants of preferences with regard to locals' benefits
- To develop a measurement scale that captures local's perception on Giant Panda conservation.

MATERIALS AND METHODS

Stratified random sampling was used for this study. this sampling technique includes a procedure of stratification or segregation followed by irregular determination of subjects from every stratum (Sekaran and Bougie, 2016). The study was conducted at the vicinity of Zoo Negara, Malaysia which in the vicinity of 3 municipal council jurisdictions (Figure 1, 2 and 3). There are namely Ampang Jaya Municipal Council, Kuala Lumpur City Hall and Selayang City Council. According to Table 1, the estimated population of locals living around the vicinity of Zoo Negara is around 2, 696, 230. Therefore, based on (Ryan, 1995) formula for sample size with 90% confidence level, 250 questionnaires was distributed amongst the respondents. The questions given to the respondents were using Likert Scale. The perceptions are measured in a 4 point Likert scale running from strongly disagrees to strongly agree. The items in the factors are combinations of compatible questions from previous study and newly develop questions.

RESULTS AND DISCUSSION

Demographic Profiles: 250 sets of questionnaire randomly distributed to the locals; where the response rate was 95%. Majority i.e. 149 (59.6%) respondents were males and 101(40.4%) were females. In terms of age, the range of 25 to 34 years old was classified as the major class i.e. 87 (34.8%), followed by age class "under 25 years 74 (29.6%) while the age class of "55 years and above" was recorded as the lowest age class in the study area (Table 2). Majority of the respondents i.e. 102 (70%) were educated up to tertiary level (STPM/Diploma) followed by 56 (22.4%) up to SPM level. However, 18 (7.2%) were highly educated i.e. Master and PhD. From the findings of the study, it seems to be that highly educated people are willing to expose their children for more environmental education and claimed that Zoo Negara is helpful to educate the people in environmental and conservation issues. Mean while on occupation ratio, the highest percentage were the respondents who pursue their career by being self-employed 66 (26.4%), followed by occupation in government sector 62 (24.8%), and the lowest percentage are respondents who were unemployed 1 (0.4%). Approximately 115 (46.0%) from the entire sample earn RM3000 and below, followed by RM4001-RM5000 (Table-2).

Factor Analysis: Factor analysis was done to develop the scale for the locals' perception on conservation of Giant Panda. Items were reconstructed based on the accurate groupings (factors). Before running factor analysis, the Kaisere-Meyere-Olkin (KMO) and Bartlett's Tests were conducted to verify the suitability of the data collected (Zhang and Lei, 2012). Other than that, the Bartlett's Test of Sphericity must be significant

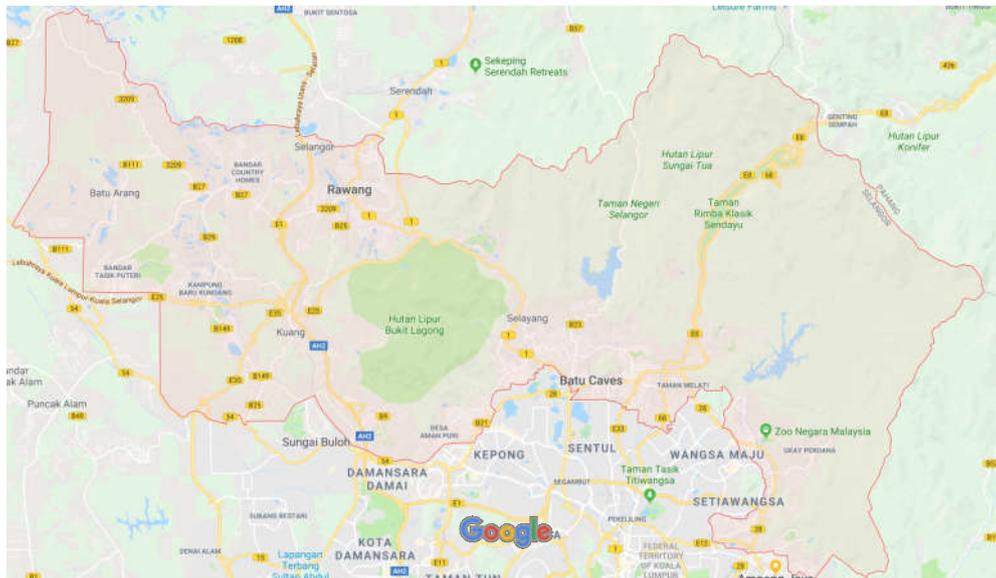


Figure 1. Selayang municipal city council (gombak district)

