



UNIVERSITI PUTRA MALAYSIA

***KNOWLEDGE, ATTITUDE AND PRACTICE ON THE IMPORTANCE
OF GREEN AREA AMONG COMMUNITY IN SHAH ALAM,
SELANGOR***

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GREEN AREA AMONG COMMUNITY IN SHAH ALAM, SELANGOR**

BY

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ABSTRACT

KNOWLEDGE, ATTITUDE AND PRACTICE ON THE IMPORTANCE OF GREEN AREA AMONG COMMUNITY IN SHAH ALAM, SELANGOR

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Introduction: Globally, there has been a big shift in the population toward living in cities. Global warming, the greenhouse effect, urban heat, and floods are the impacts from humans do that have bad effects on the climate. Hence, urban green spaces, on the other hand, are thought to be important for residents because they can help them relax, deal with mental fatigue and stress and can help maintain habitats and conserve biodiversity to reduce the impact from natural disaster. **Objectives:** Hence, a study of the knowledge, attitude and practice on the importance of green area among community in Shah Alam, Selangor was conducted. **Methodology:** This was a cross-sectional study whereby, a Knowledge, Attitude and Practice (KAP) survey was conducted, involving community from 2 sections in Shah Alam which are Section 8 and Section 14. A validated and pilot-tested questionnaire was distributed to 156 communities and results were analysed using Statistical Package for the Social Sciences (SPSS). The questionnaire consists of four parts (social-demographic characteristic, general questions, KAP on the importance of green area and recommendation). The data was analysed by descriptive frequency, Pearson correlation test and Mann-Whitney U test to find the association between KAP on the importance of green area among community in Shah Alam, Selangor. **Results and Discussion:** This study found no significant relationships between KAP towards importance of green areas between community of Section 8 and Section 14 using Mann-Whitney U test for independence. The findings further showed there is a high level of attitude but moderate level of knowledge and practice among the community towards the importance of green areas. The study discovered social media is the primary source information regarding the importance of green areas for them. **Conclusion:** In conclusion, this study indicates that the respondents have high level of attitude but moderate level of knowledge and practice towards the importance of green areas. The finding of Shah Alam community' KAP data can be used as a reference to formulate effective health promotion intervention to increase the use of green spaces that would have a favorable impact on society, as well as on the economy and the environment of the country.

Keywords: Urban Green Area, Knowledge, attitude and practice (KAP), Community

ABSTRAK

PENGETAHUAN, SIKAP DAN AMALAN TERHADAP KEPENTINGAN KAWASAN HIJAU DALAM KALANGAN MASYARAKAT DI SHAH ALAM, SELANGOR

MUHAMMAD NUR FITRI BIN SHAMSULKAMAL

Pengenalan: Di peringkat global, terdapat perubahan besar terhadap populasi yang berpindah ke bandar. Pemanasan global, kesan rumah hijau, haba bandar dan banjir adalah kesan daripada kerja manusia yang mempunyai kesan buruk terhadap iklim. Oleh itu, kawasan hijau, sebaliknya, dianggap penting untuk penduduk kerana ia boleh membantu mereka berehat, menangani keletihan mental dan tekanan dan boleh membantu mengekalkan habitat dan memulihara biodiversiti untuk mengurangkan kesan daripada bencana alam. **Objektif:** Justeru itu, kajian tentang pengetahuan, sikap dan amalan tentang kepentingan kawasan hijau dalam kalangan masyarakat di Shah Alam, Selangor telah dijalankan. **Metodologi:** Ini adalah kajian keratan rentas di mana satu tinjauan KAP telah dijalankan, melibatkan komuniti dari 2 kawasan di Shah Alam iaitu Seksyen 8 dan Seksyen 14. Soal selidik yang telah disahkan dan diuji rintis telah diedarkan kepada 156 komuniti dan keputusan dianalisis menggunakan SPSS. Soal selidik terdiri daripada empat bahagian (ciri sosial-demografi, soalan umum, KAP tentang kepentingan kawasan hijau dan cadangan). Data dianalisis dengan kekerapan deskriptif, ujian korelasi Pearson dan ujian Mann-Whitney U untuk mencari perkaitan antara KAP terhadap kepentingan kawasan hijau dalam kalangan masyarakat di Shah Alam, Selangor. **Keputusan dan Perbincangan:** Kajian ini mendapati tiada hubungan yang signifikan antara KAP terhadap kepentingan kawasan hijau antara komuniti Seksyen 8 dan Seksyen 14 menggunakan ujian Mann-Whitney U untuk perkaitan. Dapatan kajian selanjutnya menunjukkan terdapat tahap sikap yang tinggi tetapi tahap pengetahuan dan amalan yang sederhana dalam kalangan masyarakat terhadap kepentingan kawasan hijau. Kajian mendapati media sosial adalah sumber maklumat utama mengenai kepentingan kawasan hijau untuk mereka. **Kesimpulan:** Kesimpulannya, kajian ini menunjukkan bahawa responden mempunyai tahap sikap yang tinggi tetapi tahap pengetahuan dan amalan yang sederhana terhadap kepentingan kawasan hijau. Penemuan data KAP komuniti Shah Alam boleh digunakan sebagai rujukan untuk merumuskan intervensi promosi kesihatan yang berkesan untuk meningkatkan penggunaan kawasan hijau yang akan memberi impak yang baik kepada masyarakat, serta ekonomi dan alam sekitar negara.

Kata kunci: Kawasan Hijau Bandar, Pengetahuan, sikap dan amalan (KAP), Komuniti

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LIST OF ABBREVIATION

WHO	World Health Organization
KAP	Knowledge, Attitude and Practice
NUP	National Urbanization Policy
DOSM	Department of Statistic Malaysia
NLD	National Landscape Department
EPU	Economic Planning Unit approval
SPSS	Statistical Package for the Social Sciences

CHAPTER 1

INTRODUCTION

1.1 Background of Study

World Health Organization (WHO), (2017) stated that urban green space is the 'green technology' that is an important part of a city's open public spaces and common amenities, and it can be used as a health promotion facility for everyone in the city. Urban green spaces can be small or big, have plants, outdoor spaces, water sources, and are also equipped with sports and fitness equipment (Nath, T. K., et al., 2018). In particular when considering universal green area access for all urban residents regardless of socioeconomic circumstances, it is essential to concentrate on urban green space that is accessible to the public (World Health Organization (WHO), 2016). Urban green spaces cover natural vegetation areas, personal, communal or publicly accessible, commonly used for relaxation and other social activities (Nath, T. K., et al., 2018; Cilliers, 2015; Zupancic et al., 2015).

Urban green areas may include sites with natural surfaces or natural areas, but also include specific kinds of buildings in urban areas, such as urban forests and blue space, which may contain aquatic plants ranging from lakes to coastal areas (World Health Organization (WHO), 2016). Jennings, Browning, and Rigolon (2019) stated

that the presence of urban green spaces and their contact with nature are an important factor in the enhancement of human health and social development. For example, green space offers a range of human resources and advantages, often described as ecosystem services. Moreover, the role of ecosystem services in preserving human well-being includes the provision of services, regulation of services, climate regulation and support services (Jaung, W., et al., 2020 and Millennium Ecosystem Assessment, 2005).

A broad range of green and public space concepts and forms does not impede the possibility of providing open, inclusive green and public spaces that are safe for women, children, the elderly and people with disabilities. Allen & Balfour (2014) stated that the entry to green and public spaces is known to be spaces close to residential areas that are easy to walk, are physically accessible, are safe to use. Access to green and public spaces is obviously related to a number of improved physical and psychological results for communities (Mitchell, R., & Popham, F., 2008). Therefore, green spaces play an important role in social, cultural, economic and ecological aspects of sustainable growth.

A number of cities all around the world have the renewing impacts of their urban green spaces. According to Yale and Columbia universities, the top ten greenest and cleanest pure air countries in the world are all in Europe which Denmark is the world's largest green country with a total score of 82.50 (2020 Environmental Performance Index | Yale Center for Environmental Law & Policy, 2020). Some of popular green areas in worldwide are Namba Parks at Osaka, Japan,

Gardens by The Bay at Singapore, and Paddington Reservoir at Sydney, Australia. While in Malaysia, some of popular green areas are Perdana Botanical Garden at Kuala Lumpur, Mount Keriang Recreational Park at Alor Setar, Kedah, Penang Botanic Gardens at Penang and World of Phalaenopsis at Genting Highlands, Pahang.

1.2 Problem Statement

Globally, there is a dramatic demographic shift toward urbanization. The impact of urbanization also increases rural migration to urban areas. Therefore, urban green spaces are largely seen as important for residents, by providing areas for restore and mental tiredness and stress, to compensate the negative psychological effects that live and operate in densely constructed urban environments. Since urbanization has inactivated and stressed urban residents' lifestyles, these conditions lead to diseases that have become the leading cause of malaria's disease and mortality (Mansor, M., & Harun, N. Z., 2014). The current report released by the Ministry of Health (2020) shows that the prevalence of non-communicable diseases has been increasing dramatically from 1990 to 2020, due to the poor healthy lifestyles of Malaysians, apart from other external factors such as intakes of food, genetics and physical activity. Other health issues such as overweight and obesity lead to coronary heart disease, diabetes mellitus type II, cancer and mental disease. Strong evidence was found in the meta-analysis that green urban spaces may help people live longer (Rojas-Rueda, D., et al., 2019).

As a result, offering urban green space is a nature-based approach with numerous known health and well-being benefits. But urban green spaces also can be correlated with the possibility of health hazards, including increased exposure to allergenic pollen, infection transmitted by arthropod vectors such as ticks or mosquitos and the danger of injury. While many levels of city culture have positive results, not everyone understands the benefits of providing their cities with green and public spaces. With a rapidly increasing population, demand for food, housing, and clothing has nearly tripled over the last few decades. So, to meet growing demand clearing woods or other green cover for agricultural, manufacturing, or urban purposes known as deforestation occurs. The permanent end of the forest cover is needed to make this land available for residential, commercial or industrial applications.

Climate change also occurs quickly as a result of the adverse effects of human activity that cause disturbance and negative outcomes such as global warming, greenhouse effect, urban heat and floods. Climate change not only changes the overall weather scenario, but has major and negative consequences, such as polar freezing, the onset of new diseases and irreversible inhibition of the growth of some plants which are crucial to human survival. In addition, the concentration of greenhouse gasses has been increasing over the past few decades, meaning that more heat is trapped in the atmosphere and few of these gases are escaping into space. These gasses heat the surface of the earth and lead to global warming. Global warming will have long-term consequences, leading to glaciers' melting, climate change, droughts, diseases and an increasing occurrence of hurricanes. Furthermore, it has a direct effect on the soil cycle and hydrology when trees are cut down in forest

areas. The loss of trees causes more water runoff and soil erosion, which leads to more floods, as happened in Pahang. The cost of dealing with floods and losses is quite high; thus, the most cost-effective and efficient solution is to preserve green spaces that are functionally sound in order to reduce the impact of floods and serve as buffer zones.

There has been a lot of research that shows that there is a lack of knowledge, attitude, and practice regarding the importance of green space, as well as negative social attitudes among the general public, particularly the community, all of which affect the practice of controlling and maintaining green space areas. Besides, there is less study on knowledge, attitude and practice on the importance of green area being done among community in Shah Alam, Selangor. Thus, the goal of this research is to ascertain the community's knowledge, attitude, and practice on the importance of green area in Shah Alam, Selangor.

1.3 Study Justification

Green space is an umbrella term used to describe maintained or unmanaged natural areas that can include nature reserves, wilderness ecosystems and urban parks (Barton & Rogerson, 2017). Rapid population growth and urbanization worldwide have contributed to natural landscape pressures. The growth of housing areas, infrastructure, commercial and industrial areas have lost natural and open spaces (Abdul Aziz, N. A. B., 2012).

Recently, Malaysia is under a lot of stress because it is becoming more industrialised quickly. Based on the Department of Statistics, Malaysia (DOSM), in 2016, Selangor has the highest percentage of population (19.9%), followed by Sabah (12.0%) and Johor (11.5%). Initial studies in Malaysia have shown the importance for human health and well-being of urban green areas. Over 80% have said that there is a positive impact on physical and recreational activities in parks on stress reduction, consciousness, physical health, body weight maintenance, burning body fat and general well-being (Nath et al., 2018). Furthermore, green area also can increase the air quality, decreased road noise; lower temperatures and greater variety are all correlated with green spaces.

In this study, the target population for this study is among community that are aged between 18 and 60 years old and will be conducted in Section 8 and Section 14, Shah Alam. This is because these groups of people will provide greater flexibility for the investigation. A consensus definition of the community has formed as a group of

people with various traits, who have shared viewpoints and participate in joint actions in locations (MacQueen et al., 2001). As a result, it is critical to educate present and future generations who will work in this industry. In addition, the objective of community to be educates in this topic is to build the capacity of individuals and groups of all ages to enhance their quality of life, through their behaviors and societies. Thus, it is critical for community to have knowledge, attitudes, and practices regarding the value of green space in order to effect change for the betterment of the environment and for the purpose of pollution management in the near future. For study location, Taman Botani Negara Shah Alam and Shah Alam Lake Garden are located in Section 8 and Section 14, respectively. Both sections feature several recreational areas for outdoor activities such as cycling, running, hiking, socialising, and more. Also, both sections are popular weekend and evening retreats for local inhabitants, and feature many recreational parks and residential areas that are ideal for this study.

This study intends to determine and identify the KAP on the importance of green area for better control as well as to present valuable outcome that will help for improvement among community in Malaysia. Besides, this study may help in enhancing the KAP towards the importance of green area among community and increase their knowledge about the importance of green area. Through this finding, the level of awareness of public related to the issues could be improved by giving more attention and exposure about this less-known health problem to everyone using mass media and also through individual sharing that are targeted to the community, conducted by relevant health authorities. Other than that, since there is only a little

study on KAP of the importance of green area conducted in Malaysia, so this research will help to provide more data and resources for further study.



