

# **VISITORS' LEVEL OF AWARENESS ON SAFETY INSTRUCTIONS AT GIANT PANDA CONSERVATION CENTRE (GPCC), ZOO NEGARA, MALAYSIA**

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## **ABSTRACT**

People visiting Giant Panda in Zoo Negara Malaysia is getting more after the birth of the panda cub. Hence, in order to well manage the crowd due to the Giant Panda, the management needs to know further about the visitors' information, interest and their behaviour. There are several aspects to discover and one of the important aspects is safety. Therefore, this study is mainly to determine the visitors' level of awareness on safety instructions in Giant Panda Conservation Centre (GPCC), Zoo Negara. The data for this study was obtained from primary and secondary sources. Primary data is collected from the visitors coming to Giant Panda Conservation Centre (GPCC), Zoo Negara through personal interview and questionnaire. Secondary data will be from relevant journals, books, website and internet searches. Data elicitation employed a face-to-face survey approach amongst visitors to GPCC. The results showed that different visitor background will have a different level of awareness on those safety instructions.

**Keywords:** Risk; Security; Guests; Wildlife Exhibit; Malaysia.

## **1. INTRODUCTION**

Ling, Ramachandran, Shuib and Afandi, (2014), mentioned that tourism is significantly involved in a nation's economy and it has greatly related with the national and regional growth or development. Thus, tourism contributes in few ways such as creating employment, important infrastructure developments and directly improving in standard of living. Tourism in Malaysia can be categorized into a few categories. Wildlife tourism is one of the tourism products in Malaysia. In the Malaysian context, by and large, the agencies involved in wildlife tourism include the Department of Wildlife

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and National Parks that falls under the purview of the Ministry of Science, Technology and Environment. (Ministry of Natural Resources and Environment, 2017).

In Malaysia, tourism sector is a major foreign exchange earner, ranking second only after the manufacturing sector (Ho, Chia, Ng & Ramachandran, 2013). Ryan and Saward (2004) stated that capability of zoos to attract large number of visitors has been recognized. Zoo Negara Malaysia is one of the wildlife tourism sites in Malaysia. Zoo Negara (2015) stated as Zoo Negara Malaysia is under the management of Malaysian Zoological Society. This is a non-governmental organization that was founded to build the first local zoo for Malaysians. Zoo Negara was officially opened to public on the 14<sup>th</sup> November 1963. Zoo Negara is well-known around the world and houses more than 5137 specimen. This includes 476 species of mammals, reptiles, birds, fish and amphibians. It is located 5km from the capital city of Kuala Lumpur and encompasses 110 acres of land. The management envisage in transforming this wildlife tourism attraction to an open concept zoo. The Zoo Negara management are working towards having over 90% of its animals kept in spacious exhibits within a natural landscape. Their operation hour is from 9.00am to 5.00pm on Monday to Sunday (Zoo Negara, 2015).

Alleyne (2011) has mentioned that using of panda for diplomacy purpose has begun from the seventh century. Empress Wu Zetian of Tang Dynasty gifted a pair of pandas to a Japanese Emperor as goodwill diplomatic gesture. Alleyne (2011) also stated that the practice was brought back in the 1950s during the Cold War and this practice was made known as the "Panda Diplomacy". Since the year 1958 to 1982, China gifted 23 pandas to nine different countries. Yuen (2013) stated that in June 2012, the Chinese Wildlife Conservation Association came to an agreement to loan a pair of panda cubs, namely, Feng Yi (female) and Fu Wa (male) to Malaysia for a period of 10 years to commemorate the 40<sup>th</sup> anniversary of diplomatic ties between the two nations. The agreement stated that if a baby panda was born within the 10 year period, the cub will be handed over to the Chinese Government upon reaching two years old. (Yuen, 2013). Shagar and Yu (2013) mentioned that decision was made in a parliamentary sitting, to house the pandas at Zoo Negara instead of Putrajaya's Wetlands Park. This decision was made after considering feedback from the public and various agencies. The Natural Resources and Environment Minister, Datuk Seri Douglas Uggah Embas in his reasoning, mentioned that the Zoo Negara was better equipped with facilities to care for the pandas. The Minister also mentioned that the costs of maintaining the pair panda for 10 years will be incurred by Zoo Negara. (Shagar and Yu, 2013) According to Chi (2014), it was reported that the Ministry of Natural Resources and Environment has spent RM60 million in preparations to accommodate the two pandas.