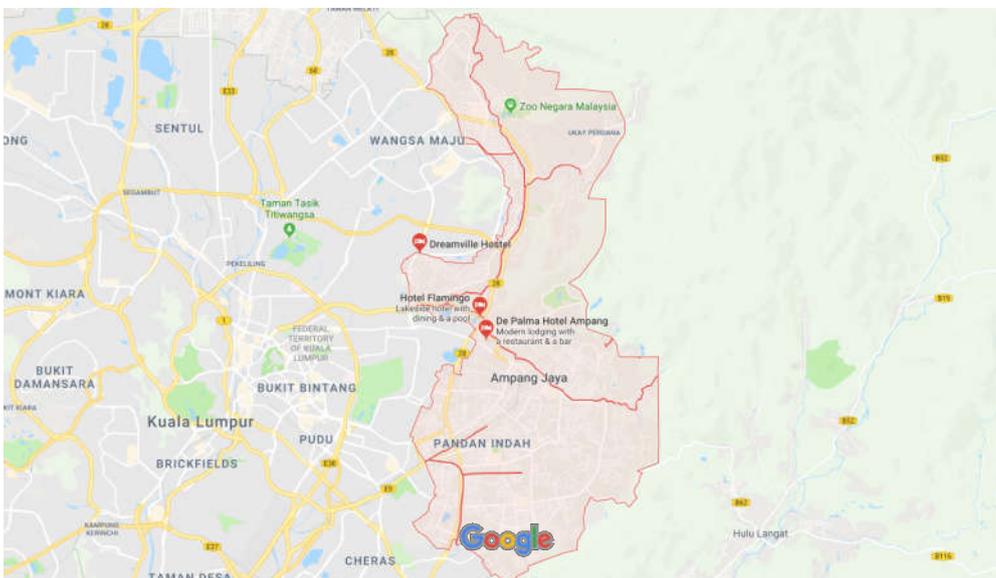


Figure 2. Ampang jaya municipal city council (ampang jaya district)

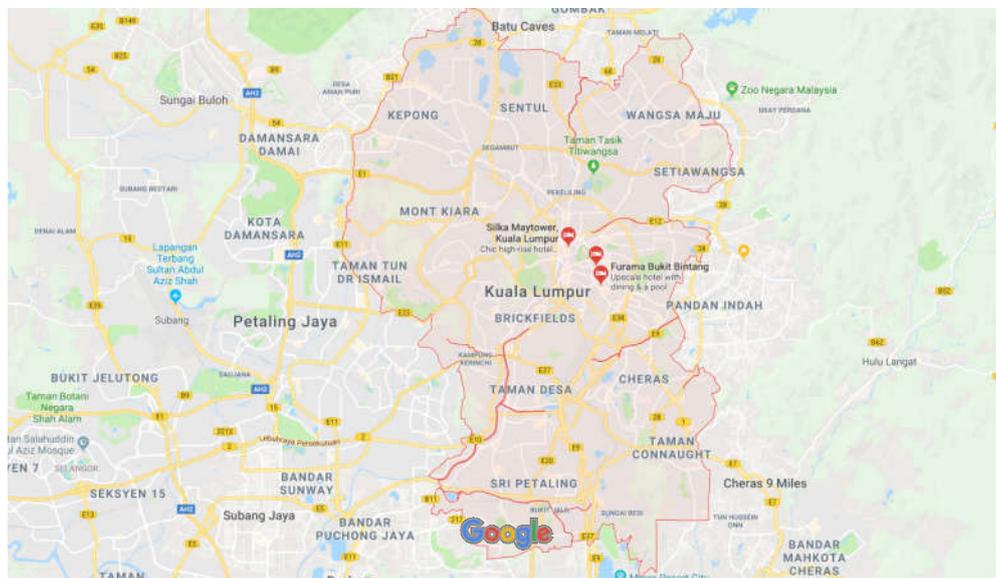


Figure 3. Kuala Lumpur City Hall (Kuala Lumpur City)

($p < .05$) to accept the factor analysis and KMO value should be more than .60 as a condition for consideration to produce a good factor analysis (Tabachnick and Fidell, 2001). From the test have been conducted, the result shows that the significance level is .000. Meanwhile, KMO value for this study is .826 can be considered sufficient to carry out the factor analysis. 30 variables were assigned accordingly to 8 components and then named as specific factors (giant panda value orientation, attitude towards wildlife conservation, giant panda appeal, government interventions, wildlife conservation participation, assessing the impact of a wildlife education program, giant panda as ecotourism product, and giant panda as ecotourism product). details of these components and variables are presented in rotated component matrix (Table 3).

Table 1. Total Estimation of Locals in The Vicinity of Zoo Negara

Municipalities	Total Residents
Ampang Jaya	406, 084
Selangor	530, 146
Kuala Lumpur	1, 760, 000
Total Locals	2, 696, 230

Source: Government of Selangor Gazette and DBKL Budget.

Table 2. Sociodemographic Characteristics of Respondents

Variables	Items	Frequency	Percentage (%)
Gender	Male	149	59.6
	Female	101	40.4
Age	Under 25	74	29.6
	25 – 34	87	34.8
	35 – 44	50	20.0
	45 – 54	29	11.6
	More than 55	10	4.0
Education Level	Informal Education	6	2.4
	Primary School	13	5.2
	SPM	56	22.4
	STPM /Diploma	102	40.8
	Bachelor Degree	55	22.0
	Master Degree	8	3.2
Occupation	PhD	10	4.0
	Student	52	20.8
	Government Sector	62	24.8
	Private Sector	49	19.6
	Self-employed	66	26.4
	Retired	5	2.0
	Housewife	15	6.0
Unemployed	1	0.4	
Monthly Income	Under RM 3000	115	46.0
	RM3001 to RM4000	18	7.2
	RM4001 to RM5000	54	21.6
	RM5001 to RM6000	46	18.4
	RM6001 to RM7000	8	3.2
	RM7001 and above	9	3.6