1.4 Research Objective

1.4.1 General Objective:

To study the knowledge, attitude and practice on the importance of green area among community in Shah Alam, Selangor

1.4.2 Specific Objectives:

- I. To identify the socio-demographic status of the respondents.
- II. To identify the level of knowledge, attitude and practice towards the importance of green area among community of section 8 and 14 Shah Alam, Selangor.
- III. To determine the association between socio-demographic data of the respondents towards knowledge, attitude and practice towards the importance of green area.
- IV. To compare knowledge, attitude and practice on the importance of green area among community of section 8 and 14 Shah Alam, Selangor.

1.4.3 Research Hypothesis:

- I. There is a significant association between socio-demographic data towards knowledge, attitude and practice towards the importance of green area.
- II. There is a significant association between knowledge and attitude with practice on the importance of green area.
- III. There is no significant difference between knowledge; attitude and practice on the importance of green area among community of section 8 and 14 Shah Alam, Selangor.

1.5 Definition of Terms

1.5.1 Conceptual Definition

I. Urban Green Area

Urban green areas may include sites with natural surfaces or natural areas, but also include specific kinds of buildings in urban areas, such as urban forests and blue space, which may contain aquatic plants ranging from lakes to coastal areas (World Health Organization (WHO), 2016).

II. Socio-demographic factors

Socio-demographic factors refer to a group defined by its sociological and demographic characteristics. For example age, gender, education level, income level and etc (Reference, 2016).

III. Knowledge factors

Knowledge is defined as facts, information and skills acquired through experience or education; the theoretical or practical understanding of a subject (Oxford Dictionary, 2021).

IV. Attitude factors

Attitude is defined as a disposition or tendency to respond positively or negatively towards a specific thing such as an idea, object, person, or situation (Ai et al, 2019).

V. Practice factors

Practice is the action of an individual in response to a stimulus. This is something that usually or regularly done, often as a habit, tradition or custom (Cambridge Dictionary, 2021).

VI. Community

Community is all those who live in a certain region, nation, etc. when discussed as a group (Oxford Dictionary, 2021).

1.5.2 Operational Definition

I. Urban Green Area

In this research, the KAP of importance of urban green area will be evaluated by self-administered questionnaire that will be distributed to community in Shah Alam, Selangor.

II. Socio-demographic factors

Socio-demographic factors will be measured using self-administered questionnaire which consist of information about age, gender and race in Section A of the questionnaire.

III. Knowledge factors

Knowledge factors will be evaluated by using self-administered questionnaire which consist of questions regarding the general information about green area, importance, impacts and benefits of the green area towards community.

IV. Attitude factors

Attitude factors will be evaluated by using self-administered questionnaire which consist of questions on the attitude that should be have regarding the importance of green area.

V. Practice factors

Practice factors will be evaluated by using self-administered questionnaire that comprise of questions on the practices that should be done to educate community on the importance of green area.

VI. Community

In this research, community in Shah Alam will be the respondents. The questionnaire will be distributed among them.

1.6 Conceptual Framework

The conceptual framework of this study is presented in the Figure 1.0 below. The study of KAP on the important of green area among community in section 8 and 14 Shah Alam, Selangor is conducted with socio-demographic factors which are age, gender and race involved.

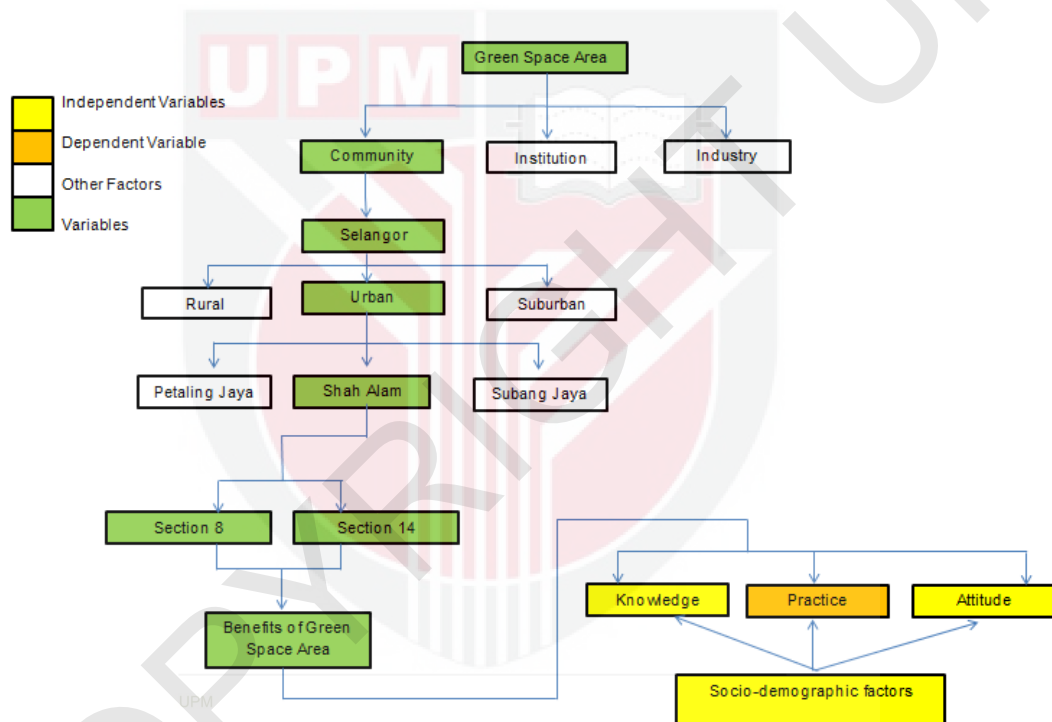


Figure 1.0: Conceptual framework for the study

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A literature review is a concentrated effort to become more familiar and familiar with what is done in the field of written knowledge research. The literature review involves the systemic recognition, location and interpretation of documents containing research material. It is the vital review of interest analysis. This chapter discuss about the importance of green area among community. The reviews of literature based on other researchers studies and websites are explained. The following are discussed, green area, importance of green area, psychological health benefits, physical health benefits, social benefits, environmental benefits and economic benefits.

2.1.1 Green Areas

Urban green areas may include sites with natural surfaces or natural areas, but also include specific kinds of buildings in urban areas, such as urban forests and blue space, which may contain aquatic plants ranging from

lakes to coastal areas (World Health Organization (WHO), 2016). According to Nath, Han & Lechner, (2018), urban green spaces are widely used for recreation and other recreational activities. They may be private, shared, or publicly accessible natural vegetated areas within urban landscapes. A research by Barton & Rogerson, (2017) explains that green space is an umbrella term that refers to both protected and unmaintained natural areas. These areas can include nature reserves, wilderness areas, and urban parks.

World Health Organization (WHO), (2017) declare urban green space is the 'green technology' component where it is an important part of a city's open public spaces and common amenities, and it can be used as a health promotion facility for everyone in the city. Urban habitats are critical components of resilient and healthy communities and one of these habitats is the urban community green space, which includes a variety of different types of urban vegetation, including roadside vegetation, green walls, gardens, parks, and urban forests (Jaung et al., 2020). Some of the famous green areas in urban areas are Copenhagen city at Denmark and Van Cortlandt Park at The Bronx, New York City.

Green Urban Areas, as specified by Urban Atlas code 14100, are public green spaces that are primarily used for recreation, such as gardens, zoos, parks, and suburban natural areas and forests, as well as green spaces that are maintained or used for recreational purposes that are surrounded by urban areas (European Union, 2011). Although the Urban Atlas does not

include water sources as described by Green Urban Areas, we acknowledge that water often forms part of urban green area and that the edge of water, whether it is a river or a lake, a sea beach or a steep cliff, is often a significant and attractive feature that people can appreciate and use.

2.1.2 Importance of Green Areas

Urban green area is critical components of resilient and healthy communities (Jaung et al., 2020). The World Health Organization (WHO) is now attempting to emphasize the critical role of green space in human well-being and public health. Green spaces area were suggested as a determinant of health, enhancing health and well-being with various mechanisms (Rojas-Rueda et al., 2019). Globally, awareness of the critical nature of urban green space has grown. As previously stated, green spaces contribute significantly to the quality of life and the atmosphere through a variety of benefits. Urban parks and green areas contribute numerous directly and indirectly to the prosperity, well-being, social ties and everyday life of people (Abdul Aziz, 2012). Interaction with gardens and natural spaces provides a range of psychological, physical, social, environmental, economic advantages in humans, ranging from stress reduction, faster cure and attention deficit mitigation in children to reduced crime and air pollution.

2.1.3 Psychological Health Benefits

Green space areas have been shown to improve mental health and well-being. A cohort study enrolled 46 786 participants who were residentially stable and lived in cities have shown that exposure to tree canopy was associated with decreased prevalence and incidence of psychological distress and improved self-rated general wellbeing (Astell-Burt & Feng, 2019). In addition, contact with natural conditions may increase the focus of functional and emotional improvements and decrease blood pressure (Hartig et al., 2003). Numerous studies have discovered and indicates that exposure to green space has a range of beneficial effects on the health of children and adolescents. McCormick (2017) has examined the relationship of green space and the mental well-being of kids and youth (age 0–18) and found that access to nature is linked to mental well-being, care, social assistance, comportment, school success and the management of symptoms of ADHD.

The World Health Organization (2020) estimates that 10% to 20% of the world's children and teenagers have mental illnesses and troubles, all of which are from the age of 14 years. A recent research shows that engaging in a green space physical activity contributes to feelings of rejuvenation will increase while feelings of stress will decrease (Thompson Coon et al., 2011). A study by van den Berg et al. (2007) proves that passive interaction with green space, lowering blood pressure and tension, affecting psychological

restorative systems. In addition, time spent in or exposed to green spaces will obviously boost optimistic moods and emotions, retreat from everyday problems and reduce the risk of adolescent psychological and physiological stress (Markevych et al., (2014), Van den Berg et al., (2010), Francis et al., (2012)). Therefore, studies have shown that depressed people feel happier after exposing themselves to natural scenes. Parks, gardens, street trees and landscaped roads offer more than a beautiful panorama, essentially reducing the burden of our everyday lives, invoking a sense of quietness.

2.1.4 Physical Health Benefits

Physical inactivity in many countries is becoming more and more prevalent, with significant consequences for the prevalence of non-communicable diseases and for global population health (World Health Organization (WHO), 2012). A research from Biddle et al. (2004) state that people participating frequently in green space exercises are less susceptible to obesity and better bones, decreasing the likelihood of developing osteoporosis. This green space can be important environmental considerations for urban residents, offering opportunities for outdoor physical activity, social contacts and relaxation. According to studies conducted in Japan, people who live near green spaces are more likely to go for a walk, which improves the health of older people who live in cities (Takano et al., 2002). In addition, cardiovascular, behavioural and neurocognitive growth and general well-

being have been shown to increase physical activity and prevent obesity, cancer and osteoporosis (Owen et al., 2010).

A relatively large number of recreational attributes have been identified in high-quality green space, out of a total of five experts evaluated, including historical and cultural qualities, space, the wealth of natural organisms, peaceful attributes and wildness (World Health Organization (WHO), 2016). Some researchers discovered that young people who live near green spaces are more likely to use them to help combat obesity-related problems in the future (Nielsen and Hansen, 2007). Furthermore, recent figures have led to about 3.3 percent of world deaths due mainly to poor walkability and restricted access to recreational areas (Templeton, 2019). One way that green space can be related to health is to improve the advantages of physical activity in green or natural areas, in contrast to other contexts. Access to green spaces has a substantial overall effect, with residents of cities that engage in physical activity having a 'lower risk of chronic health problems such as obesity or cardiovascular disease (Jennings et al., 2016).

2.1.5 Social Benefits

Parks or green open spaces are social areas for people of all backgrounds and ages to enjoy outdoors. According to Sullivan et al. (2004), people are more likely to participate in social events in green spaces than they

are in indoor spaces. Additionally, green space increases the economic value of real estate, bridges social divides within communities, and ensures socio-environmental sustainability (Chen and Jim, 2008). Another study by Cohen et al. (2008) found that residents of nearby green spaces have good social relationships with them. Green spaces are an investment in fitness, wellbeing and quality of life, providing areas for relaxation, leisure and social interaction in urban settings.

World Health Organization (WHO), (2017) stated that green spaces can be used to reach particular user groups and support both health and social well-being. Suitable provision of urban green spaces in deprived areas will provide a way to improve health and social inclusion for particular target groups. The relation between people and these green spaces allows for close interaction with nature in urban areas (Mansor and Harun, 2014). The presence of common green areas draws people to outdoor areas, which leads to more social interactions (Nath et al., 2018; Coley et al., 1997; Arnberger, 2012). Furthermore, it also can help the overall sense of community, reduce feelings of isolation and enhance social support, contribute to increased personal strength and well-being and generate social capital (Nath et al., 2018; Prezza et al., 2001; Haq, 2011; Dinnie et al., 2013; Jennings et al., 2016).

2.1.6 Environmental Benefits

Green area offers a broad range of environmental services. Numerous studies have established the beneficial effect of urban vegetation on ambient air quality in urban settings, as it helps to pollutant removal and carbon sequestration. According to Yin et al. (2011), urban open green areas contribute significantly to air pollution reduction by intercepting atmospheric particles and absorbing various gaseous contaminants where they reduce NO_x and SO_x levels and eliminate enormous amounts of pollutants in the air. The development of green areas helps to create a new layer of urban biodiversity. A research by Watts et al. (2013) claim that green areas has long been recognized as soft walls of vegetation and trees not only form places and define borders, but also contribute significantly to noise reduction.

