

# Makalah Akademia

## KNOWLEDGE, ATTITUDES AND PRATICES (KAP) SURVEY MODEL FOR SOLID WASTE MANAGEMENT IN PUBLIC PARK

By

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**THE KAP** survey is a quantitative method that usually conducted to collect reliable data on the knowledge (what is being known), attitudes (how people perceive) and practices (how people act) about general or specific issue.

### INTRODUCTION TO KAP SURVEY MODEL

Originated in the 1950s and it is widely used in the fields of health research, environmental science and management related field.

KAP survey model is expected to generate raw data on the specific issue and be able to identify the gap of knowledge, beliefs among people and behavioural patterns performed. The outcome from the KAP survey model believed to help in program implementation planning and strongly influence decision making process. Data are collected by the researcher through a structured survey questionnaire that may include both qualitative and quantitative data collection. For the case of solid waste problem in a public park, it is believed that the issue is closely related to the attitudes among visitors. Awareness and attitudes among visitors believed as among of the factors that contributing to the solid waste problem especially in public park. Therefore, KAP survey model is seen as one of the effective method to provide baseline data in managing solid waste especially in public park.

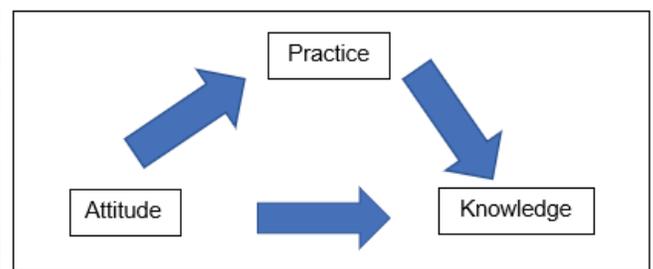


Figure 1. KAP survey model diagram

### CASE STUDY: TITIWANGSA LAKE GARDEN, KUALA LUMPUR

Titiwangsa Lake Garden is one of the public park located in the city of Kuala Lumpur, Malaysia with an outstanding features of flora and fauna. Originally from a mining site, now Titiwangsa Lake Garden become a popular spot for urban community to engage in recreational activities and enjoying valuable time with family and friends. During the random observation process, it was obvious to discover improper solid waste management greatly effects on aesthetic appearance of the park. Poorly managed solid waste materials lead to the water pollution, and it might endanger fishes in the lake.

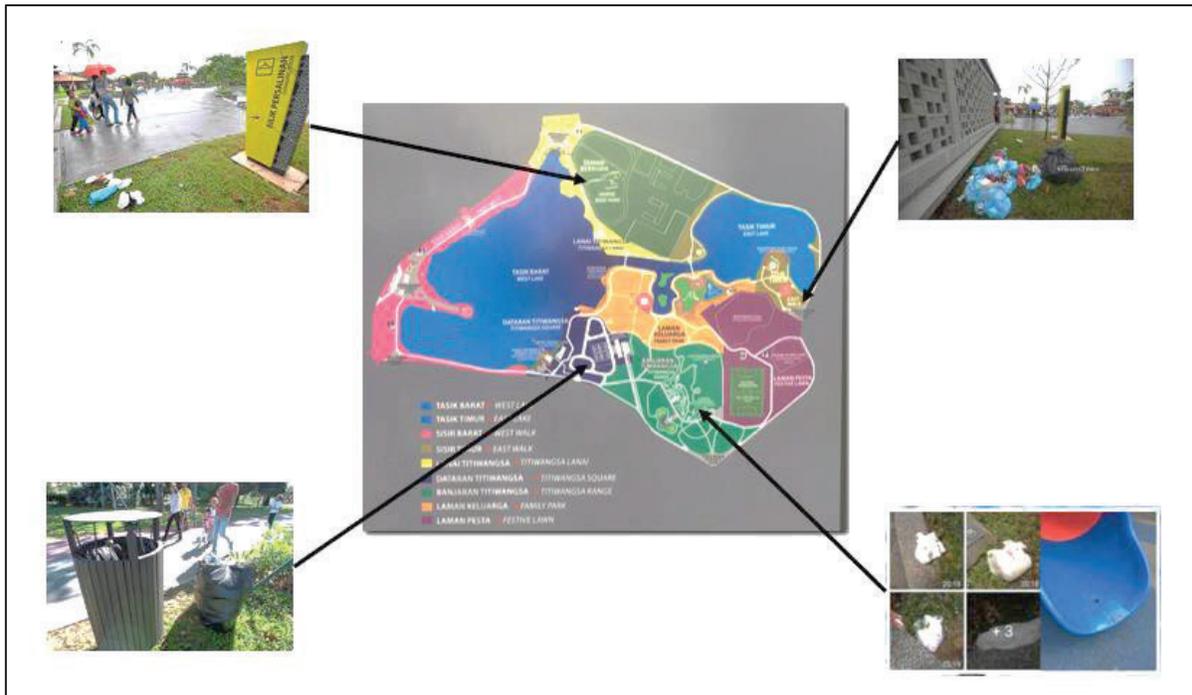


Figure 2. Improper solid waste management in Titwangsa Lake Garden observed

Therefore, this study was conducted to investigate the relationship between knowledge and attitude among visitors in Titiwangsa Lake Garden and what are the possible practices should be enforced to solve this issue. This is a crucial step in maintaining the image and identity of the park as one of the most beautiful public park in Kuala Lumpur.