At Zoo Negara, Kuala Lumpur, Giant Panda Conservation Centre (GPCC) is the place to allocate the pair of pandas. The construction of the GPCC complex was at a cost of RM25 million (Shagar and Yu, 2013). Datuk Seri G. Palanivel's deputy, Datuk Seri James Dawos Mamit said RM25 million was spent on the panda enclosure, 20million on the rental fee for the first four years and RM15million on maintenance. Multi Spex Architects director Zulkhairi Md Zain, person- in- charge to design the GPCC, said the centre would have sufficient space to house an additional baby panda (Yuen, 2013). On August 18, 2015, Liang Liang and Xing Xing, created a world record as the first Giant Panda pair to naturally reproduce within a short period of time while in captivity. And this has again attracted more visitors to GPCC (Sivanandam, 2015).

According to Lai (2011), Zoo Negara's deputy director, Dr Muhammad Danial raised a few concerns on safety for the public, animals & staff. Zoo Negara as a safety measure had installed preventive

security lapses. Zoo Negara also practices weekly refresher courses to remind its keepers on the importance of maintaining safety standards. On 24 December 2015, National Zoo deputy president Rosly Ahmat Lana spoke about the increasing visitor numbers to the zoo. Statistics showed, until Nov 24 2015 visitor arrivals reached 12,000. However, in less than a month the number of visitors rose by 1,200. The reasons for the sudden influx being the panda cub born coupled with the school holidays season (Panda cub lures more visitors to National Zoo, 2015). It is clear evidence that the Giant Panda Conservation Centre is one of the main attractions at Zoo Negara.

According to Health and Safety Executive (2012), health and safety of public and employees either while working or in the vicinity of animals is a key area of concern at all zoos. It has been recorded that most accidents at zoos are mainly due to slips and trips, manual handling and vehicle movements. Among these accidents, one third of it is happened to visitors or the public. Therefore, from the Health and Safety Executive (2012), it is clearly seen that safety instructions are playing an important role in managing the zoo. The study will be conducted to identify how visitors aware of the safety instructions practicing in GPCC when they are visiting the Giant Panda at GPCC. Meanwhile, according to one of the staffs who attended training on giant panda in China, Mr Akmal Hadi, (personal interview, October 07, 2015) from the first day GPCC released to public, there was no accident was reported. However, it doesn't mean that the visitors are aware of those safety instructions. Hence, there is a need to do some research to enhance the safety procedure as there was no previous specific study to the safety aspects at GPCC Zoo Negara. Policies are required to provide information and guidelines about the role of protection that the visitors have towards the protection of the wildlife to assist marketing, visitor management and the development of public awareness addressing visitors and the local (Siow et al., 2015; Siow et al., 2014).

It will help the management to know the factors that influence their awareness on safety instructions in GPCC and thus improve their management to the visitors. The main purpose of this study is to identify the demographic of visitors to Giant Panda Conservation Centre (GPCC), Zoo Negara. For example, age, gender, education level, and visiting pattern of the visitors. This study also conducted to obtain information on visitors' level of awareness on the safety instructions towards the infrastructure provided for Giant Panda Conservation Centre (GPCC) of Zoo Negara. The factor that influencing the level of awareness of visitors on the safety instructions towards the infrastructure at Giant Panda Conservation Centre (GPCC), Zoo Negara is to be determined in this study. This is to find out the relationship between how the different socio demographic background of the visitors can affect their awareness towards those safety instructions.

## **2. LITERATURE REVIEW**

### **2.1. Zoo Safety**

According to Zoo Negara deputy director Dr Muhammad Danial Felix, Malaysian zoos are safe, however visitors should be diligent of their behaviour (Lai, 2011). Hence, it is important for the visitors to be reminded at all times to follow guidelines to remain safe. The guidelines include clear instructions on refraining from attempting to feed the animals to avoid injury. The guidelines also clearly states to refrain from knocking on exhibit glass walls as these could break. Dr Muhammad Danial also mentioned, as a preventive measure, Zoo Negara had installed safety measures to prevent any security lapses. The safety practice includes twice-daily checks of the electric fencing especially for enclosures with large carnivores such as tigers. Staffs form the parks and gardens division are

given the task to inspect all tree branches as a safety precaution. During rainy season, the management also pays extra attention to avoid any mishaps. Other safety measures include weekly refresher courses for zoo keepers to remind on the importance of maintaining safety standards. An annual training course on safety organised by the Malaysian Association of Zoological Parks and Aquaria is also available to expose new keepers to basic animal husbandry (Lai, 2011). According to Mr Akmal Hadi, (personal communication, October 07, 2015), the management of GPCC has their standard procedures when emergency cases happen.