The presence of green spaces in cities contributes to a one-degree reduction in city temperatures. Urban open green spaces are especially critical in tropics cities because they provide shading and cooling, helping to offset the urban heat island effect and reducing air pollution (Gago, Roldan, Pacheco-Torres, & Ordóñez, 2013). In addition, the age of trees and vegetation is regarded to be a critical element to ensure that the temperature is reduced by the shadow and transpiration in the metropolitan environment. Furthermore, green areas provide as habitats for birds and other species. They might be 'wildlife corridors' or act as 'urban woods' with excellent connectivity (Byrne & Sipe, 2010). Urban open green areas can help preserve

habitats and biodiversity, making them important biodiversity hotspots. Besides that, green areas also act as buffer zone to prevent and reduce the impact from natural disaster. People in Malaysia cut down trees too quickly, which causes soil erosion, sedimentation, slope damage, and landslides. People who cut down trees in water catchment areas could have an impact on the amount of water available and the quality of the water. It could also make it more difficult to recover groundwater and cause more floods in low-lying areas. Deforestation and the loss of natural flood-mitigation buffers are two causes that contribute to floods becoming more severe every year (Use science, data to mitigate floods, 2021). Therefore, green areas is very important where it aids in slowing the movement of rain down dramatically while also retaining some of the water that falls (Haliza Abdul Rahman, 2022). Whenever this "seepage area" is no longer present, muddy water seeps into the ground, eroding the soil and resulting in landslides and flash floods. So, green area should be kept up because floods and landslides happen all too often in this country.

Pertahan kelestarian hutan demi warisan masa depan



Hudaib bin Wahid bin Hudaib
Direktorial Jeneral Hutan
Kementerian Sumber Asli, Alam Sekitar dan Kelestarian
Majlis Perundingan Hutan
Kementerian Sumber Asli, Alam Sekitar dan Kelestarian

Malaysia berkecuali sebagai satu-satunya negara di Asia Tenggara yang mempunyai hutan tropika primer yang masih utuh. Hutan tropika primer ini adalah sumber kehidupan untuk jutaan manusia yang tinggal di kawasan ini. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain.

Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain.

Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain. Hutan tropika primer juga merupakan sumber kehidupan untuk jutaan manusia yang tinggal di kawasan lain.

CLIMATE CHANGE

USE SCIENCE, DATA TO MITIGATE FLOODS

THE use of science and data to mitigate floods is a key strategy for governments and local authorities. This is because floods are a major threat to human health and property, and can cause significant damage to the environment.

What are the immediate actions that we need to take?

FIRST, the flood inundation report by the Department of Drainage and Irrigation (DDI) and other agencies must be used to identify high-risk areas in the region. This information, the state government, local authorities and emergency management must use to plan.

SECOND, governments must take immediate action to evacuate people from flood-prone areas. This will allow people to move to safety and avoid damage to property. Governments must also be prepared to provide relief to people who are affected by floods.

THIRD, water gates and other mitigating facilities must be kept in good working condition. This will allow people to move to safety and avoid damage to property.

FOURTH, deepening drainage under the Water Ministry, which has developed a river dredging and flood control plan to identify potential flood-prone areas. This will allow people to move to safety and avoid damage to property.

social media platforms to share information to alert the public to take precautions and to avoid the authorities that they take quick action to save lives and ensure that people are evacuated to safety in an emergency situation.

FIFTH, use telecommunication and floodplain signals to identify high-risk areas. This will allow people to move to safety and avoid damage to property.

How is telecommunication communication used in the floodplain? This will allow people to move to safety and avoid damage to property.

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MITIGATION projects are developed based on a location's existing conditions. If the land use of the area changes over time, the mitigation project is not to fail.

This is mainly due to a possible increase in water runoff beyond the design capacity of a flood mitigation project. Thus, a flood impact assessment must be carried out to evaluate the overall impact of every new development project within a flood mitigation project.

DEFORSTATION and loss of natural barriers for flood mitigation are factors that cause flooding to get worse every year.

The annual general meeting highlights the role of deforestation in the past 30 years and the virgin forest reserve that is left. This report must be presented to Parliament in the next sitting.

BUDGET for flood mitigation and infrastructure for 2022-2023 is approximately RM1.5 billion. From this, the state government and local authorities must ensure that the budget is used to its full potential.

Finally, the annual general meeting will highlight the role of deforestation in the past 30 years and the virgin forest reserve that is left. This report must be presented to Parliament in the next sitting.



Changing weather pattern due to climate change may become extreme, with frequent flooding. (A COURTESY OF THE NATIONAL DISASTER MANAGEMENT AGENCY)

deep potential risk a flood mitigation project faces in the operational cycle and make sure that taxpayers' money is put to good use. This must also be presented to Parliament in the next sitting.

PREDICTING future floods to put in place proper mitigation actions is a must. From a technical to scientific weather and flood situation. This situation is to predict changes in weather patterns and to identify the impact of climate change and degree of intervention.

In the event there is no direct pattern, it will lead to high and mitigation measures, as well as reinforcement of high-risk areas to new locations. This will allow people to move to safety and avoid damage to property.

Finally, the annual general meeting will highlight the role of deforestation in the past 30 years and the virgin forest reserve that is left. This report must be presented to Parliament in the next sitting.

digital platforms for warnings and communication to affected areas as recent flood inundation from the weather is communication from the authorities to the public.

Thus, the government agencies at the federal, state and local government level must coordinate communication to ensure seamless operations when a disaster strikes.

SAFETY and stability of infrastructure such as building, bridges, flyovers and roads must be maintained to flood-hit areas.

A changing weather with climate change may become extreme and hit us frequently. Let us be guided by science and data to chain a better future.

PIRAPAKARAN S.
President, Association of Water and Drainage Engineers Malaysia

Figure 2.0: Newspaper cuttings about importance of green areas

2.1.7 Economic Benefits

While green spaces in urban areas are known to create a healthy atmosphere and improve living conditions, they also offer economic benefits. Green area can increase property values and attracts development. Studies have demonstrated that the establishment of greenways or trails can have a positive impact on property values (Nicholls and Crompton, 2005). People will pay higher prices for houses near parks and it will increase commercial rents and demand for space. According to Tan (2011), landscape neighbourhoods in Malaysia had 18.1 per cent higher residential property values than neighbourhoods lacking landscape elements. In addition, a research in Hong Kong found that home values went up 7.1% and 13.2% because of green areas and close proximity to water bodies, which made them more valuable (Jim and Chen, 2006). A study by Miller (2001) state that, houses with a view to 1 of the 14 parks located in an area valued 22 percent more than residences only a mile from the park. Higher property taxes can be used to pay to build and maintain the green area and a potential increase in property tax revenue alone can recover the initial cost of acquisition in a few years.

2.1.8 Policy and Governance Related to Green Areas

In general, land use planning in Malaysia Peninsular is fully conducted in accordance with the terms of the 1976 Town and Country Planning Act (Act 172) and its 1995 and 2001 revisions (Act A933) (Act A1129). In fact, the Town and Country Planning Act recognize and safeguard the value of open public areas as a particular infrastructure in the development region. According to Sreetheran et al. (2006), The Town and Country Planning Act 1976 (Act 172) and the Town and Country Planning (Amendment) Act 1995 (Act A933) both underline the critical nature of open space as a component of the social infrastructure that should be supplied in a development area. The requirements for open and recreational space are generally set forth in the structure and local plans and the design plan for development at the national and local level by the planning authorities. As previously stated, the Town and Country Planning (Amendment) Act 1995 defines 'open space' in Malaysia. However, there is no specific 'green space' defiance, since open space is a broader idea. According to the Town and Country Planning Act A933, “open space” means any land fenced, or not, which is set up or reserved for setting out as a public garden, park, sports and leisure area, recreational ground, stroll or a public space, in its entirety or in part.

The National Urbanization Policy (NUP) is the Federal Town and Country Planning Department's endeavour to direct growth in accordance with the 9th Malaysia Plan and the National Vision. The NUP was created to improve the effectiveness and quality of urban services in order to foster the development of safer, more modern, and aesthetically pleasing communities. One of the six pillars is the construction of living urban settings with identifiable identity, emphasizing the conservation of the environment and the quality of urban life (National Urbanisation Policy, 2006). Another key player in policy is the National Landscape Department (NLD), which was founded by the Ministry of Housing and Local Government in 1996. It was responsible for the landscaping and greening of the country based on Economic Planning Unit approval (EPU).

2.1.9 Preservation and Management of Green Areas

It is critical to protect green spaces since they give multiple health advantages to humans, flora, and animals and also contribute to the ecosystem's sustainability. Environmental management in urban settings is obviously linked to and greatly influenced at national level by environmental management policy. At this level, a particular focus is on the Environmental Quality Act of 1974 with its many statutes relating to the environment, regulations and guidelines handled by numerous government agencies and municipal authorities (Akmar, A. A. N et al., 2011).

The public has a critical role to play in preserving green spaces. To keep green areas as clean as possible, homeowners and visitors must dispose of rubbish in designated places, ensure that green areas are clean following recreational activity, and pick up and discard waste that accumulates around the green area into a trashcan. Apart from this, the public must take precautions against damaging acts to green areas, such as refraining from open burning, bringing their own container for drinks and food that can be reused, thereby reducing the amount of total garbage that may pollute green areas, and reporting any suspicious activity to authorities.

CHAPTER 3

METHODOLOGY

3.1 STUDY DESIGN

This study is a cross-sectional study that assess the knowledge, attitude and practice (KAP) associated on the importance of green area among community in Shah Alam, Selangor. This study is intended to focus on the exposure to linked factors such as socio demographic factors correlates with the results.

3.2 STUDY LOCATION

This study was conducted in Shah Alam, Selangor. It is selected because Shah Alam is one of the busiest cities in Malaysia. Shah Alam is also famous with the city concept of “City in a Garden” and has become an attractive destination for tourism, which is perfect for this study. Shah Alam had underwent very rapid urbanization process each and every year, and one of the factors was due to it is surrounded by developing areas of the Klang-Langat Valley. In addition, I have

chosen section 8 and section 14 as the specific study location because both section have very famous nature and parks in Shah Alam which are Taman Botani Negara Shah Alam and Shah Alam Lake Garden. Other than that, both of the sections have multiple recreational spaces surround it for people to do outdoor activities like cycling, running, hiking, social activities and much more. In addition, both sections have been one of the favourite retreats of the residents in the vicinity in the evenings and during the weekends and have its own multiple recreational parks with residential areas which are very suitable for this study.



Figure 3.0: Location of Section 8 & Section 14 Shah Alam, Selangor

3.3 SAMPLING PROCEDURE

This study was conducted after obtaining the approval from Ethic Committee for Research Involving Human Subjects of Universiti Putra Malaysia (JKEUPM). Then, the data collection was conducted by distributing a set of questionnaires face to face to the respondents. Figure 4.0 below shall present the following process of sampling procedure.

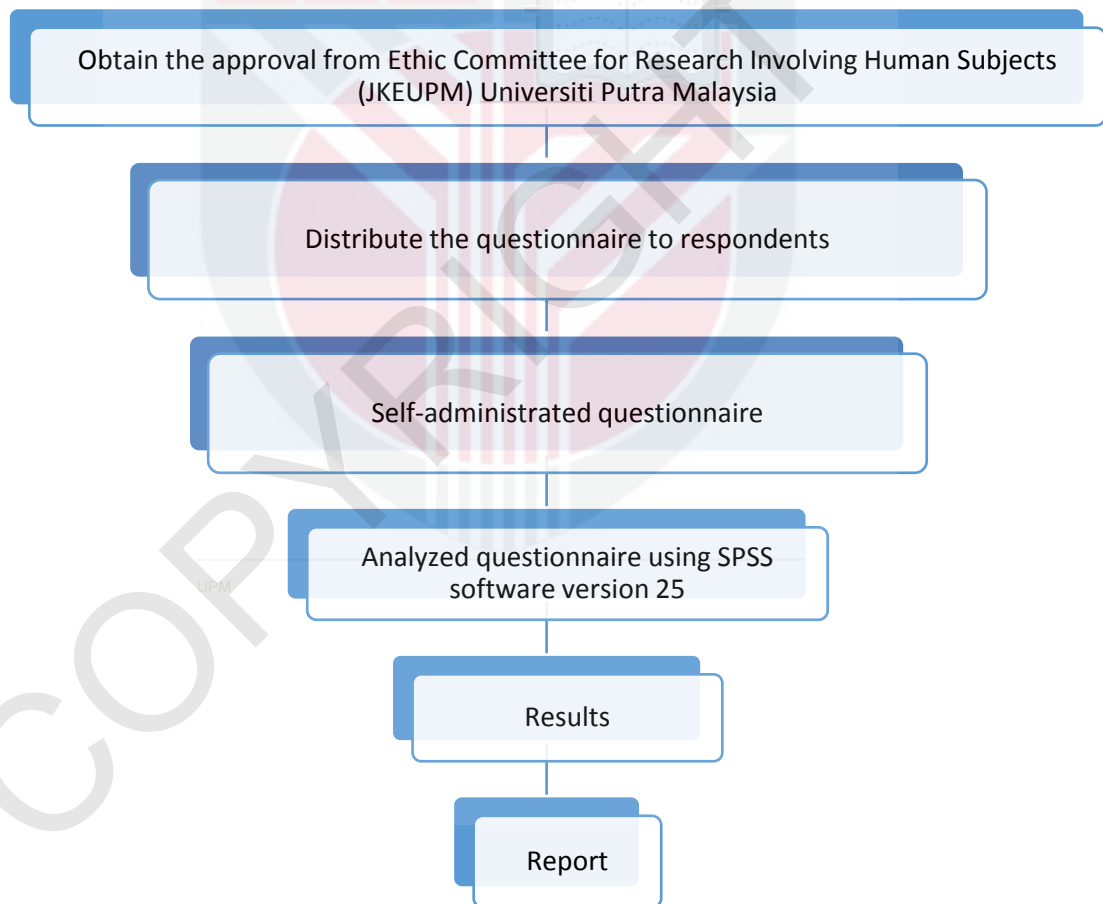


Figure 4.0: Flowchart of the sampling procedure

3.4 STUDY SAMPLING

3.4.1 SAMPLE POPULATION

The sampling population was among community in Shah Alam which were Taman Botani Negara Shah Alam at section 8 and Shah Alam Lake Garden at section 14 Shah Alam, Selangor.

3.4.2 SAMPLE FRAME

The sample frame in this study was selected randomly using systematic random sampling among community in section 8 and section 14 Shah Alam, Selangor since the full list of the population was not completed.

3.4.3 INCLUSIVE AND EXCLUSIVE CRITERIA

- Inclusion criteria

Citizens of Malaysia that are aged between 18 and 60 years old that resident in section 8 and section 14 Shah Alam, Selangor

- Exclusion criteria

Non-citizens of Malaysia

3.4.4 SAMPLING UNIT

The sampling unit was community who were residing in section 8 and section 14 Shah Alam, Selangor.