Factor 1. Giant Panda Value Orientation

- I will conduct interventions to prevent extinction of Giant Panda. (.700)
- I want to save Giant Panda from extinction. (.812)
- I believe implementing GPCC for conservation of Giant Panda is far for future generation. (.667)
- I believe implementing wildlife conservation is a commitment to society. (.637)
- I conserve wildlife out of my sense of responsibility to protect the environment. (.742)
- Wildlife conservation behaviour is a virtue. (.807)
- I would feel guilty if I didn't conserved wildlife properly. (.789)

The variables either directly or indirectly are related to the Giant Panda Value Orientation, initiated by GPCC. Giant Panda arrived in Malaysia circa 2014. Giant Panda is only available in Republic of China and few national zoos worldwide. Their presence makes the community want to know more about Giant Panda and wildlife conservation. The conservation of Giant Panda (GP) has the potential to support a substantial increase in protecting Giant Panda from exclusivity. Thus, this factor is titled as Giant Panda Value Orientation.

Factor 2. Awareness towards Wildlife Conservation

- I am too busy to become involved in Wildlife conservation. (.653)
- Zoo Negara is the place to increase the level of awareness about the life of endangered animal. (.750)
- The purpose of ecotourism activity in the establishment of GPCC is directly affecting my community daily lives in the future. (.835)
- The ultimate goal of GPCC is to generate employment opportunities for my communities. (.843)
- The establishment of GPCC at Zoo Negara will increase the income of my community. (.831)
- My family expect me to engage in Wildlife conservation behaviour. (.839)
- My friends expect me to engage in Wildlife conservation behavior. (.843)
- My community expects me to engage in Wildlife conservation behavior. (.861)
- The people that are the most important in my life would approve of me helping with Wildlife conservation. (.848)
- I am aware about the conservation establishment of Giant Panda. (.726)

Attitude towards Wildlife Conservation is entitled for factor 2 because all variables are directly related to the attitude of the local community towards wildlife conservation and engagement. On the other hand, since zoological parks are mostly found in towns, the wildlife are forced to be incarcerated and dependent on humans for survival. Zoological parks are useful in protecting wildlife from danger, and increasing their number through breeding. Besides, zoos are also important for research and education purposes and creating wildlife conservation awareness to the public.

Factor 3. Giant Panda Appeal

- Giant Panda Conservation Centre (GPCC) was produced as a strategy to conserve Giant Panda. (.794)
- GPCC is the initiatives that can attract my interest to know Giant Panda. (.691)
- Zoo Negara is the initiatives that preserve the conserve animals in their natural habitat. (.729)
- Wildlife is a part of ecotourism. (.676)
- The establishment of GPCC will promote Zoo Negara as the ecotourism attraction. (.643)

Giant Panda Appeal is the suitable title for this factor because Giant Panda is an ecotourism product in Zoo Negara. Besides that, habitat of Giant Panda is fractured which is threatened by habitat fragmentation and disturbance caused by highway and dam developments, plantation forestry, and tourism (Zheng *et al.*, 2012).

Table 3. Rotated Component Matrix

Rotated Component Matrix ^a	Component							
	1	2	3	4	5	6	7	8
I will conduct interventions to prevent extinction of Giant Panda.	.700							
I want to save Giant Panda from extinction.	.812							
I believe implementing GPCC for conservation of Giant Panda is far for future generation.	.667							
I believe implementing wildlife conservation is a commitment to society.	.637							
I conserve wildlife out of my sense of responsibility to protect the environment.	.741							
Wildlife conservation behavior is a virtue.	.807							
I would feel guilty if I didn't conserved wildlife properly.	.789							
I am too busy to become involved in Wildlife conservation.		.653						
Zoo Negara is the place to increase the level of awareness about the life of endangered animal.		.750						
The purpose of ecotourism activity in the establishment of GPCC is directly affecting my community daily lives in the future.		.835						
The ultimate goal of GPCC is to generate employment opportunities for my communities.		.843						
The establishment of GPCC at Zoo Negara will increase the income of my community.		.831						
My family expect me to engage in Wildlife conservation behavior.		.839						
My friends expect me to engage in Wildlife conservation behavior.		.843						
My community expects me to engage in Wildlife conservation behavior.		.861						
The people that are the most important in my life would approve of me helping with Wildlife conservation.		.848						
I am aware about the conservation establishment of Giant Panda.		.726						
Giant Panda Conservation Center (GPCC) was produced as a strategy to conserve Giant Panda.			.794					
GPCC is the initiatives that can attract my interest to know Giant Panda.			.691					
Zoo Negara is the initiatives that preserve the conserve animals in their natural habitat.			.729					
Wildlife is a part of ecotourism.			.676					
The establishment of GPCC will promote Zoo Negara as the ecotourism attraction.			.643					
I believe that the efforts of GPCC establishment will help in conserve Giant Panda species.				.718				
In my opinion, government doing a right thing by bringing Giant Panda to Malaysia.				.646				
The success of GPCC can only be achieved through strong local community involvement.				.759				
I should support the effort of government by developing GPCC in order to conserve Giant Panda.				.781				
Wildlife conservation at Zoo Negara area is a primary means to reduce endangered species.					.859			
Giant Panda conservation establishment requires the participation of local communities in order to conserve Giant Panda species.					.763			
I have my time to attend any conservation consultant program by governance for Giant Panda.					.679			
Protection of Giant Panda in the GPCC area is to generate income for local communities through ecotourism activities in this area.						.723		
The establishment of GPCC at Zoo Negara will enhancement of my community livelihoods.						.760		
I will conduct interventions to prevent wildlife damage.							.606	
There are organizations who are already involved in Wildlife conservation that could help me participate in it if I wanted to.							.662	
Purchasing entrance ticket to GPCC will help to support ecotourism growth in Malaysia.								.705
Giant Panda presence will attract more local and foreign tourists.								.633