## **2.2. Zoo Practices**

According to Department of Environment, Food and Rural Affairs (2012), there are several best practices to manage the public safety in the zoo. First, zoo operators are required to obtain insurance cover that covers the operator and every other person in the zoo premise. This insurance should cover against liability, injury or mishap which may be caused by the animals or other conditions, both inside and outside the zoo premise that includes transportation within the premise. Second, the operators should keep animals in enclosures that are constructed according to safety guidelines. The operators should ensure that gates and doors to enclosures are kept locked at all times as per safety guidelines to prevent unauthorised access. It is recommended in the guidelines, for a double gate or door system to be constructed to prevent escape from the secure area.

Third, to ensure public safety, buildings maintenance, management, structures and public areas must be kept safe at all times. Initiatives taken include proper surfaces and flights of step to avoid slipping and falling along with handrail within the premises. Premise should be push chair and disable friendly, hence, shallow gradient access should be considered within the premise. Regular trees maintenance and inspection by qualified personnel within the premise is important to ensure visitors safety. Design, construction and maintenance of walkway passing over animal enclosures should be given high safety priority. Such structure should be ensured to withstand contact by animals. Another important safety feature is exits from the premise which should be appropriately located and adequately signed. Entrance and exit access, at all times, must be kept clear to ensure easy release of visitors in case of an emergency. At the same time, these access points should be designed as per safety standards to prevent animals from escaping.

Clear signage containing safety information should be provided especially in areas where visitors come into contact with animals. Clear and sufficient number of safety signs in accordance with health and safety standards on the hazard of certain enclosures especially when it involves electrified fence should be provided. Warning signs and notice boards should be clearly exhibited of all edges that could be hazardous to visitors and employees. Barriers can be constructed at such edges to prevent visitors, especially children from falling. Buildings and enclosures deemed hazardous should at all times be kept locked. Clear notices of the danger should be displayed to warn especially visitors that access is denied to ensure safety. It will be useful and more impactful for Zoos to consider using symbols as signage that can assist foreign visitors and children to better understand the safety precautions. Safety and warning panels on electrified fence should be displayed both outwards and inwards.

## **2.3. Risk**

“Nothing is risk in itself; there is no risk in reality. But on the other hand, anything can be a risk; it all depends on how one analyses the danger, considers the event.” This (Ewald 1991) statement reveals on how an individual perceives risk. The statement also implies that anything can become a risk and it can

be construed by different people from different angle. Beedie (1994) defines risk as ‘an uncertain outcome, and any threat to one’s physical, mental and social wellbeing’. The classification of participation risks in adventurous outdoor activities are absolute risk, perceived risk and real risk (Beedie, 1994; Bentley, Cater, and Page, 2010; Dickson & Tugwell, 2000; Haddock, 1993; Priest & Gass, 1997). According to Haddock (1993), absolute risk occurs in natural situation where any form of safety measures are not available; real risk occurs in a given situation where safety measure are available; perceived risk is an individual’s subjective opinion while engaging in the activity.

**2.4. Risk perception**

Cambridge Dictionaries online (2015) defined perception as a belief or opinion that often held by many people and based on how things seem. Crompton (1992) proposed that destination choice is made after constraints such as money and time are weighed against the destination image. Meanwhile destination image is a critical factor selecting a destination. In the initial stage of choosing a place to visit, destinations with strong and positive attractiveness are more likely to be considered (Sonmez and Graefe, 1998). It is obvious that perception of risk and safety influence destination image and choice. Therefore, it is important to maintain the strong and good image of GPCC in order to retain and attract more visitors to come. From the above, the risk perception to GPCC can be varied by different social demographic of the visitors such as age, education level, and family status. Thus, risk and safety management in GPCC must be well managed.

**2.5. Safety Awareness**

From Cambridge Dictionaries online (2015), awareness means knowledge that something exists, or understanding of a situation or subject at the present time based on information or experience. In this study, level of awareness will be measured through how much the visitors know, understand of the present safety instructions at GPCC based on their own experience.