3.4.5 SAMPLING METHOD

The first approach utilised in this study was purposive sampling, in which two areas in Shah Alam (Section 8 and Section 14) were purposefully chosen to participate in this study based on many factors connected to green area. Then, a systematic random sampling method was chosen to be conducted among respondents in Shah Alam since the full list of the population was not completed, so the 5th person who visited the green area was selected as respondent and continue with 10th and so on. A systematic random sampling suggests that subject in the population would have equal chance of being included in the study (Ghauri & Gronhaug, 2005).

3.4.6 SAMPLE SIZE CALCULATION

The estimated sample size calculated was 98. By using proportion for one group formula with 95% of confidence interval which has 1.96 of standard errors and 10% of desired precision with justification, the sample size of this study can be determined.

$$n = \frac{Z^2_{1-\frac{\alpha}{2}} P(1-p)}{d^2}$$

Where,

n : Sample size

$Z^2_{1-\frac{\alpha}{2}}$: Standard deviation of who were exposed to SHS

P : Prevalence of estimated proportion

d : Desired precision

$$n = \frac{(1.96)^2 (0.5)(1-0.5)}{(0.1)^2}$$

$$n = 98 \text{ respondents}$$

Therefore, a minimum number of 98 respondents will recruited for this study. However, 10% drop out rate need to be added in case any likelihood for drop out respondent. Therefore, the total of estimated sample is 108 respondents. The reason for the chosen level of precision is that the Movement Control Order (MCO) was put into place in Shah Alam and other states in January

2021 to stop the spread of COVID-19 (COVID-19 Response: FAQ (MCO 2021), 2021), which limited the movement of researchers on a set time.

3.5 DATA COLLECTION AND INSTRUMENT

3.5.1 QUESTIONNAIRES

Self-administered questionnaires were used to measure the level of KAP on the importance of green area in Shah Alam. There are four parts:

- I. Section A is about the social-demographic characteristics of the people who took the survey (age, gender and race).
- II. Section B is about the general questions.
- III. Section C consists of 3 subsections:
 - Knowledge about the important of green area
 - Attitude towards the important of green area
 - Practice on the important of green area
- IV. Section D is about suggestion and recommended by what people think should be done to spread information and keep Malaysia's green areas safe and clean.

The questionnaire was developed in stages which included the improvements and approval from the experts. The discussions with experts and pre-testing the questionnaire have been done to ensure good content validity. The language used in the questionnaire is bilingual (English and Malay) which understandable by the community. The responders were given a questionnaire to fill out.

3.6 DATA COLLECTION PROCEDURE

The respondents were picked in various locations at various times. Before distributing the questionnaire, the respondents were briefed on the purpose of the study. The study researcher kept their personal information and responses confidential. They were needed to sign a consent form prior to participating in this study. The respondents completed a self-administered questionnaire within 20 minutes and it was gathered after the survey. The information obtained from the questionnaire was used to measure the level of KAP on the important of green area among community in section 8 and 14 Shah Alam, Selangor.

3.7 DATA ANALYSIS

After the questionnaires were collected, using IBM's Statistical Package for Social Sciences (SPSS) software Version 25, data collected from respondents were analyzed based on the specific objectives of the study. Table 1.0 below shows the statistical analysis for the respective objectives.

Table 1.0: Research objectives and statistical analysis used for the study

Objectives	Statistical Analysis
To identify the socio-demographic status of the respondents	Descriptive Analysis
To identify the level of knowledge, attitude and practice towards the importance of green area among community of section 8 and 14 Shah Alam, Selangor	Descriptive Analysis
To determine the association between socio-demographic data of the respondents towards knowledge, attitude and practice towards the importance of green area.	Chi-square test
To compare knowledge, attitude and practice on the importance of green area among community of section 8 and 14 Shah Alam, Selangor.	Man Whitney U
To identify the best medium to disseminate information and the most effective measure for preservation and conservation of green area in Malaysia.	Descriptive Analysis
To identify the source of information about the importance of green area.	Descriptive Analysis

3.8 QUALITY CONTROL

3.8.1 PILOT STUDY

The reliability of the questionnaire was assured through a pilot study where 10% of communities from different locations who have similar characteristics with sample subject. The communities have been taken from Universiti Putra Malaysia (UPM) which was also considered as green area. They have been excluded from this research but for only pilot study purpose only. The aim of the pilot study was to make sure that the respondents could understand the questions well and any difficulties could be found during answering the questions. The questionnaire has been examined by using Statistical Package for Social Sciences (SPSS) version 25.0 to arrive at Cronbach alpha to test the reliability and consistency of the questions. The value of the Cronbach's Alpha resulted from the pre-test was 0.796 which covered for all sections. Hence, the questions were considered acceptable and reliable.

3.8.2 ETHICAL CONSIDERATIONS

This research proposal was submitted to Ethics Committee for Research Involving Human Subjects of Universiti Putra Malaysia (JKEUPM) to be reviewed and approved that the methodology is appropriate to be conducted to the target study population. Then, a written consent form each participant was obtained prior to data collection.

CHAPTER 4

RESULTS

The results of this study were divided based on the findings from the distributed questionnaires. The survey has four sections which are Section A (Socio-demographic data), Section B (General questions), Section C (Knowledge, Attitude and Practice) and Section D (Recommendation). This chapter includes the descriptive and analytical results on socio-demographic, knowledge, attitude and practice on the importance of green area among community in Shah Alam, Selangor.

This research was conducted among community in Section 8 and Section 14 of Shah Alam. In this research, there was a total of 156 respondents which were among community in Section 8 (n=66) and Section 14 (n=90) were assessed on their knowledge, attitude, and practice of green areas. The findings of the study were displayed as the following.

4.1. Socio-demographic Characteristics

This part shows the frequency distribution of selected variables describing the background profiles of the respondents. Table 2.0 shows the socio-demographic data of total respondents such as age, gender and race. Figure 4.0, 4.1, 4.2, 4.3, 4.4 and 4.5 had summarized the socio-demographic information in bar chart form.

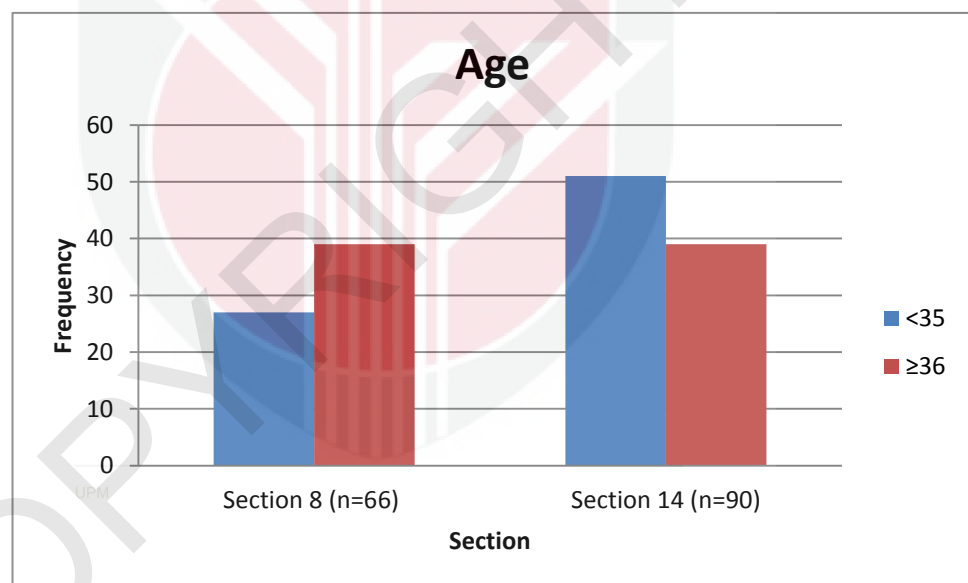


Figure 5.0: Age of Respondents

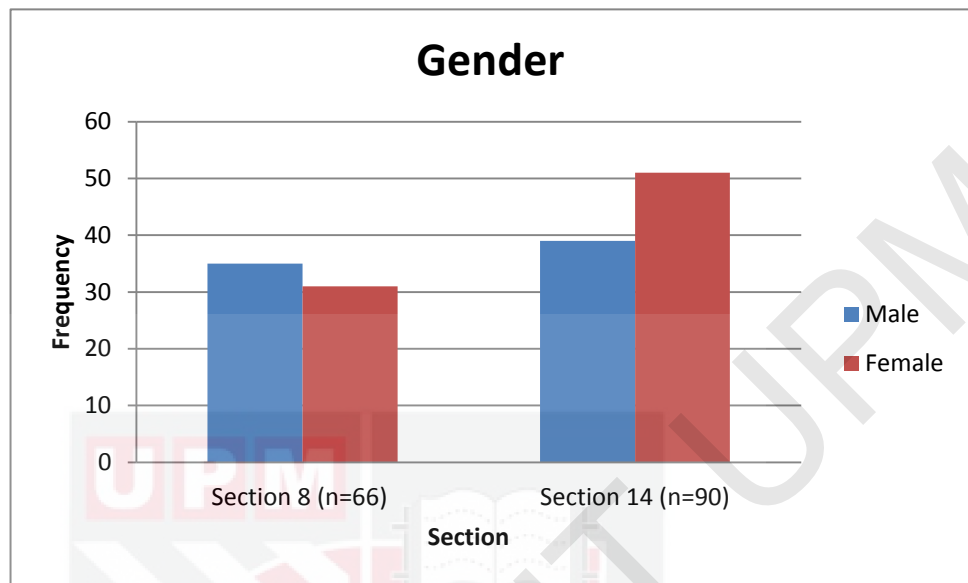


Figure 6.0: Gender of Respondents

From the total of 156 respondents that had participated, 66 of them are from Section 8 and 90 of them are from Section 14. Based on figure 5.0, for Section 8, there are 27 community who have age of below 35 years old (40.91%) and 39 for community who have age of 36 and above (59.09%). For Section 14, there are 51 community who have age of below 35 years old (56.67%) and 39 for community who have age of 36 and above (43.33%). Regarding gender based on Figure 6.0, 35 (53.03%) are male and 31 (46.97%) are female for Section 8. While for Section 14, there are 39 (43.33%) of male respondents and 51 (56.67%) of female respondents.

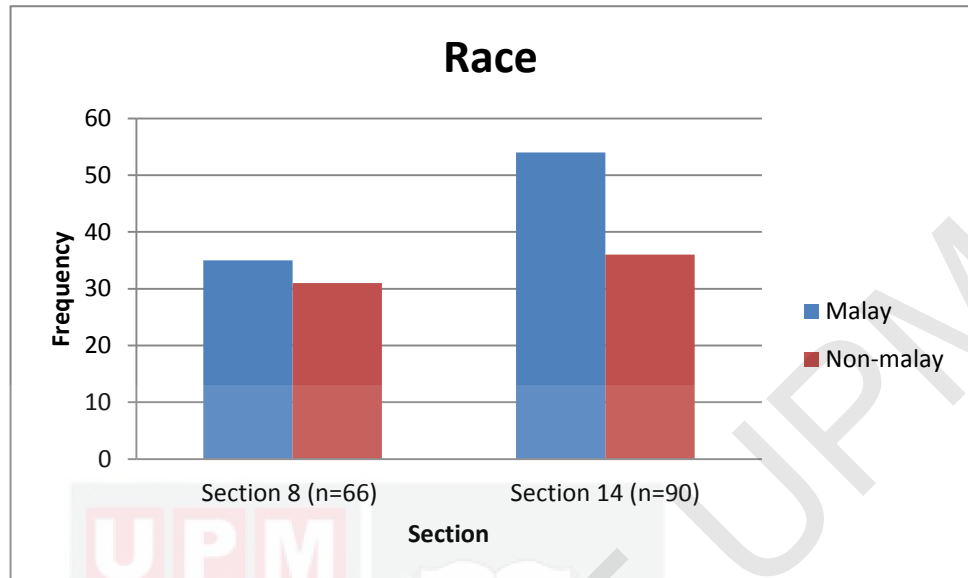


Figure 7.0: Race of Respondents

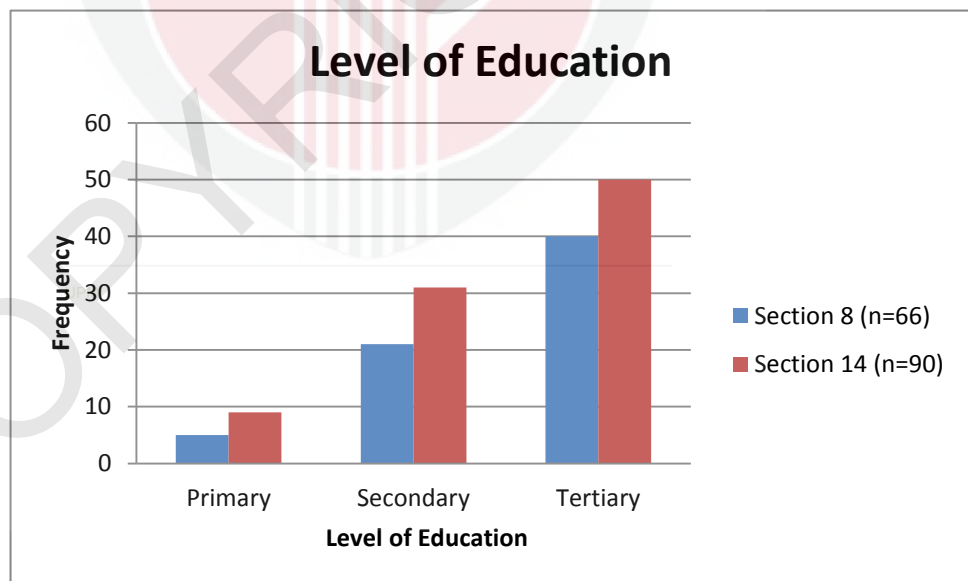


Figure 8.0: Level of Education of Respondents

For race, based on figure 7.0, most of the community from both Section 8 and Section 14 are Malay with the percentage of 53.03% and 60.00%. Other than that is Non-malay with the percentage of 46.97% and 40.00% from both Section 8 and Section 14. For level of education, based on figure 8.0, most of the respondents from Section 8 and Section 14 have tertiary level of education which is 60.61% and 55.56%.