Extraction method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 21 iterations.

Eigen value > 1

Factor loading > 0.6

% of cumulative variance = 77.974

In some situation, ecotourism can help to conserve a fragile biodiversity and increase awareness of environmental issues (Rao, 2013), which in this case is wildlife animal.

Factor 4. Government Interventions

- I believe that the efforts of GPCC establishment will help in conserve Giant Panda species. (.718)
- In my opinion, government doing a right thing by bringing Giant Panda to Malaysia. (.646)
- The success of GPCC can only be achieved through strong local community involvement. (.759)
- I should support the effort of government by developing GPCC in order to conserve Giant Panda. (.781)

Our nation has participated in many conventions to show support towards national agenda and worldwide conservation.

Natural and environmental resources provide a complex set of values to individuals and benefits to society. All variables in this factor measure the Government Interventions in GPCC at Zoo Negara. In Malaysia, the government is very much committed to the concept of sustainability, which highly relates to wildlife conservation.

Factor 5 and Factor 6. Wildlife Conservation and Participation

- Wildlife conservation at Zoo Negara area is a primary means to reduce endangered species. (.859)
- Giant Panda conservation establishment requires the participation of local communities in order to conserve Giant Panda species. (.763)
- I have my time to attend any conservation consultant program by governance for Giant Panda. (.679)

- Protection of Giant Panda in the GPCC area is to generate income for local communities through eco-tourism activities in this area. (.723)
- The establishment of GPCC at Zoo Negara will enhance my community livelihoods. (.760)

Factor 5 and factor 6 are combined and entitled as Wildlife Conservation and Participation which receive the involvement by local community. Giant Panda may be the modern day white elephant not quite sacred, yet a powerful emblem of the modern Chinese nation and persuasive social qualities identified with protection and creature welfare. The commitment to keep these uncommon, consecrated, and asset requesting life shapes fit as a fiddle, in order to respect the relationship connoted by the elephant blessing, caused substantial and once in a while ruinous expenses (Buckingham et al., 2013).

Factor 7. Assessing the impact of wildlife education program

- I will conduct interventions to prevent wildlife damage. (.606)
- There are organizations who are already involved in Wildlife conservation that could help me participate in it if I wanted to. (.662)

This factor is named as the Community Involvement on Wildlife Education Program, because both of these variables are directly related to the local community intervention. The idea to train the locals in the field of artificial breeding, genetics and such is a good start since most wildlife animals are currently in endangered level and need to be conserve from its extinction.

Factor 8. Giant Panda as Ecotourism Product

- Purchasing entrance ticket to GPCC will help to support ecotourism growth in Malaysia. (.705)
- Giant Panda presence will attract more local and foreign tourists. (.633)

Factor 8 is entitled as Giant Panda as Ecotourism Product due its benefit in bringing in more tourists. Moreover, GPCC also help to contribute in the economic growth in ecotourism sector. Thus, GP is not only a the diplomatic symbol between Malaysia and China, but also as a part of awareness for its conservation towards this endangered species and considered as ecotourism product (Ahmad Shuib et al., 2016).

DISCUSSION AND CONCLUSION

The initial motivation of this research was to identify factor that influencing the willingness to pay of locals for the conservation of giant panda. When the problems were identified, it is understood that the scale to measure the perception of locals about conservation of giant panda in Malaysia was not available. Then, a factor analysis was used to develop a new scale. From this finding, 8 factors that influence the locals' perception on conservation of Giant Panda and it presented a scale to measure the locals' perception. The development of this new scale consists of factors from the existing literature together with newly developed factors.

The discovery of awareness towards conservation would be valuable for the further investigation in general perception on conservation of animal. But, these factors are not found in literature because most of the literature focuses on the value of wildlife orientation in the zoo. On the other hand, the factors like Giant Panda Value Orientation, Attitude towards Wildlife Conservation, Giant Panda Appeal, Government Interventions, Wildlife Conservation Participation, Assessing The Impact Of A Wildlife Education Program, Giant Panda as Ecotourism Product, and Giant Panda as Ecotourism Product was directly influence the visitors' toward GPCC. The result shows that GPCC success to makes locals learning and caring about giant panda. Locals tent to know more about giant panda and care more about giant panda since GPCC was established. The availability of information in GPCC is easily accessible and presented in interesting manners makes this factors success to educate the community about conservation. This can influence people willing to pay for the conservation of giant panda and show the opportunities to donate money for the conservation that allow people to express care for giant panda.