**Table 1: The Most Common Attributes mentioned in Safety Instruction**

No	Authors	Attributes														
		General safety signs	Restrictions on noise	Fire evacuation	Animal escapes	Animal attack	Supervision of children by parents	Emergency procedures / exits	Restrictions on pet	Medical provision	Slopes, steps and surface	Over charged by shops	Falling	Smoking	Electrical safety	Fence Crossing
1.	Department of Zoology (2014)	x	x						x				x	x		
2.	Chester Zoo (2015)	x	x	x		x	x		x	x					x	
3.	Southwicks Zoo (2015)		x				x		x	x					x	
4.	Smithsonian National Zoological Park (2015)		x											x	x	
5.	Russell and Prideaux (2014)					x						x				
6.	Health and Safety Executive (2012)			x	x		x		x							
7.	Department of Environment, Food and Rural Affairs (2012)	x	x	x			x			x		x				
8.	Loney, Cooling & Aw (2012)											x				
	<b>Total</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>3</b>

Based on the literature that has reviewed, the above attributes are listed down in Table 2 as a measurement in the studies. The most mentioned attribute are fire evacuation and medical provision (4 out of 7 studies), followed by general safety signs, emergency procedures / exits, and fence crossing mentioned (3 out of 7 studies). While restrictions on noise, animal escapes, animal attack, supervision of children by parents, slopes, steps and surface, and smoking are mentioned 2 out of 7 studies. The rest attributes which are restrictions on pet, over charged by shops, falling and electrical safety mentioned 1 out of 7 studies.

### **3. METHODOLOGY**

#### **3.1. Data Collection**

Giant Panda Conservation Centre (GPCC) is the site of this study. It is located inside Zoo Negara which comprise of 1.6 hectare out of 110 acres of land in Zoo Negara. Inside the complex, the facilities include laboratory, incubator room, veterinary clinic, exercise area, holding den and a monitory room. The enclosure is kept below 24 degree Celsius to modify the same temperature as the Giant Panda homeland in Sichuan province, China. (Shagar and Yu, 2013)

Besides, each round of visitors is limited to 150 people in 20 minutes. This is to avoid the crowdedness inside the enclosure area. The data collection of the study will be conducted at the resting area of GPCC which near the exit from the photo printing centre to reduce the impact to the visitors satisfaction and also the sales of the photo printing. The respondents will be randomly surveyed and at aged 18 and above. The data for this study will be obtained from both primary and secondary data. Primary data is collected from the visitors coming to Giant Panda Conservation Centre (GPCC), Zoo Negara through personal interview and questionnaire. Secondary data will be from relevant journals, books, websites and internet searches. The data will be collected during the few weekdays and weekend in December until March which include school holidays and public holidays in between. A pilot test is conducted to test the effectiveness and validity of the questionnaire. In this study, the pilot test is done on 20 respondents at GPCC.

#### **3.2. Sampling Size**

According to Deputy President Chairman of Malaysian Zoological Society, Rosly@Rahmat Amat Lana, GPCC Zoo Negara received 360,719 visitors since its opening on 25 June 2014 (Giant Panda Adapting Well to Malaysia, 21 July 2015). Therefore, the sample was calculated  $n = 99.9$  respondents. In this study, in order to make the data more accurate, number of sample size was enlarged and collected at 250 respondents.

#### **3.3. Analytical Tools**

Descriptive analysis and regression analysis are used as an analytical tool in the study. Descriptive analysis is used to give an overview description of the socio demographic, level of awareness on safety instructions. Besides, the mean value of the level of awareness towards those safety instructions in GPCC will be determined. Regression analysis is used to focus on relationship between socio demographic and visiting pattern (independent variables) with level of awareness on safety instructions (dependent variable).