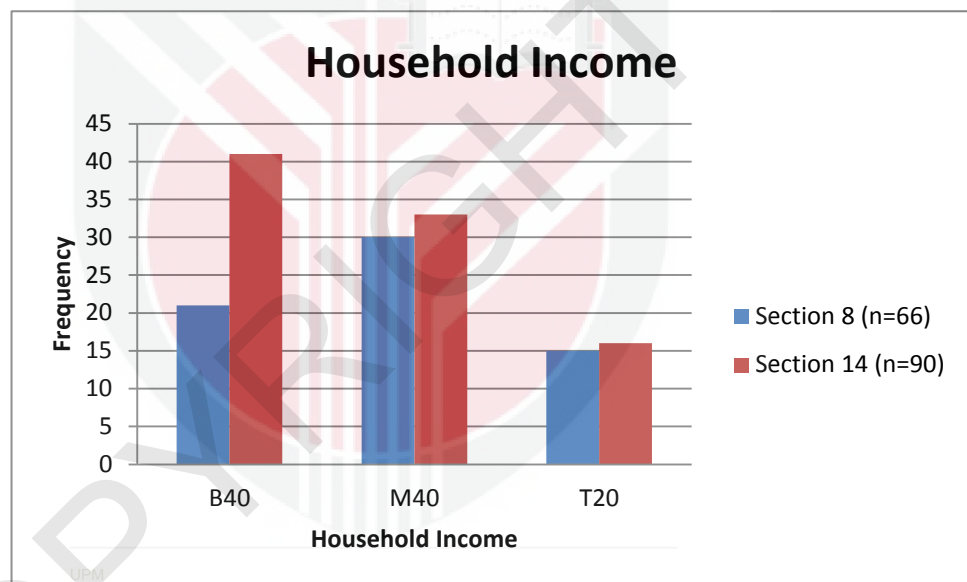


Figure 9.0: Household Income of Respondents

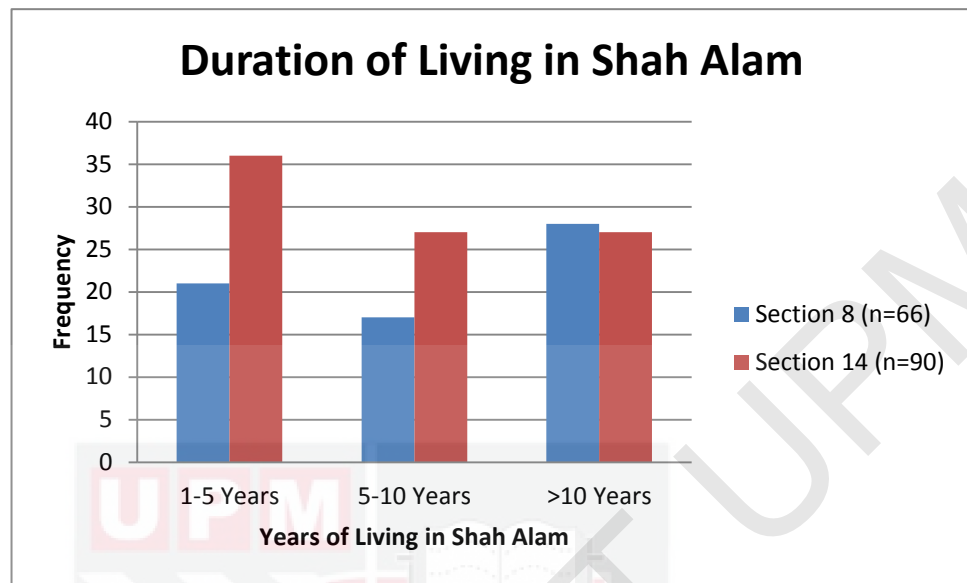


Figure 10.0: Duration of Living of Respondents

The household income of respondents was summarized in figure 9.0. A large number of Section 8 community had household income of M40 which are 30 (45.45%), followed by community with household income of B40 21 (31.82%), then with T20 at 15 (22.72%). For Section 14 community, most respondents had household income of B40 at 41 (45.56%). Next, the second highest number of respondents had household income of M40 at 33 (36.67%). The least number of respondents had household income of T20 at 16 (17.78%). Last but not least, majority of respondents from Section 14 have been living in Shah Alam for 1-5 years with 40.00% while another two groups have an equal percentage of years of living in Shah Alam which are 30.00% of them have been living for 5-10 years, another 30.00% have been living for more than 10 years. Section 8 has majority of 42.42% of community that have been living in Shah Alam for more than 10 years.

Table 2.0: Socio-demographic Characteristics (N=156)

Socio-demographic Profile		Section 8 (n=66)	Section 14 (n=90)
		N (%)	N (%)
Age			
	<35 years old	27 (40.91)	51 (56.67)
	36≥ years old	39 (59.09)	39 (43.33)
Gender			
	Male	35 (53.03)	39 (43.33)
	Female	31 (46.97)	51 (56.67)
Race			
	Malay	35 (53.03)	54 (60.00)
	Non-Malay	31 (46.97)	36 (40.00)
Level of Education			
	Primary	5 (7.58)	9 (10.00)
	Secondary	21 (31.82)	31 (34.44)
	Tertiary	40 (60.61)	50 (55.56)
Household Income			
	B40 (<RM4,850)	21 (31.82)	41 (45.56)
	M40 (RM4,850 –		
	RM10,959)	30 (45.45)	33 (36.67)
	T20 (>RM10,959)	15 (22.72)	16 (17.78)
Years of Living in Shah Alam			
	1-5 Years	21 (31.82)	36 (40.00)
	5-10 Years	17 (25.76)	27 (30.00)
	>10 Years	28 (42.42)	27 (30.00)

4.2 General Information on Importance of Green Area

Table 3.0 illustrated the second section in the questionnaire which was the general knowledge. Seven questions have been asked to those respondents. The purpose of this section is to know their general knowledge regarding to the importance of green area. Descriptive statistic was done to get the frequency and percentage of respondents chosen answers based on two different sections.

Based on the table 3.0, most of the respondents from both sections (72.44%) aware and have knowledge on green areas. Besides, most of the respondents (66.7%) answered correctly to the definition of green areas question and majority of the community (76.3%) aware that green areas are vital for quality of life. Other than that, most of the community (66.67%) chose that the green areas can lower or cool the temperature of its surrounding and social media has been chosen mostly as the source of information in getting the knowledge of the importance of green areas by respondents (97.44%). In addition, majority of the respondents also chose internet (26.9%) as the most referred social media platform in getting exposure to importance of green areas and most of them (31.6%) interact with green areas in about one to two times per week.

Table 3.0: General Information on the Importance of Green Area (N=156)

General Knowledge	Number (n)	Percentage (%)
Know about green areas		
Yes	113	72.44
No	43	27.56
Definition of green areas		
Consists of green trees or plants	14	9
Consists of animals such as insects, fishes and others	28	17.9
Consists of lakes	2	1.3
Surrounded with infrastructure facilities	8	5.1
All statements above	104	66.7
Aware that green areas are important for quality of life		
Yes	119	76.3
No	37	23.7
Importance of the green areas		
Absorb excessive sound	71	45.51
Lower or cool the temperature	104	66.67
Conserve environmental conditions	81	51.92
Give aesthetic effects that are beautiful, tidy, clean and could attract the public	66	42.31
Promote healthy lifestyles by providing space for recreational activities	88	56.41

Source of information

Mass media	44	28.21
Printed media	120	76.92
Social media	152	97.44
Friends	107	68.59
Lectures	12	7.7
Parents	16	10.26
Non-governmental organization	10	6.4
Others	0	0

Most referred social media platform

Instagram	36	21.1
Facebook	41	24.0
Twitter	21	12.3
Tiktok	12	7.0
Internet	46	26.9
Others	0	0

Duration of interaction with green areas in a week

1-2 times	54	31.6
3-4 times	31	18.1
4-5 times	38	22.2
More than 5 times	33	19.3

4.3 Knowledge on The Use of Green Areas

This section consists of a set of several statements and the respondents needed to choose whether the particular statement is right or wrong. The survey consisted of 20 questions assessing the respondents' knowledge of green areas. The community gets 1 point for each correct response and 0 points for each incorrect answer. The overall score is then transformed into three levels: low, moderate, and high. Scores vary from 0 to 20. The mean score for knowledge is 17.18, and the standard deviation is 1.69, so the three groups of people were based on that (Singh & Chapman, 2011).

High Level: more than 19

Moderate Level: 15 to 19

Low Level: less than 15

Level of knowledge of the respondents on the importance of green areas and its distribution was shown in Table 4.0. Majority of the community from Section 8 and Section 14 had moderate knowledge level which was 59 (89.4%) and also 75 (83.3%) respectively. Whereas, only 3 (4.5%) community from Section 8 and 7 (7.8%) from Section 14 had high knowledge on the importance of green areas. Meanwhile, 4 (6.1%) and 8 (8.9%) of respondents from both Section 8 and Section 14 respectively had poor level of knowledge on the importance of green areas.

Table 4.0: Level of Knowledge on The Importance of Green Areas

Variables	Section 8		Section 14	
	N	(%)	N	(%)
Knowledge				
Low	4	6.1	8	8.9
Moderate	59	89.4	75	83.3
High	3	4.5	7	7.8

4.4 Attitude towards The Importance of Green Areas

To explore the attitude towards the importance of green areas among community in Section 8 and Section 14, in the survey, participants were asked 14 questions about their attitudes towards their behaviour. The attitude was scored using a scoring scale. On a scale of 5 to 1, strongly disagree received a score of 1 and disagree received a score of 4. The results were divided into three categories: high, moderate, and low attitude. A mean attitude score of 58.87 and a standard deviation of 4.97 were used to group the respondents into three groups (Singh & Chapman, 2011).

High Level: more than 64

Moderate Level: 54 to 64

Low Level: less than 54

To sum up the attitude level towards the importance of green areas, the distribution was tabulated in Table 5.0. Majority of the community from Section 8 and Section 14 had high attitude towards the importance of green areas which were 45 (68.18%) and 52 (57.78%). Besides, 21 (31.82%) of respondents from Section 8 and 37 (41.11%) of respondents from Section 14 had moderate attitude level. Other than that, 0 (0.0%) and 1 (1.11%) community from both Section 8 and Section 14 respectively had low level of attitude.

Table 5.0: Level of Attitude on the Importance of Green Areas

Variables	Section 8		Section 14	
	N	(%)	N	(%)
Attitude				
Low	0	0.00	1	1.11
Moderate	21	31.82	37	41.11
High	45	68.18	52	57.78

4.5 Practice on The Importance of Green Areas

For practice towards the importance of green areas, the respondents were asked 17 questions about how they preserve and conserve green places. The respondents were asked how often they practised each statement in the questionnaire. 1 point for never, 2 points for seldom, 3 points for occasionally, 4 points for often, and 5 points for always. The results were divided into three categories: high, moderate, and low attitude. A mean score for practice was 71.56, and the standard deviation was 7 so it used to put the respondents into three groups (Singh & Chapman, 2011).

High Level: more than 79

Moderate Level: 65 to 79

Low Level: less than 65

Table 6.0 shows the distribution of level of practice among community from Section 8 and Section 14 towards the importance of green areas. Majority of the community from Section 8 and Section 14 had moderate practice towards the importance of green areas which were 57 (86.36%) and 74 (82.22%). Besides, only 1 (1.52%) of respondents from Section 8 and 3 (3.33%) of respondents from Section 14 had high attitude level. Other than that, 8 (12.12%) and 13 (14.44%) community from both Section 8 and Section 14 respectively had low level of attitude.

Table 6.0: Level of Practice on The Importance of Green Areas

Variables	Section 8		Section 14	
	N	(%)	N	(%)
Practice				
Low	8	12.12	13	14.44
Moderate	57	86.36	74	82.22
High	1	1.52	3	3.33

4.6 Association between Socio-demographic Data with Knowledge, Attitude and Practice on The Importance of Green Areas

The association between age, gender, race, level of education, household income and duration of living with community's knowledge, attitude and practice on the importance of green areas was analysed using Chi-square test and presented in Table 7.0, Table 8.0 and Table 9.0 below. The Chi-square Test was conducted in order to determine the relationship between two categorical variables.

Based on Table 7.0, there were no association between the entire social demographic characteristic (age, gender, race, level of education, household income, and years of living in Shah Alam) with knowledge among community in Section 8 and Section 14. The p-value for age, gender, race, level of education, household income, and years of living in Shah Alam were more than 0.05 which were 0.368, 0.801, 0.866, 0.433, 0.424 and 0.461. Hence, indicating that there were no significant association between social demographic characteristic (age, gender, race, level of education, household income, and years of living in Shah Alam) with knowledge of respondents.

Table 7.0: Association between Socio-demographic Data with Knowledge
(N=156)

Variables	Level of Knowledge, N (%)			X ²	p-value
	Low	Moderate	High		
Age					
<35	8 (66.7%)	64 (47.8%)	6 (60.0%)	2.002	0.368
≥36	4 (33.3%)	70 (52.2%)	4 (40.0%)		
Gender					
Male	5 (41.7%)	65 (48.5%)	4 (40.0%)	0.444	0.801
Female	7 (58.3%)	69 (51.5%)	6 (60.0%)		
Race					
Malay	6 (50.0%)	77 (57.5%)	6 (60.0%)	0.288	0.866
Non-Malay	6 (50.0%)	57 (42.5%)	4 (40.0%)		
Level of Education					
Primary	0 (0.0%)	12 (9.0%)	2 (20.0%)	3.474	0.433
Secondary	6 (50.0%)	43 (32.1%)	3 (30.0%)		
Tertiary	6 (50.0%)	79 (59.0%)	5 (50.0%)		
Household Income					
B40	6 (50.0%)	50 (37.3%)	6 (60.0%)	3.883	0.424
M40	3 (25.0%)	58 (43.3%)	2 (20.0%)		
T20	3 (25.0%)	26 (19.4%)	2 (20.0%)		
Years of Living					

in Shah Alam

1-5 Years	4 (33.3%)	50 (37.3%)	3 (30.0%)	3.612	0.461
5-10 Years	6 (50.0%)	35 (26.1%)	3 (30.0%)		
>10 Years	2 (16.7%)	49 (36.6%)	4 (40.0%)		

N=156, Chi-square Test, *significant at $p < 0.05$

For attitude, based on Table 8.0, there were no association between the entire social demographic characteristic (age, gender, race, level of education, household income and years of living in Shah Alam) with attitude among community in Section 8 and Section 14. The p-value for age, gender, race, level of education, household income and years of living in Shah Alam were more than 0.05 which were 0.741, 0.800, 0.924, 0.441, 0.791 and 0.466. Hence, indicating that there were no significant association between social demographic characteristic (age, gender, race, level of education, household income and years of living in Shah Alam) with attitude of respondents.