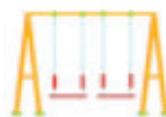
### KAP SURVEY MODEL FOR MANAGING SOLID WASTE IN PUBLIC PARK

The main purpose of this study is to determine the knowledge, attitude and practices among park visitors regarding solid waste management in public park. Basically, people with a knowledge tend to have positive attitudes and display a good practice as response in the certain situation. In this study, data were collected from 125 respondents who are visitors at park and survey questionnaire were distributed on-site with convenient sampling design. Table 1 indicated the socio-demographic profile of respondents and the majority of respondents were students (72.8%) and the highest level of education was university or college level. It was believed that the park is popular among young people due to its outstanding aesthetic appearance with varieties of biodiversity offered in the park.

Table 1. Socio-demographic characteristics of respondents

Variables	Frequency	Percentage (%)
<b>1. Age of respondents (years)</b>		
15 – 25	108	86.4
26 – 35	11	8.8
36 – 45	3	2.4
46 - 55	3	2.4
<b>2. Gender</b>		
Male	43	34.4
Female	82	65.6
<b>3. Marital status</b>		
Single	110	88.0
Married	15	12.0
<b>4. Occupation</b>		
Government sector	18	12.8
Private sector	17	13.8
Unemployed	1	0.8
Students	91	72.8
<b>5. Level of Education</b>		
Secondary school	14	11.2
University/ College	110	88.0
Others	1	0.8

On the other hand, table 2 showed the level of knowledge among respondents regarding solid waste management.



Majority of respondents (72.5%) aware that improper management of solid waste lead to the spread of diseases but 16.1% did not agree that improper waste disposal may contribute to the spread of the diseases and 11.4% did not know anything or do not have any knowledge about it. Meanwhile, most respondents (89.6%) agreed that improper solid waste disposal has various effects towards environment and cause unpleasant view of the public park.

Table 2. Knowledge of respondents on solid waste management

Variables	Frequency	Percentage (%)
<b>1. Improper waste disposal lead to the spread of diseases such as cholera and diarrhoea</b>		
True		72.5
False		16.1
Don't know		11.4
<b>2. Improper waste disposal has adverse effects on environment</b>		
True		89.6
False		5.6
Don't know		4.8
<b>3. Improper of solid waste management display unpleasant view of park</b>		
True		89.6
False		5.6
Don't know		4.8

Table 3 revealed the attitudes or perception of respondents towards solid waste management especially in Titiwangsa Lake Garden. As 3R campaign is actively practiced in the park, respondents were purposely asked about the campaign and majority of respondents (80%) aware on the idea of 3R campaign. In relation to that, over 80% respondents realized that solid waste management is very important in park and open spaces in park should be free from any waste.

Table 3: Attitudes of respondents on solid waste management

Variables	Frequency	Percentage (%)
<b>1. Do you have any idea about the 3R (reuse, reduce, recycle) campaign?</b>		
Yes	100	80.0
No	9	7.2
Don't know	14	11.2
<b>2. Do you think proper solid waste management in park is important?</b>		
Yes	106	84.8
No	7	5.6
Don't know	11	8.8
<b>3. Do you think open spaces in park should be clean and free from solid waste?</b>		
Yes	112	89.6
No	7	5.6
Don't know	6	4.8

Table 4 indicated the practice of respondents regarding solid waste management in the park and types of bin provided at park were identified. The data showed approximately balanced percentage of usage on types of bin in the park and it showed the maximum usage of bins provided in park. 55.2% of respondents reported type of solid waste generated during their visit was plastics followed by food waste with 40.8%. Other types of solid waste were paper and glass which recorded 3.2% and 0.8% respectively.

Table 4. Practices of respondents regarding solid waste management

Variables	Frequency	Percentage (%)
<b>1. Types of bins used during visit to park</b>		
Hanging bin	45	38.0
Wheeled bin	32	25.8
Rubbish bin	34	27.2
Receptable bin stand	14	11.2
<b>2. Types of solid waste generate during visit to park</b>		
Paper	4	3.2
Plastic	69	55.2
Food waste	51	40.8
Glass	1	0.8
<b>3. Do you use the 3R bin provided at the park?</b>		
Yes	114	91.3
No	10	8.6
Don't know it exist	1	0.2

## CONCLUSION

Level of knowledge among respondents regarding solid waste management in public park was satisfactory where majority of respondents aware on the importance of proper solid waste disposal in park. Attitudes and practices among respondents towards solid waste management is good and majority of respondents agreed that solid waste management is very important in the public park management. However, the observation process discovered that solid waste issue is a serious problem in the park.

This happened due to the participation of respondents are mostly among students and may affects the data collected showing high level of knowledge among respondents. Therefore, the extension of this study could be conducted to apply KAP survey model in elaborating more in the knowledge, attitude and practices regarding solid waste management for further understanding. The data collected from KAP survey should be able to assists local authority in solving solid waste problem especially in public park and implement effective strategies in enhancing awareness on solid waste management, creating positive attitude towards proper solid waste disposal and portraying good practices in developing healthy community through a good solid waste management practise.