## 4. RESULTS AND INTERPRETATION

### 4.1. Respondent Profile

**Table 2:** Social Demographic and Visit Information of Respondents

		Frequency	Percentage %
<b><i>Social Demographic</i></b>			
Gender	Male	96	38.4
	Female	154	61.6
Age	18 – 25	69	27.6
	26 – 35	65	26.0
	36 – 45	90	36.0
	46 – 55	15	6.0
	56 +	11	4.4
Nationality	Malaysian	231	92.4
	Non-Malaysian	19	7.6
Marital status	Single	78	31.2
	Married	171	68.4
	Divorced	1	0.4
Ethnic groups	Malay	138	55.2
	Chinese	67	26.8
	Indian	23	9.2
	Others	22	8.8
Highest education level	No formal education	2	0.8
	Primary school	3	1.2
	Secondary school	67	26.8
	College / university	178	71.2
Occupation	Students	50	20.0
	Self-employed	40	16.0
	Private sector	79	31.6
	Government sector	49	19.6
	Unemployed (housewife/retiree)	32	12.8
Monthly salary	0	61	24.4
	1 – 2000	45	18.0
	2001 – 4000	43	17.2
	4001 – 6000	42	16.8
	6001 +	31	12.4
	Not mentioned	28	11.2
<b><i>Visit information</i></b>			
Number of visit	1	225	90.0
	2	19	7.6
	3	6	2.4
Companion to GPCC	Alone	4	1.6
	Couple	10	4.0
	Friends	44	17.6
	Family	184	73.6
	Package tour group	3	1.2
	Organisation group	5	2.0

**Table 2:** Social Demographic and Visit Information of Respondents (cont.)

		Frequency	Percentage %
Time spend at GPCC	1 – 30	135	54.0
	31 – 60	76	30.4
	61 – 90	11	4.4
	91 +	27	10.8
Plan to revisit	Yes	103	41.2
	Maybe	101	40.4
	No	46	18.4

Among the respondents, there are high percentage of them are in age group 36-45 which mean this age group has more disposable income and interest to visit to zoo. The findings also revealed a very high academic level of education with 71.2 % of them attending for the tertiary education as their highest qualification. Most of the respondents (73.6%) were coming with their families which aim to bring their children for visit the panda for the first time. More than half of them only spend less than half an hour in GPCC as there is time restriction to observe panda (20minutes in panda enclosure) and they want to proceed to other zoo attractions.

#### 4.2. Level of Awareness on Safety Instructions

The second objectives of this study is to obtain information on visitors' level of awareness on the safety instructions towards the infrastructure provided for Giant Panda Conservation Centre (GPCC) of Zoo Negara. Thus, the percentage for level of awareness (not aware at all, slightly aware, moderately aware and extremely aware) for each instructions and the mean value for their awareness is calculated. The following table showed the mean and percentage of awareness level on safety instructions at GPCC from the highest to the lowest.

**Table 3:** Mean and percentage of awareness level on safety instructions at GPCC from the highest to the lowest

No.	Instructions	Percentage of the Valid Respondents (%)				Mean
		Not Aware at All	Slightly Aware	Moderately Aware	Extremely Aware	
1.	Please do not use flash. (Area to Observe Panda)	1.2	0.8	5.6	92.4	3.89
2.	Warning sign be quiet. (Area to Observe Panda)	2.8	2.0	11.2	84.0	3.76
3.	Please do not bring in any food or drinks. (Area to Observe Panda)	4.8	2.4	8.0	84.7	3.73
4.	Please do not throw rubbish anywhere. (Area to Observe Panda)	6.4	0.4	9.2	84.0	3.71
5.	Please proceed in an orderly manner. (Area to Observe Panda)	3.6	6.8	15.2	74.4	3.60
6.	Please do not throw rubbish anywhere. (Bear Information Centre)	10.1	2.8	11.7	75.4	3.52
7.	Please do not bring in any food or drinks. (Bear Information Centre)	10.1	4.0	10.9	74.9	3.51
8.	Direction of toilet signage. (Toilet)	8.0	7.1	15.0	69.9	3.47
9.	Please proceed in an orderly manner. (Bear Information Centre)	6.8	14.1	15.7	63.5	3.36
10.	Condition of floor surface. (Toilet)	10.5	7.8	24.8	56.9	3.28



**Table 3:** Mean and percentage of awareness level on safety instructions at GPCC from the highest to the lowest (cont.)