Table 8.0: Association between Socio-demographic Data with Attitude (N=156)

Variables	Level of Attitude,			X ²	p-value
	N (%)				
	Low	Moderate	High		
Age					
<35	1 (100.0%)	30 (51.7%)	47 (48.5%)	1.105	0.741
≥36	0 (0.0%)	28 (48.3%)	50 (51.5%)		

Gender

Male	1 (100.0%)	27 (46.6%)	46 (47.4%)	1.069	0.809
Female	0 (0.0%)	31 (53.4%)	51 (52.6%)		

Race

Malay	1 (100.0%)	32 (55.2%)	56 (57.7%)	0.809
Non-malay	0 (0.0%)	26 (44.8%)	41 (42.3%)	

Level of**Education**

Primary	0 (0.0%)	7 (12.1%)	7 (7.2%)	3.940
Secondary	0 (0.0%)	22 (37.9%)	30 (30.9%)	
Tertiary	1 (100.0%)	29 (50.0%)	60 (61.9%)	

Household**Income**

B40	0 (0.0%)	25 (43.1%)	37 (38.1%)	2.207
M40	1 (100.0%)	21 (36.2%)	41 (42.3%)	
T20	0 (0.0%)	12 (20.7%)	19 (19.6%)	

Years of**Living in****Shah Alam**

1-5 Years	0 (0.0%)	20 (34.5%)	37 (38.15)	3.453
5-10 Years	0 (0.0%)	20 (34.5%)	24 (24.7%)	
>10 Years	1 (100.0%)	18 (31.0%)	36 (37.1%)	

N=156, Chi-square Test, *significant at $p < 0.05$

Based on Table 9.0, there were no association between entire social demographic characteristic (age, gender, race, level of education, household income and years of living in Shah Alam) with practice among community in Section 8 and Section 14. The p-value for age, gender, race, level of education, household income and years of living in Shah Alam were more than 0.05 which were 0.129, 1.000, 0.553, 0.814, 0.805 and 0.873. Hence, indicating that there were no significant association between social demographic characteristic (age, gender, race, level of education, household income and years of living in Shah Alam) with practice of respondents.

Table 9.0: Association between Socio-demographic Data with Practice (N=156)

Variables	Level of Practice, N (%)			X ²	p-value
	Low	Moderate	High		
Age					
<35	9 (42.9%)	65 (49.6%)	4 (100.0%)	4.149	0.129
≥36	12 (57.2%)	66 (50.4%)	0 (0.0%)		
Gender					
Male	10 (47.6%)	62 (47.3%)	2 (50.0%)	0.162	1.000
Female	11 (52.4%)	69 (52.7%)	2 (50.0%)		
Race					
Malay	10 (47.6%)	76 (58.0%)	3 (75.0%)	1.307	0.553
Non-malay	11 (52.4%)	55 (42.0%)	1 (25.0%)		
Level of					

Education

Primary	2 (9.5%)	12 (9.2%)	0 (0.0%)	1.502	0.814
Secondary	5 (23.8%)	46 (35.1%)	1 (25.0%)		
Tertiary	14 (66.7%)	73 (55.7%)	3 (75.0%)		

Household**Income**

B40	9 (42.9%)	50 (38.2%)	3 (75.0%)	1.866	0.805
M40	8 (38.1%)	54 (41.2%)	1 (25.0%)		
T20	4 (19.0%)	27 (20.6%)	0 (0.0%)		

**Years of Living
in Shah Alam**

1-5 Years	9 (42.9%)	47 (35.95%)	1 (25.0%)	1.484	0.873
5-10 Years	5 (23.8%)	37 (28.2%)	2 (50.0%)		
>10 Years	7 (33.3%)	47 (35.9%)	1 (25.0%)		

N=156, Chi-square Test, *significant at $p < 0.05$

4.7 Comparison of Knowledge, Attitude and Practice on The Importance of Green Areas between Community of Section 8 and Section 14

The comparison of knowledge, attitude and practice on the importance of green areas between community of Section 8 and Section 14 were analysed using Mann-Whitney Test due to the non-normal data and it has two groups of sections. The results were tabulated in Table 10.0 and Table 11.0.

Table 10.0: Comparison of Knowledge on The Importance of Green Areas (N=156)

Sections	N	Median	z	p-value
Section 8	66	2.00	-0.059	0.953
Section 14	90	2.00		

N=156, Mann-Whitney Test, *significant at $p < 0.05$

Based on Table 10.0, the p-value obtained from the test was 0.953 which is more than 0.05. Hence, there was no significant difference on the knowledge level of community between Section 8 and Section 14.

Table 11.0: Comparison of Attitude on The Importance of Green Areas (N=156)

Sections	N	Median	z	p-value
Section 8	66	3.00	-1.362	0.173
Section 14	90	3.00		

N=156, Mann-Whitney Test, *significant at $p < 0.05$

Based on Table 11.0, the p-value obtained from the test was 0.173 which is more than 0.05. Hence, there was no significant difference of attitude level of community between Section 8 and Section 14.

Table 12.0: Comparison of Practice on The Importance of Green Areas (N=156)

Sections	N	Median	z	p-value
Section 8	66	2.00	-0.115	0.908
Section 14	90	2.00		

N=156, Mann-Whitney Test, *significant at $p < 0.05$

Based on Table 12.0, the p-value obtained from the test was 0.908 which is more than 0.05. Hence, there was no significant difference of practice level of community between Section 8 and Section 14.

4.8 Recommendation

The recommendation was proposed in Section D of the questionnaire distributed to the community in both Section 8 and Section 14.

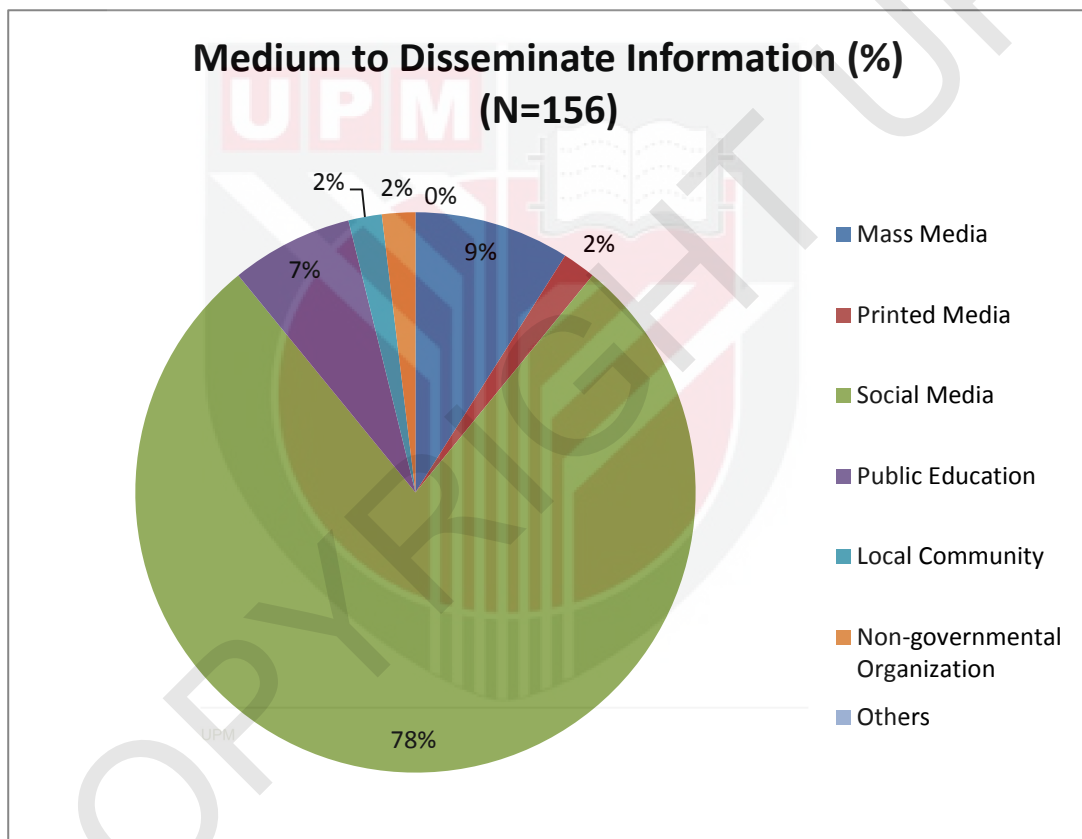


Figure 11.0: The Most Appropriate Medium for Disseminating Information Regarding on the Importance of Green Areas

Based on Figure 11.0, the best way chosen by the community to spread the word about the importance of green areas was social media which was 122 (78%), followed by mass media 14 (9%). Meanwhile, 11 (7%) community have chosen public education and another three medium have an equal percentage chosen by community which are printed media, local community and non-governmental organization 3 (2%).

Table 13.0: Most Effective Measure to Preserve and Conserve Green Areas

Variables	Frequency	Percentage (%)
Strengthen the policies and the legislation regarding the green areas	45	28.8
Include community engagement in green areas management	35	22.4
Enhance reforestation or replantation	25	16.0
Allocate sufficient funds for green management	23	14.7
Strengthen the role of government agencies (local authority) in green areas management and preservation	28	17.9

Table 13.0 showed the most effective measures chosen by community to preserve and conserve green areas in Section 8 and Section 14. Majority of the respondents which were 45 (28.8%) suggested to strengthen the policies and the legislation regarding the green areas could help in preserving and conserving green areas in Shah Alam. Next, respondents which were 35 (22.4%) suggested to include community engagement in green areas management may help in preserve it. Besides, 28 (17.9%) community recommend to strengthen the role of government agencies (local authority) in green areas management and preservation and also the other 25 (16%) and 23 (14.7%) community think that to enhance reforestation or replantation and allocate sufficient funds for green management.

CHAPTER 5

DISCUSSION

5.1 General Socio-Demographic Characteristic

The aim of this study was to assess the knowledge, attitude and practice on the importance of green area among community in Shah Alam, Selangor as well as the associated factors of each of it. Most of respondents were of working age or senior citizens (50.0%) and from tertiary level of education (57.69%). People in their working years are more likely to experience work-related stress and hence have a greater need for physical activity or stress reduction, both of which can be found in urban green spaces (Nath et al., 2018). Next, majority of respondents were female (52.56%) and Malay (57.05%). Since this study was closely related with environment and healthy lifestyle, it was expected that female will participate more. One study stated that, when it comes to exercise, ladies in New York City prefer to go to the park over the street because of the gorgeous environment and the therapeutic or spiritual characteristics of the park (Krenichyn K., 2006).

Furthermore, Malaysia is a mixed country, with the Malay, Chinese, and Indian populations constituting the three largest ethnic groups. Due to the fact that Malay people account for 67.4% of Malaysia's population, it was projected that they

would be the most common ethnic group among respondents (Department of Statistics Malaysia Official Portal, 2021). In addition, the monthly household income shows the distribution of the sample. The average monthly household income for Section 8 and Section 14 were of M40 (40.38%), in which it translates into income starting from RM4,850 to RM10,959. In accordance with the 2020 survey report, urban income increased by 3.9%.each year, going from RM7,671 to RM8,635 and Selangor also had a higher average income than the rest of the country, with a mean income of RM10,827 and RM8,013, respectively (Department of Statistics Malaysia Official Portal, 2021).

5.2 Knowledge on The Use of Green Areas

A large majority of the population in both sections had a moderate understanding of the importance of green spaces and according to Table 4.0 many of them visit parks and recreational areas regularly, yet they couldn't identify some of the most fundamental information about the value they place on these places of natural beauty. Despite the fact that green areas are critical components of resilient, there are still a handful of pupils from both sections who lack basic information. As a result, it's concerning that these people may be unwilling to learn about something that could have a negative impact on their health if they remain unaware of the difficulties that surround them.

These findings were consistent with previous research, which has shown that age may or may not have anything to do with knowledge. Pretto, Acreman, and Ashfold (2015) found that younger respondents scored lower in awareness than older respondents, indicating that age correlates with awareness but not with concern. Another study discovered a statistically significant difference in KAP scores based on age. However, other research has shown a contrary outcome, claiming that younger groups perform better in their KAP (Yezli et al., 2018). According to some study stated that the internal domains of learning are cognitive aspects, which refer to achieving the correct factual knowledge, affective aspects, which refer to attitudes and beliefs, and behavioural aspects, which refer to conducting the behaviour in question and changing behaviour, which are all based on educational theory (Tolvanen et al., 2011). Also, it was reported by Tolvanen et al. (2011) that increasing knowledge increases the likelihood of changing attitudes and behaviour.

In addition, one study pointed out that the gain in knowledge is more concerned with the changes in behaviour and practises than with the increase in information itself (Al-Binali et al., 2010).