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APPENDICES

QUESTIONNAIRE



INSTITUTE OF AGRICULTURAL AND FOOD POLICY STUDIES
UNIVERSITI PUTRA MALAYSIA
IN COOPERATION WITH ZOO NEGARA, PERHILITAN & WWF - MALAYSIA

STUDY ON THE VALUATION OF BENEFITS FOR GIANT PANDA CONSERVATION BY
LOCAL COMMUNITY IN THE PROXIMITY OF ZOO NEGARA MALAYSIA

KAJIAN MENGENAI PENILAIAN MANFAAT UNTUK PEMULIHARAAN GIANT PANDA
OLEH MASYARAKAT TEMPATAN BERDEKATAN DARI ZOO NEGARA MALAYSIA

Enumerator : Weekend
Date : Weekdays
Start Time : Public Holiday
End Time :

MAKLUMAT RESPONDEN	
RESPONDENT ID	
RESIDENTIAL AREA	
MOBILE NO.	

This study is conducted by a postgraduate student specializing in Natural Resource Policy from Institute of Agricultural and Food Policy Studies, Universiti Putra Malaysia. **The information provided to complete this study are kept confidential and will be used only for study purpose. Thank you for your cooperation.**

Kajian soal selidik ini dijalankan oleh pelajar pascasiswazah dalam pengkhususan Dasar Sumber Asli dari Institut Kajian Dasar Pertanian dan Makanan, Universiti Putra Malaysia. **Maklumat yang diberikan adalah sulit dan hanya akan digunakan untuk tujuan penyelidikan sahaja. Terima kasih atas kerjasama anda.**

RESPONDENT ID:

SECTION A (BAHAGIAN A)
SOCIO-DEMOGRAPHIC PROFILE / CIRI-CIRI SOSIO-DEMOGRAFIK

1. Please specify your residence location / Sila nyatakan lokasi kediaman anda

1. Residential area / Taman/Kampung : _____
2. Town / Nama pekan/bandar : _____
3. Postcode / Poskod : _____
4. State / Negeri : _____

2. This municipal is managing your residential area / Majlis Perbandaran/Dewan Bandaraya berikut menguruskan kawasan perumahan anda

- Ampang Jaya Municipal City Council /
Majlis Perbandaran Ampang Jaya
- Selayang Municipal City Council / Majlis
Perbandaran Selayang
- Kuala Lumpur City Hall / Dewan Bandaraya
Kuala Lumpur

- Bachelor Degree / Ijazah Sarjana Muda
- Master Degree / Ijazah Sarjana
- Doctor of Philosophy / PhD
- Others, Specify / Lain-Lain, Nyatakan:

3. Gender / Jantina :

- Male / Lelaki
- Female / Perempuan

8. Marital status / Status perkahwinan

- Single / Bujang
- Married / Berkahwin
- Separated / Berpisah

4. Age / Umur : _____ years old / tahun.

9. Number of dependents? / Bilangan tanggungan? _____ people / orang

5. Religious / Agama

- Islam / Islam
- Christian / Kristian
- Buddhist / Buddha
- Others, Specify / Lain-lain, nyatakan :

10. Average monthly household income (If you are students, please state the allowance you receive for each month. Example: PTPTN, scholarship, pocket money and etc)? / Purata pendapatan isi rumah bulanan? (Sekiranya anda adalah pelajar, sila nyatakan elaun yang anda terima setiap bulan. Contoh: PTPTN, Biasiswa, Wang Saku dll)

- Below RM3000
- RM3001 – RM4000
- RM4001 – RM5000
- RM5001 – RM6000
- RM6001 – RM7000
- RM7001 and above

6. Race / Bangsa

- Malay / Melayu
- Chinese / Cina
- Indian / India
- Others, Specify / Lain-Lain, Nyatakan:

7. Education / Pendidikan

- Informal Education / Pendidikan Tidak Formal
- Primary School / Sekolah Rendah
- Malaysia Education Certificate / Sijil Pelajaran Malaysia
- STPM/ Certificate/ Diploma / STPM/ Sijil/ Diploma

11. Occupation / Pekerjaan

- Student / Pelajar
- Government Sector / Sektor Kerajaan
- Private Sector / Sektor Swasta
- Self-Employment / Bekerja Sendiri
- Retired / Bersara
- Housewife / Surirumah
- Unemployed / Tidak Bekerja
- Others, Specify / Lain-Lain, Nyatakan:



RESPONDENT ID:

12. Are your family members or you involved in NGO/tourism/conservationist sector? If answer YES, go to question no 13a / Adakah anda atau mana-mana ahli keluarga anda terlibat dengan aktiviti Badan Bukan Kerajaan/pelancongan/penyokong pemuliharaan? Sekiranya jawapan adalah YA, sila ke soalan 13a

- Yes / Ya
 No / Tidak

12a. If you involved in NGO/tourism/conservationist sector, you are? / Sekiranya terlibat dengan aktiviti Badan Bukan Kerajaan/pelancongan/penyokong pemuliharaan, anda ialah?