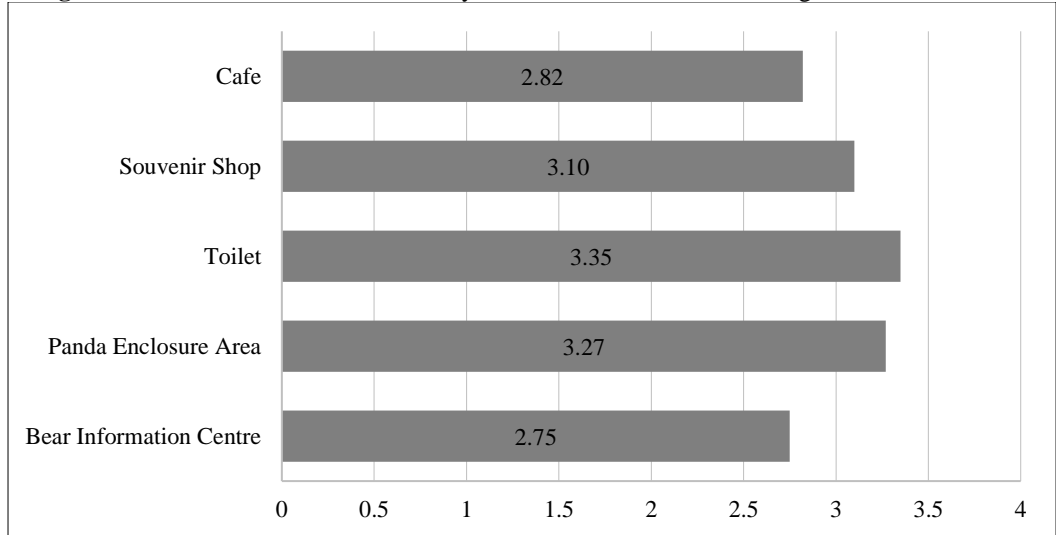
No.	Instructions	Percentage of the Valid Respondents (%)				Mean
		Not Aware at All	Slightly Aware	Moderately Aware	Extremely Aware	
11.	Please do not knock on the glass. (Area to Observe Panda)	17.4	5.3	11.3	66.0	3.26
12.	Steepness of boardwalk. (Area to Observe Panda)	14.1	8.0	18.1	59.8	3.24
13.	No smoking zone. (Souvenir Shop)	21.7	4.2	11.3	62.9	3.15
14.	No smoking zone. (Bear Information Centre)	25.0	2.5	8.3	64.2	3.11
15.	No smoking zone. (Area to Observe Panda)	23.9	4.0	9.3	62.8	3.11
16.	No smoking zone. (Toilet)	22.4	5.3	12.5	59.9	3.10
17.	Aware of items dropping. (Souvenir Shop)	20.2	9.7	17.6	52.5	3.03
18.	No smoking zone. (Café)	24.4	5.8	12.0	57.8	3.03
19.	Usage of railing. (Area to Observe Panda)	25.5	13.8	18.0	42.7	2.78
20.	Proper instructions of washing hands. (Café)	34.8	8.9	15.6	40.6	2.62
21.	Direction of emergency exits. (Area to Observe Panda)	33.6	13.8	10.9	41.7	2.61
22.	Direction of emergency exits. (Bear Information Centre)	46.9	9.5	12.8	30.9	2.28
23.	Emergency procedures/instructions by person in charge. (Area to Observe Panda)	44.4	12.9	13.7	29.0	2.27
24.	Available of fire extinguisher. (Bear Information Centre)	49.2	10.5	12.6	27.7	2.19
25.	Description of emergency procedures/instructions. (Bear Information Centre)	46.3	15.8	17.9	20.0	2.12
26.	Available of first aid equipment. (Bear Information Centre)	62.1	13.4	7.8	16.8	1.79
	Total mean	22.2	7.4	13.0	57.5	3.06

From table 3, the overall level of awareness was quite high which is 3.06 which means respondents had moderately aware of safety instructions present at GPCC. Especially in panda enclosure area (area to observe the panda), respondents were extremely aware of not using flash light, behave quiet and not to bring in food and drinks. This might because of there had staff or volunteers keep on holding the signage to remind them to do so.

To make an overview of visitors' level of awareness on safety instructions at GPCC, the above safety instructions are grouped by locations. From Figure 1, it can be clearly seen that visitors are quite aware of safety instructions especially at toilet and panda enclosure area. Then the awareness mean is following by souvenir shop, café and bear information centre. Visitors are highly aware of the safety in toilet as they have high concern on slippery floor which might cause injury to them. Next, at panda enclosure area, visitors are always reminded to follow the rules by the staffs or volunteers. Visitors also highly aware at souvenir shop because there is limited space to pass through before coming out to the café.