5.3 Attitude towards The Importance of Green Areas

Table 5.0 summarises the distribution of attitudes on the value of green spaces. The majority of residents in Sections 8 and 14 had a favourable attitude toward the importance of green spaces. The findings from research conducted by Tolvanen et al. (2011) revealed that knowledge influences behaviour, but that it did so mostly through attitudes. An attitude is the possibility that a person will respond positively or negatively to a particular object, person, circumstance, or idea (Yun Ai Wong et al., 2019). As a result of these reactionary tendencies, influencing attitudes with enough positive and accurate knowledge results in the development of beneficial practices. Furthermore, an article by Arbiol et al. (2016) claimed that in order to maximise an individual's ability to put preventive activities into practise as successfully as possible, a positive attitude must be accompanied by a strong comprehension or good knowledge. In addition, some study found a link between knowledge and a positive attitude, which lends credence to this assertion. As a result, a gain in knowledge is inversely related to an increase in positive attitude (Aminrad et al., 2013).

5.4 Practice on The Importance of Green Areas

Table 6.0 illustrates the dispersion of community practise in relation to the value of green places between Sections 8 and 14. The majority of residents in Sections 8 and 14 had a moderate attitude toward the importance of green spaces. In the dictionary, practice is described as the method by which people display their knowledge and attitude through their acts (Karunamoorthi Kaliyaperumal, 2004). In this case, it is possible to say that shifting from poor practise to good practise is the outcome of shifting one's knowledge and attitude. This assertion is supported by a study who found that an increase in knowledge and awareness regarding environmental dilemmas has a significant impact on changes in environmental behaviour and human practises toward nature (Mohammad Bakri Hammami et al., 2017). Other than that, an article by Arbiol et al. (2016) claimed that in order to maximise an individual's ability to put preventive activities into practise as successfully as possible, a positive attitude must be accompanied by strong understanding or good knowledge. In addition, on the basis of past studies, they concluded that changing a practise is a process that may take time and may not result in a change in practise overnight. Growing up (growth, skill development), learning, conditioning, and extrinsic and intrinsic rewards are some of the variables that might lead to changes in health-related behaviour. These modifications are regarded as part of a process. This process can be influenced by a variety of internal elements, such as knowledge, attitudes, intention, and stress, as well as external factors, such as social support and the environment in which one lives (Tolvanen et al., 2011).

5.5 Association between Socio-demographic Data with Knowledge, Attitude and Practice on The Importance of Green Areas

There was no association between socio-demographic characteristics (gender and race) and knowledge on the importance of green areas, as shown in Tables 7.0 respectively. These findings were supported by other studies that found knowledge scores were not significantly associated with gender (Selvarajoo et al., 2020) or race (Balbir Singh et al., 2019), but they were also in contrast to other findings that stated that there was an association between knowledge with age and race (Selvarajoo et al., 2020), and gender (Balbir Singh et al., 2019), as well as other findings that stated that knowledge have association with age and race (Ma Saung Oo et al., 2019). In addition, women are more concerned about the environment than men. According to the socialisation theory, females across cultures were deemed more cooperative, which means they are more helpful in situations that require nursing, and this leads to them feeling more connected with the pro environmental behaviour (Carrier, 2010). Furthermore, a study by Aini mat said & Nurizan Yahaya (2007) state that young women in Malaysia were found to be much more concerned about the environment, but they were not found to be significantly more dedicated to acting in a more ecologically responsible manner.

There was no relationship between practice on the importance of green areas and socio-demographic characteristics (gender and race). Another study with identical findings found no correlation between gender, race, or practice and the importance of green areas. It appears that the findings are consistent with earlier

research, which has found that gender (Selvarajoo et al., 2020) and race (Goni et al., 2019) are not associated with practising behaviour. However, a previous study found that gender (Goni et al. 2019) and race (Selvarajoo et al. 2020) traits were strongly linked to mean practice scores.

There was no relationship found between socio-economic status (monthly household income, level of education) and knowledge, attitude, or practice in this study. According to some findings, respondents who had a father with a secondary degree tended to have greater information about contraception than respondents who had a father with a tertiary education level. Contrary to the findings of a study which found that greater awareness of family planning results in improved contraceptive practice (Ma Saung Oo et al., 2019). The current study runs counter to other past studies that have found that household money had a positive impact on students' academic ability in school. The income of the family was found to have a direct and statistically significant association with the success of the students at the primary and secondary levels. A significant factor in explaining a child's accomplishment, according to this study, is the size of the home. This contrasts with the current study, which found no relationship between household size and knowledge, attitude or practice (Ekber Tomul & Havva Sebile Savasci, 2012).

5.6 Comparison of Knowledge, Attitude and Practice on The Importance of Green Areas between Community of Section 8 and Section 14

Based on Table 10.0, there was no significant difference on the Knowledge, Attitude and Practice on the importance of green areas between community of Section 8 and Section 14 with p-value is more than 0.05. This concludes that both community from Section 8 and Section 14 have the same level of KAP on the importance of green area. These findings were aligned with previous research by Johar & Razak, (2015) claim that in terms of environmental knowledge and attitude, there is no statistically significant difference between the two neighbourhoods. In addition, the research also indicates that similar socio-economic and demographic factors between the two green neighbourhoods may result in a similar level of environmental knowledge between the two communities and when compared to other study sites, some sites have a more positive attitude toward the environment, which may be related to the neighborhood's status and attributes (Johar & Razak, 2015).

Furthermore, other findings also state that there was no statistically significant relationship between knowledge and attitude and practice about exercise (Murad et al., 2016). However, the study mentions that a high level of knowledge and an enthusiastic attitude toward exercise may not guarantee that individuals will engage in regular physical activity. On the other hand, this was also in contrast with other findings that state that there was a statistically significant difference between the KAP relationships among respondent in Kuala Langat towards awareness of

mangrove, indicating that there was an effect between KAP variables (A. Rosazlin et al., 2021). In the study A. Rosazlin et al., (2021) stated that it is the knowledge that has an influence on attitude, and the attitude that has an effect on practice, and the knowledge that has an effect on attitude.



CHAPTER 6

CONCLUSION

In conclusion, community from Section 8 and Section 14 have high level of attitude but moderate level of knowledge and practice towards the importance of green areas. To improve the knowledge and practice of this community, it is recommended to increase their understanding. Non-governmental Organizations can do a campaign to educate community about the importance of green area. Next, Local Council can do a program such as '1 Person 1 Plant' program to encourage community to join and learn the benefits of green area. Also, Department of Environment can share information regarding of green area through social media since most of the respondent choose social media as appropriate medium to disseminating information about the green area.

Furthermore, in order to provide urban residents with locations for recreation, social, and leisure activities, it is necessary to plan green spaces in an appropriate manner. Parks, open space, gardens, and urban woods, among other things, give tourists, neighbours, and children with a variety of chances for physical activities such as walking, running, and cycling, as well as opportunities for social contact and nature observation. Therefore, Policymakers need to take action in strengthening

green policy and regulation. In addition, boosting environmental education in schools, especially for the next generation, is critical since it can help students learn how to better care for and protect the environment for future generations. Consequently, more emphasis should be placed on educating children about the need of protecting the environment for the long-term viability of their lives. In light of the well-documented benefits of urban green spaces for health and well-being, as well as the positive responses from residents, the promotion and support for the use of green spaces by Malaysians should be seen as a significant public health intervention. This would have a favourable impact on society, as well as on the economy and the environment of the country.

Some limitation of this study was the possibility that the community were not speaking the truth when answering the questions, particularly when responding questions about attitudes and practises, and that this could contribute to a social desirability bias in the results. This limitation, on the other hand, can be circumvented by convincing them that their anonymity will be maintained in strict confidence. However, because the data was gathered from only two sections, it may not accurately reflect the population of Selangor as a whole, as would be expected. In order to do this, the research location should be expanded to include multiple sections from different districts in order to produce a more diversified sample that is representative of the Selangor population. Finally, because this research data analysis is based on cross-sectional data, it is not possible to make a broad interpretation of the findings.

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APPENDICES

APPENDIX I
ETHICS APPROVAL
LETTER

**ETHICS COMMITTEE FOR RESEARCH INVOLVING HUMAN SUBJECTS
(JKEUPM)
UNIVERSITI PUTRA MALAYSIA**

Research title	: Knowledge, Attitude, And Practice on The Importance of Green Area Among Community in Shah Alam, Selangor.
Study Site	: Shah Alam, Selangor
JKEUPM Ref No.	: JKEUPM-2021-366
Researcher	: Muhamamd Nur Fitri Bin Shamsulkamal
Supervisor	: Assoc. Prof. Dr. Haliza Abdul Rahman

Documents received and reviewed with reference to the above study:

1. Ethics Application Form, Version 1 dated 14/06/2021
2. Respondent's Information Sheet / Consent (English), Version 2 dated 10/05/2021
3. Proposal (English), Version 2 dated 09/05/2021
4. Questionnaire / Interview (English), Version 1 dated 14/06/2021
5. Curriculum Vitae of:
 - a. Assoc. Prof. Dr. Haliza Abdul Rahman

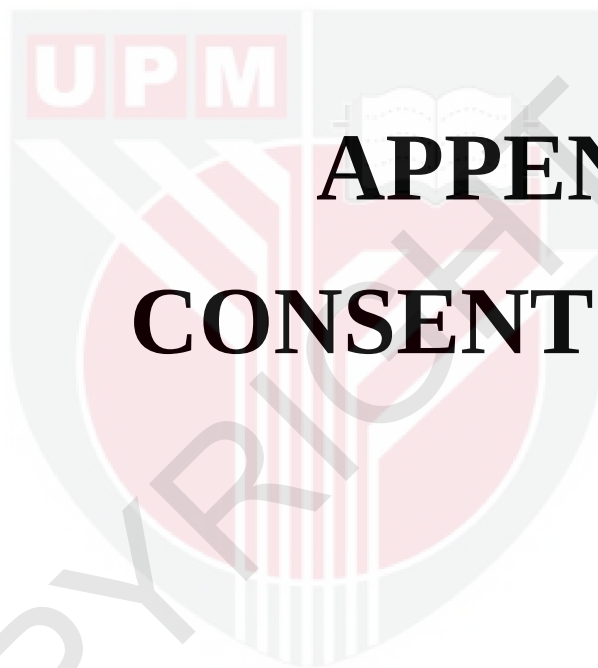
The University Research Ethics Committee, Universiti Putra Malaysia (JKEUPM) operates in accordance to the ICH-GCP Guidelines.
Decision by JKEUPM:

- ☒ Approved
- ☒ Permission **MUST BE OBTAINED** from the respective hospital/ institutions before conducting the research
- ☐ Disapproved

Please note that the approval is **VALID UNTIL 10 August 2022**

Researchers should comply with the following:

- I. Complete a Study Final Report upon study completion (Form 3.2).
- II. Ethical approval is required in the case of amendments/ changes to the study documents/ study sites/ study team.
- III. Applicable for Clinical Trial Studies and Clinical interventional Studies only: Progress Report has to be submitted to JKEUPM at every 6 months from the date of approval (Form 3.1). Report occurrences of all Serious Adverse Events (SAEs), Suspected Unexpected Serious Adverse Reaction (SUSARs) and Protocol Deviation/ Violation at all JKEUPM approved sites to JKEUPM. SAEs are to be reported within 15 calendar days from awareness of event by investigator. Initial report of SUSARs are to be reported as soon as possible but not later than



APPENDIX II

CONSENT FORM

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FORM 2.4: RESPONDENT'S INFORMATION SHEET AND INFORMED CONSENT FORM

Please read the following information carefully and do not hesitate to discuss any questions you may have with the researcher.

1. STUDY TITLE :

Knowledge, Attitude and Practice on The Importance of Green Area among Community in Shah Alam.

2. INTRODUCTION:

This study intends to investigate the knowledge, attitude and practice on the importance of green area among community in Shah Alam.

3. WHAT WILL YOU HAVE TO DO?

As respondent, you need to sign the consent form which indicate you are interested and willing to cooperate with this study. Then, you need to answer the questions in the questionnaire honestly and accurately. You need to tick (/) in the space given.

4. WHO SHOULD NOT PARTICIPATE IN THE STUDY?

Children under 18 that are living in Shah Alam and also foreigners that are living in Shah Alam.

5. WHAT WILL BE THE BENEFITS OF THE STUDY:

(a) TO YOU AS THE SUBJECT?

You can evaluate the level of knowledge, attitude and practice on the importance of green area yourself.

(b) TO THE INVESTIGATOR?

Researchers will be able to collect data from the study to identify the level of knowledge, attitude and practice on the importance of green area among community in Shah Alam. Other than that, researchers can obtain useful data from the study for improvement of preservation and conservation of green areas in Malaysia.

6. WHAT ARE THE POSSIBLE RISKS?

There is possible risk in this research. All information obtained from respondents are confidential.

7. WILL THE INFORMATION THAT YOU PROVIDE AND YOUR IDENTITY REMAIN CONFIDENTIAL?

Information and identity of respondents are remain confidential.

8. WHO SHOULD YOU CONTACT IF YOU HAVE ADDITIONAL QUESTIONS DURING THE COURSE OF THE RESEARCH?

If you have additional questions, you can contact:

Muhammad Nur Fitri Bin Shamsulkamal Researcher Bachelor of Science (Environmental and Occupational Health) Department of Environmental and Occupational Health Faculty of Medicine and Health Sciences Universiti Putra Malaysia 0198388232 nurfitrishamsul@gmail.com	Assoc. Prof. Dr. Haliza Abdul Rahman Project Leader Department of Environmental and Occupational Health Faculty of Medicine and Health Sciences Universiti Putra Malaysia Tel: 03-89472403 Fax: 03-89472395 dr.haliza@upm.edu.my
--	---

Please initial here if you have read and understood the contents of this page_____

9. CONSENT

I Identity Card No.
address.....

.....hereby voluntarily agree to take part in the research
stated above *(clinical /drug trial/video recording/ focus group/interview-based/ questionnaire-based).

I have been informed about the nature of the research in terms of methodology, possible adverse effects and complications (as written in the Respondent's Information Sheet). I understand that I have the right to withdraw from this research at any time without giving any reason whatsoever. I also understand that this study is confidential and all information provided with regard to my identity will remain private and confidential.

I* wish / do not wish to know the results related to my participation in the research

I agree/do not agree that the images/photos/video recordings/voice recordings related to me be used in any form of publication or presentation (if applicable)

* delete where necessary

Signature
(Respondent)

Signature
(Witness)

Date :

Name :

I/C No. :

I confirm that I have explained to the respondent the nature and purpose of the above-mentioned research.