- NGO/ Badan Bukan Kerajaan | NGO's Name / Nama NGO:**
 Tourism / Pelancongan | (Owner / Pengusaha // Staff / Pekerja)
 Conservationist / Penyokong pemuliharaan | Activist Name / Nama Aktivis:

13. Is there any programme organized of any party to attract local community involved in tourism or conservation activity regarding Giant Panda? Adakah terdapat program yang dijalankan oleh pihak tertentu untuk menarik minat penduduk terlibat dengan aktiviti pelancongan atau pemuliharaan mengenai Giant Panda?

- Yes / Ya, Specify / Nyatakan :
 No / Tidak

14. Did you encourage your children/ generation to get involved in tourism or conservation sector? / Adakah anda menggalakkan anak-anak / generasi anda seterusnya untuk terlibat dalam sektor pelancongan atau pemuliharaan?

- Yes / Ya
 No / Tidak

15. How do you define your lifestyle? / Bagaimanakah anda mendefinisikan gaya hidup anda?

- Care for environment** / Membantu menjaga alam sekitar
 Care for animal welfare / Membantu menjaga kebajikan haiwan
 Love to travel / Suka melancong
 Love to do recreational activities / Suka melakukan aktiviti rekreasi
 Religious / Melakukan aktiviti keagamaan
 Specify / Nyatakan : _____

RESPONDENT ID:

SECTION B (BAHAGIAN B)
THEORY OF PLANNED BEHAVIOUR / TEORI GELAGAT TERANCANG

QUESTION 1 – 55 / SOALAN 1 - 55

Instruction / Arahan : Circle your answer based on the scale given / *Bulatkan jawapan anda mengikut skala yang diberi.*

1	2	3	4	DK
Strongly Disagree / Sangat Tidak Setuju	Disagree / Tidak Setuju	Agree / Setuju	Strongly Agree / Sangat Setuju	Do Not Know / Tidak Tahu

WILDLIFE PROTECTION / PERLINDUNGAN HIDUPAN LIAR

No	STATEMENT / PENYATAAN	SCALE / SKALA				
		1	2	3	4	DK
1.	I am aware about the conservation establishment of Giant Panda / Saya sedar tentang pemuliharaan Giant Panda.	1	2	3	4	DK
2.	Giant Panda Conservation Center (GPCC) was produced as a strategy to conserve Giant Panda. / GPCC telah dihasilkan sebagai satu strategi untuk memulihara spesies Giant Panda.	1	2	3	4	DK
3.	Zoo negara is the place to increase the level of awareness about the life of endangered animal. / Zoo Negara adalah tempat untuk meningkatkan tahap kesedaran saya terhadap kehidupan haiwan terancam.	1	2	3	4	DK
4.	Wildlife conservation at Zoo Negara area is a primary means to reduce endangered species. / Pemuliharaan sumber asli di kawasan Zoo Negara adalah cara utama untuk mengurangkan spesies terancam.	1	2	3	4	DK
5.	GPCC is the initiatives that can attract my interest to know Giant Panda. / GPCC adalah inisiatif yang dapat menarik minat saya untuk mengenali Giant Panda.	1	2	3	4	DK
6.	Zoo Negara is the initiatives that preserve the conserve animals in their natural habitat. / Zoo Negara adalah inisiatif yang memelihara haiwan di dalam habitat semula jadi mereka.	1	2	3	4	DK
7.	Giant Panda conservation establishment requires the participation of local communities in order to conserve Giant Panda species. / Pemuliharaan Giant Panda memerlukan penyertaan masyarakat tempatan dalam usaha untuk memulihara spesies Giant Panda.	1	2	3	4	DK

ECOTOURISM DEVELOPMENT / PEMBANGUNAN EKOPELANCONGAN

8.	The establishment of GPCC at Zoo Negara significantly will involve my community. / Penubuhan GPCC di Zoo Negara akan melibatkan masyarakat saya.	1	2	3	4	DK
9.	Wildlife is a part of ecotourism. / Haiwan liar adalah sebahagian dari ekopelancongan..	1	2	3	4	DK



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10.	The establishment of GPCC will promote Zoo Negara as the ecotourism attraction. / <i>Penubuhan GPCC akan menggalakkan Zoo Negara sebagai tarikan ekopelancongan.</i>	1	2	3	4	DK
11.	Purchasing entrance ticket to GPCC will help to support ecotourism growth in Malaysia. / <i>Pembelian tiket masuk ke GPCC akan menyokong pertumbuhan ekopelancongan di Malaysia.</i>	1	2	3	4	DK
12.	Giant Panda presence will attract more local and foreign tourists. / <i>Kehadiran Giant Panda akan menarik lebih ramai pelancong dalam dan luar negara.</i>	1	2	3	4	DK
13.	GPCC entrance fee is reasonable. / <i>Yuran masuk ke GPCC adalah berpatutan.</i>	1	2	3	4	DK