In addition, the level of awareness of the visitors was lower at bear information centre compared to other locations even though at bear information centre there are staffs to remind visitors to behave also. The reason might because of they were excited to look for the panda at panda enclosure, thus, they were less observant on the safety instruction before the panda enclosure area.

**Figure 1:** Mean awareness level on safety instructions at GPCC according to different location



#### 4.3. Multiple Regression Analysis

A multiple regression analysis was employed to determine the effect of the independent variables (social demographic and visiting pattern) on the dependent variable (level of awareness on the safety instructions). The result was statically significant,  $F(4, 194) = 7.765$  at  $p$ -value less than 0.05. The model also revealed that the independent variables predicting 13.8% change in dependent variable. In Table 4, the independent variables not come with family, Indian ethnic respondents, Malay ethnic respondents, and Self-employed occupation showed the most significant effect on the dependent variable. Indian ethnic respondents showed the largest beta coefficient (Beta= 0.677) which implied the greatest factor in explaining visitors' level of awareness. Therefore, the equation of the multiple regression model of visitors' overall level of awareness can be written as:

Visitors' Overall Level of Awareness = 2.98 – 0.297 (come with family) + 0.677 Indian Ethnic Respondents) + 0.362 Malay Ethnic Respondents + 0.273 (Self-employed occupation)

**Table 4:** The Multiple Regression Analysis with the Level of Awareness

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t-value	p-value
	B	Std. Error	Beta		
(Constant)	2.98	0.98		30.463	0.000
Come with family	-0.297	0.095	-0.214	-3.134	0.002
Indian ethnic respondents	0.677	0.162	0.304	4.180	0.000
Malay ethnic respondents	0.362	0.092	0.288	3.929	0.000
Self-employed occupation	0.273	0.122	0.157	2.239	0.026

Note: Significant at t-value > 1.645 and p-value < 0.05

$$F(4, 194) = 7.765, R^2 = 0.138 \text{ and Adjusted } R^2 = 0.120$$

The independent variable not come with family had a higher awareness on the safety instructions compared with those come with family members. The respondents came with family put less awareness on safety instructions because most of them had to take care of their children less than 12 years whom need more attention on them to prevent any unwanted accidents.

Next, Indian respondents were more aware on safety instructions compared to other races where 19 out of 22 of them were foreigner. One of the reasons maybe the language of safety instructions at GPCC were not fully understood by the foreigner. Thus, foreigner had a lower awareness to those instructions.

Meanwhile, Malay respondents had a higher awareness on safety instructions compared to other races (Chinese, Indian and other races). This might be Malay ethnic were more observant to other safety instructions compare with other races.

The other independent variable respondents with self-employed occupation were more concern on safety awareness compare to those works with government or private sector and unemployed which included housewife and retirees. The reason may due to respondents with self-employed more aware of the structure and instructions because they had their responsibilities on their own business. However, in this study, the factor of age is insignificant compared with previous study by George (2003), on tourist's perceptions of safety and security, the visitors who aged 45 and above has a higher rate for safety variables in the study.

Another study done by Kwon and Park (2002) mention that factor of gender, education and age group are significant on safety factors in their study. In contrast with this study, all three factors (gender, education and age group) are not significant for the test. A study by Nur Syuhada, Syamsul Herman & Zaiton (2013), shows that socio demographics are influential on visitors' perception towards risk in recreational activities and facilities.

## **5. CONCLUSION AND RECOMMENDATION**

The findings of this study revealed that variations did exist in the level of awareness of visitors on safety instructions at GPCC between the visitors' socio demographic and visiting pattern. In order to improve the visitor management, safety is an aspect that shouldn't be left out.

Based on the observation during data collection, there are a few recommendations suggested. Firstly, since GPCC is open to public, the facilities should have been taken considerations to all level of people. There was lift services to facilitate the people with special need to the panda enclosure area from bear information centre. Furthermore, the friendly and helpful staffs were there to offer help. However, the entrance for the exit or emergency exit is too small if the door is only open one side. Therefore, when people with wheel chair wanted to pass through the exit, it has induced some difficulties to them especially at the exit between souvenir shop and café. Hence, the management maybe can improve on the space of exits because emergency exit plays an important role in safety management to the visitors and staff.

Furthermore, the inactivity of panda has caused some dissatisfaction among the respondents. Panda only will be active during feeding time twice a day. But in other time, the panda are mostly asleep. The management might be able to have some training program to train the panda in order to keep them active and healthy.

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