SOCIO-ECONOMIC DEVELOPMENT / PEMBANGUNAN EKONOMI SOSIAL

14.	The purpose of ecotourism activity in the establishment of GPCC is directly affecting my community daily lives in the future. / <i>Tujuan aktiviti ekopelancongan dalam penubuhan GPCC secara langsung memberi kesan kepada kehidupan seharian masyarakat saya pada masa akan datang.</i>	1	2	3	4	DK
15.	Protection of Giant Panda in the GPCC area is to generate income for local communities through eco-tourism activities in this area. / <i>Perlindungan Giant Panda di kawasan GPCC adalah untuk menjana pendapatan bagi masyarakat setempat melalui aktiviti ekopelancongan di kawasan ini.</i>	1	2	3	4	DK
16.	The ultimate goal of GPCC is to generate employment opportunities for my communities. / <i>Matlamat utama GPCC adalah untuk menjana peluang pekerjaan kepada masyarakat saya</i>	1	2	3	4	DK
17.	The establishment of GPCC at Zoo Negara will increase the income of my community. / <i>Penubuhan GPCC di Zoo Negara akan meningkatkan pendapatan masyarakat saya</i>	1	2	3	4	DK
18.	The establishment of GPCC at Zoo Negara will enhancement of my community livelihoods. / <i>Penubuhan GPCC di Zoo Negara akan meningkatkan mata pencarian masyarakat saya.</i>	1	2	3	4	DK

ATTITUDE / SIKAP

19.	I believe that the efforts of GPCC establishment will help in conserve Giant Panda species. / <i>Saya percaya bahawa usaha pembangunan GPCC akan membantu dalam pemuliharaan spesies Giant Panda.</i>	1	2	3	4	DK
20.	Giant Panda should be conserve for ecotourism purposes. / <i>Giant Panda patut dilindungi bagi tujuan eko pelancongan.</i>	1	2	3	4	DK



RESPONDENT ID:

21.	In my opinion, government doing a right thing by bringing Giant Panda to Malaysia. / Pada pendapat saya, kerajaan melakukan perkara yang baik dengan membawa Giant Panda ke Malaysia.	1	2	3	4	DK
22.	Conservation of Giant Panda is necessary for the use of future generations. / Pemuliharaan Giant Panda adalah penting untuk kegunaan generasi akan datang.	1	2	3	4	DK
23.	The success of GPCC can only be achieved through strong local community involvement. / Kejayaan GPCC hanya boleh dicapai melalui penglibatan masyarakat tempatan yang kukuh.	1	2	3	4	DK
24.	I should support the effort of government by developing GPCC in order to conserve Giant Panda. / Saya patut menyokong usaha kerajaan atas penubuhan GPCC untuk memulihara Giant Panda.	1	2	3	4	DK
25.	My family expect me to engage in Wildlife conservation behaviour. / Keluarga saya mengharapkan saya untuk terlibat dalam pemuliharaan hidupan liar.	1	2	3	4	DK
26.	My friends expect me to engage in Wildlife conservation behaviour. Rakan-rakan saya mengharapkan saya untuk terlibat dalam pemuliharaan haiwan terancam	1	2	3	4	DK
27.	My community expects me to engage in Wildlife conservation behaviour. / Komuniti saya mengharapkan saya untuk terlibat dalam pemuliharaan hidupan liar.	1	2	3	4	DK

SUBJECTIVE NORM & INTENTION / NORMA SUBJEKTIF & NIAT

28.	The people that are the most important in my life would approve of me helping with Wildlife conservation. / Orang yang penting dalam hidup saya akan menerima saya untuk membantu memelihara sumber alam semulajadi.	1	2	3	4	DK
29.	People can rely on me to make a positive contribution in Wildlife conservation for Giant Panda. / Orang ramai boleh bergantung pada saya dalam memelihara sumber alam semulajadi untuk Giant Panda.	1	2	3	4	DK
30.	Most people who I admire engage in the protection and conservation of Wildlife. / Kebanyakan orang yang saya kagumi melibatkan diri dalam perlindungan dan pemuliharaan sumber hidupan liar.	1	2	3	4	DK
31.	I would personally prepare to act on Wildlife conservation in Giant Panda. / Secara peribadi, saya bersedia untuk bertindak untuk pemuliharaan Giant Panda..	1	2	3	4	DK
32.	I have my time to attend any conservation consultant programme by governance for Giant Panda. / Saya mempunyai masa untuk menghadiri mana-mana program perunding tadbir urus pemuliharaan Giant Panda.	1	2	3	4	DK
33.	I will conduct interventions to prevent wildlife damage. / Saya akan mengadakan intervensi untuk mencegah kerosakan terhadap hidupan liar.	1	2	3	4	DK



RESPONDENT ID:

34.	There are organisations who are already involved in Wildlife conservation that could help me participate in it if I wanted to. / Terdapat organisasi yang sudah terlibat dalam pemuliharaan sumber hidupan liar yang boleh membantu saya mengambil bahagian di dalamnya jika saya mahu.	1	2	3	4	DK
35.	I am too busy to become involved in Wildlife conservation. / Saya terlalu sibuk untuk terlibat dalam pemuliharaan sumber asli	1	2	3	4	DK
36.	I need to gain more knowledge and skills before becoming involved in wildlife conservation for Giant Panda. / Saya perlu mendapatkan lebih banyak pengetahuan dan kemahiran sebelum terlibat dalam pemuliharaan hidupan liari untuk spesies Giant Panda.	1	2	3	4	DK
37.	I am glad to engage in the Wildlife conservation for Giant Panda. / Saya gembira untuk melibatkan diri dalam pemuliharaan sumber hidupan liar bagi spesies Giant Panda.	1	2	3	4	DK

INTENTION / NIAT

38.	I am willing to support the conservation of Giant Panda in GPCC. / Saya rela menyokong pemuliharaan Giant Panda di GPCC.	1	2	3	4	DK
39.	I will conduct interventions to prevent extinction of Giant Panda. / Saya akan menjalankan intervensi untuk mencegah Giant Panda dari kepupusan.	1	2	3	4	DK
40.	I want to save Giant Panda from extinction. / Saya ingin menyelamatkan Giant Panda dari kepupusan.	1	2	3	4	DK
41.	I believe implementing GPCC for conservation of Giant Panda is far for future generation. / Saya percaya melaksanakan GPCC untuk pemuliharaan Giant Panda adalah lebih untuk generasi akan datang.	1	2	3	4	DK
42.	I believe implementing wildlife conservation is a commitment to society. / Saya percaya melaksanakan pemuliharaan haiwan liar adalah komitmen kepada masyarakat.	1	2	3	4	DK
43.	I conserve wildlife out of my sense of responsibility to protect the environment. / Saya memulihara haiwan liar sebagai rasa tanggungjawab saya untuk melindungi alam sekitar.	1	2	3	4	DK
44.	Wildlife conservation behavior is a virtue. / Tingkah laku memulihara hidupan liar adalah suatu kebaikan.	1	2	3	4	DK
45.	I would feel guilty if I didn't conserved wildlife properly. / Saya rasa bersalah jika tidak memulihara hidupan liar dengan betul.	1	2	3	4	DK



RESPONDENT ID:

3. If you decide to pay for the giant panda conservation program to run smoothly, please tell your main reason for doing so. (please choose only one answer) / Jika anda membuat keputusan untuk membayar bagi tujuan melancarkan program pemuliharaan giant panda, sila beritahu sebab utama anda membuat demikian. (sila pilih satu jawapan sahaja)

- I feel this conservation program has the same value as what i'm willing to pay / Saya berasa program pemuliharaan ini mempunyai nilai yang sama dengan apa yang saya sanggup bayar
- Giant panda conservation program is very important for future generations / Program pemuliharaan giant panda ini amat penting untuk generasi yang akan datang.
- I have an interest in this giant panda conservation program this / Saya mempunyai minat dalam program pemuliharaan giant panda ini
- I decided to pay just to show my support for wildlife conservation, and not for the specific conservation program/project / Saya membuat keputusan untuk membayar hanya untuk menunjukkan sokongan saya untuk pemuliharaan hidupan liar dan bukan semata-mata untuk program/projek pemuliharaan tertentu
- Other reasons, Specify / Lain-Lain sebab, Nyatakan: _____

4. In your opinion, what is the best way to collect the fund for the Giant Panda Conservstion Program? / Pada pendapat anda, apakah cara kutipan yang sesuai untuk program pemuliharaan giant panda?

- Giant Panda Conservation Centre (GPCC) / Pusat Konservasi Giant Panda
- Voluntary donation / Sumbangan sukarela
- Through salary deduction / Melalui potongan gaji
- Donation to WWF - Malaysia / Sumbangan kepada WWF - Malaysia
- Others, Specify / Lain-Lain, Nyatakan: _____

5. In your opinion, who should be responsible or assigned to manage giant panda conservation program this? (You can select more than one answer) / Pada pendapat anda, siapakah yang harus bertanggungjawab atau ditugaskan untuk mengurus program pemuliharaan giant panda ini? (Anda boleh memilih lebih daripada satu jawapan)

- Zoo Negara Private Sector / Sektor Swasta
- Non Government Organization (NGO) / Perbadanan Budan Kerajaan
- Others, Specify / Lain-Lain, Nyatakan: _____

6. If you decide not to pay for the giant panda conservation program to run smoothly, please tell your main reason for doing so. (please choose only one answer) / Jika anda membuat keputusan untuk tidak membayar bagi tujuan melancarkan program pemuliharaan Giant Panda, sila beritahu sebab utama anda membuat demikian. (pilih satu jawapan sahaja)

- I cannot afford to pay anything at the moment, but will do so if possible / Saya tidak mampu untuk membayar apa-apa pada masa sekarang, tetapi akan membuat demikian sekiranya boleh.
- I refuse to pay more than what was paid through taxes / Saya enggan membayar lebih daripada apa yang telah dibayar melalui cukai.
- I think this program will continue to run even if i pay or not / Saya rasa program ini akan terus berjalan walaupun saya membayar atau tidak.
- I do not get any benefit from this program / Saya tidak mendapat sebarang faedah daripada program ini.
- I prefer the money is used for other better projects / Saya lebih suka wang tersebut digunakan untuk projek yang lebih baik.
- I think this program should not be carried out / Saya rasa program ini tidak patut dijalankan.
- I need more information about this program / Saya memerlukan lebih banyak maklumat tentang program ini.