Date

Signature
(Researcher)



BORANG 2.4: PENERANGAN DAN PERSETUJUAN RESPONDEN

Sila baca maklumat berikut dengan teliti. Sekiranya anda mempunyai sebarang pertanyaan, sila kemukakan kepada penyelidik.

1.TAJUK KAJIAN

Pengetahuan, Sikap dan Amalan Tentang Kepentingan Kawasan Hijau Kalangan Komuniti di Shah Alam.

2. PENGENALAN

Kajian ini dijalankan untuk mengkaji pengetahuan, sikap dan amalan tentang kawasan hijau kalangan komuniti di Shah Alam.

3. APAKAH YANG PERLU ANDA LAKUKAN?

Sebagai responden, anda dikehendaki untuk mengisi borang persetujuan responden bagi menandakan yang anda berminat dan sanggup untuk bekerjasama dalam kajian ini. Selepas itu, anda perlu menjawab semua soalan di dalam borang soal selidik dengan jujur dan tepat. Anda perlu menandakan (/) dalam ruang yang telah diberikan.

4. SIAPA YANG TIDAK BOLEH MENYERTAI KAJIAN INI?

Kanak-kanak yang berumur 18 tahun kebawah yang tinggal di dalam Shah Alam dan serta warga asing yang tinggal di dalam Shah Alam.

5. APAKAH FAEDAH MENYERTAI KAJIAN INI?

a) KEPADA ANDA SEBAGAI PESERTA?

Anda boleh menilai tahap pengetahuan, sikap dan amalan tentang kawasan hijau dengan diri sendiri.

b) KEPADA PENYELIDIK?

Penyelidik akan memperoleh kebolehan untuk mengumpul maklumat daripada kajian bagi mengenalpasti tahap pengetahuan, sikap dan amalan tentang kepentingan kawasan hijau kalangan komuniti di Shah Alam. Selain pada itu, penyelidik akan memperoleh maklumat daripada kajian ini bagi menaik tarafkan pemeliharaan dan pemuliharaan kawasan hijau di Malaysia.

6. ADAKAH IA BERISIKO?

Tidak ada kemungkinan risiko dalam penyelidikan ini. Semua maklumat yang diperolehi daripada responden adalah sulit.

7. ADAKAH MAKLUMAT DAN IDENTITI SAYA KEKAL RAHSIA?

Maklumat dan identiti responden tetap dirahsiakan.

8. SIAPA YANG SAYA PERLU HUBUNGI SEKIRANYA SAYA MEMPUNYAI SOALAN TAMBAHAN SEMASA MENGIKUTI PENYELIDIKAN INI?

Sekiranya anda mempunyai soalan tambahan, anda boleh menghubungi:

Muhammad Nur Fitri Bin Shamsulkamal Penyelidik Bacelor Sains (Kesihatan Persekitaran dan Pekerjaan) Jabatan Kesihatan Persekitaran dan Pekerjaan Fakulti Perubatan dan Sains Kesihatan Universiti Putra Malaysia 0198388232 nurfitrishamsul@gmail.com	Assoc. Prof. Dr. Haliza Abdul Rahman Ketua Projek Jabatan Kesihatan, Persekitaran dan Pekerjaan Fakulti Perubatan dan Sains Kesihatan Universiti Putra Malaysia Tel: 03-89472403 Fax: 03-89472395 dr.haliza@upm.edu.my
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Sila tandatangan di sini sekiranya anda telah membaca dan memahami kandungan halaman ini

9. PERSETUJUAN

Saya..... No Kad Pengenalan.
beralamat.....
.....dengan ini bersetuju untuk mengambil bahagian secara sukarela dalam
penyelidikan yang tersebut di atas *(kajian klinikal/percubaan ubat-ubatan/rakaman video/kumpulan
sasaran/temuduga/ soal selidik).

Saya telah diberi penjelasan secara menyeluruh mengenai penyelidikan ini dari segi metodologi,
risiko dan komplikasi (seperti tertulis pada Helaian Penerangan Responden). Saya memahami
bahawa saya berhak menarik diri dari penyelidikan ini pada bila-bila masa tanpa memberi sebarang
alasan.Saya juga memahami bahawa sebarang maklumat yang berkaitan identiti saya akan
dirahsiakan.

Saya* berminat / tidak berminat untuk mengetahui keputusan kajian yang melibatkan saya.

I setuju/tidak bersetuju untuk imei/gambar/rakaman video/ rakaman suara digunakan dalam apa jua
bentuk penerbitan atau pembentangan. (sekiranya berkaitan).

*potong yang tidak berkenaan

Tandatangan Tandatangan
(Responden) (Saksi)

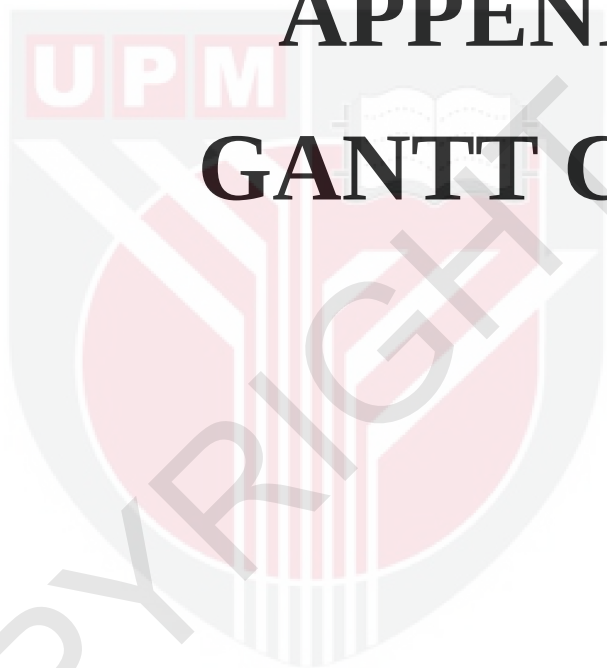
Tarikh : Nama :
No. K/P:

Saya mengesahkan bahawa saya telah menerangkan kepada responden ini sifat dan tujuan
penyelidikan yang tersebut di atas.

Tarikh Tandatangan
(Penyelidik)

APPENDIX III

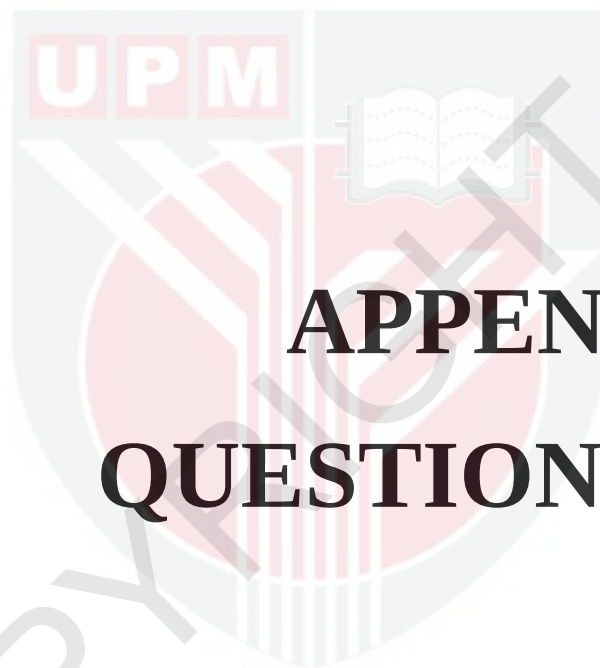
GANTT CHART



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Gantt Chart for Research Process

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APPENDIX IV

QUESTIONNAIRE

Date/Tarikh:

ID No.:



QUESTIONNAIRE/BORANG KAJI SELIDIK

RESEARCH TITLE/TAJUK KAJIAN:	KNOWLEDGE, ATTITUDE AND PRACTICE ON THE IMPORTANCE OF GREEN AREA AMONG COMMUNITY IN SHAH ALAM, SELANGOR. PENGETAHUAN, SIKAP DAN AMALAN TENTANG KEPENTINGAN KAWASAN HIJAU KALANGAN MASYARAKAT DI SHAH ALAM, SELANGOR.
STUDENT'S NAME/NAMA PELAJAR	MUHAMMAD NUR FITRI BIN SHAMSULKAMAL (196602)
STUDENT'S EMAIL & TEL.NO/EMAIL & NO. TEL PELAJAR	nurfitrishamsul@gmail.com & 019-8388232
SUPERVISOR'S NAME/NAMA PENYELIA	ASSOC. PROF DR. HALIZA ABDUL RAHMAN
SUPERVISOR'S EMAIL & TEL.NO/EMAIL & NO. TEL PENYELIA	dr.haliza@upm.edu.my & 03 9769 2403

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Instructions/*Arahan*

This questionnaire contains 4 sections:

Borang kaji selidik ini mengandungi 4 bahagian:

1. Section A: Socio-demographic information
Bahagian A: Maklumat sosio-demografik
2. Section B: General questions
Bahagian B: Soalan Lazim
3. Section C: Knowledge, Attitude and Practice on the importance of green area
Bahagian C: Pengetahuan, Sikap dan Amalan terhadap kepentingan kawasan hijau
4. Section D: Recommendations
Bahagian D: Cadangan

Section A: Socio-demographic information

Bahagian A: Maklumat sosio-demografik

INSTRUCTIONS: Please tick your answer and fill in the blanks for the questions below.

ARAHAN: Sila tandakan jawapan anda dan isi jawapan di ruangan yang disediakan untuk soalan dibawah.

1. Age/Umur:

2. Gender/Jantina:

☐

Male/Lelaki

☐

Female/Perempuan

3. Races/Bangsa:

☐

Malay/Melayu

☐

Chinese/Cina

☐

Indian/India

Others/lain-lain:

4. Level of education/Tahap pendidikan:

☐

Primary/Pendidikan Rendah

☐

Secondary/Pendidikan Menengah

☐

Tertiary/Pengajian Tinggi

5. Household Income/Pendapatan Isi rumah:

☐

B40 (<RM4,850)

☐

M40 (RM4,850 – RM10,959)

☐

T20 (>RM10,959)

6. How long have you lived here?/Berapa lamakah anda menetap di kawasan ini?

☐

1-5 years/1-5 tahun

☐

5-10 years/5-10 tahun

☐

More than 10 years/Lebih 10 tahun

Section B: General questions

Bahagian B: Soalan Lazim

INSTRUCTIONS: Please tick your answer based on the questions below.

ARAHAN: Sila tandakan jawapan anda untuk soalan dibawah.

1. Do you know about the green areas?/Adakah anda tahu tentang kawasan hijau?

☐

Yes/Ya

☐

No/Tidak

2. If yes, what is the definition of green areas? (Can only tick **ONE ANSWER**)./Jika ya, apakah definisi bagi kawasan Hijau? (Tandakan hanya **SATU JAWAPAN SAHAJA**).

☐

Green area is an area that consists of green trees or plants./Kawasan hijau adalah suatu kawasan yang mempunyai pokok-pokok atau tumbuh-tumbuhan hijau.

☐

Green area is an area that consists of animals such as insects, fishes and others./Kawasan hijau adalah suatu kawasan yang mempunyai haiwan-haiwan seperti serangga, ikan dan lain-lain.

☐

Green area is an area that consists of lakes (If there are any in residential areas)./Kawasan hijau adalah suatu kawasan yang mempunyai tasik (Jika ada di kawasan kediaman).

☐

Green area is an area that is surrounded with infrastructure facilities./Kawasan hijau adalah suatu kawasan yang mempunyai kemudahan infrastruktur di sekeliling.

☐

All statements above (Overall ecosystem)./Semua penyataan di atas (Ekosistem keseluruhan).

3. Are you aware that green areas are important for quality of life?/Adakah anda sedar bahawa kawasan hijau adalah penting bagi kualiti kehidupan?

☐

Yes/Ya

☐

No/Tidak

4. What is the importance of the green areas? (Can answer **MORE THAN ONE**)./Apakah kepentingan kawasan hijau? (Boleh tandakan **LEBIH DARIPADA SATU JAWAPAN**).

- ☐ Green areas can absorb excessive sound (Loud noise)./Kawasan hijau dapat menyerap bunyi yang berlebihan (Bunyi bising).
- ☐ Green areas can lower or cool the temperature./Kawasan hijau dapat menurunkan atau menyejukkan suhu.
- ☐ Green areas can conserve environmental conditions./Kawasan hijau dapat memelihara alam sekitar.
- ☐ Green areas can give aesthetic effects that are beautiful, tidy, clean and could attract the public./Kawasan hijau dapat memberikan kesan estetik yang cantik, kemas, bersih dan dapat menarik perhatian orang awam.
- ☐ Green areas could promote healthy lifestyles by providing space for recreational activities./Kawasan hijau dapat menggalakkan gaya hidup sihat dengan menyediakan ruang bagi melakukan aktiviti riadah.

5. Where do you get information about the importance of green areas? (Can answer **MORE THAN ONE**)./Dari manakah anda mendapat informasi tentang kepentingan kawasan hijau? (Boleh tandakan **LEBIH DARIPADA SATU JAWAPAN**).

- ☐ Mass media (Television/Radio)/Media massa (Television/Radio)
- ☐ Printed media (Newspaper/Magazine)/Media cetak (Surat khabar/Majalah)
- ☐ Social Media (Instagram, Facebook, Twitter, Tiktok).
- ☐ Friends/ Rakan-rakan
- ☐ Lectures/Kuliah
- ☐ Parents/Ibu-bapa
- ☐ Non-governmental Organization/Badan bukan kerajaan

Others. Please state:/Lain-lain. Sila nyatakan: _____

6. Which social media platform is most referred to get the information on the green areas? (Can only tick **ONE ANSWER**)./Platform di sosial media yang manakah dirujuk untuk mendapatkan maklumat tentang kawasan hijau? (Tandakan hanya **SATU JAWAPAN SAHAJA**).

- ☐ Instagram
- ☐ Facebook
- ☐ Twitter
- ☐ Tiktok
- ☐ Internet

Others. Please state:/Lain-lain. Sila nyatakan: _____

7. How long do you interact with green areas in a week time?/Berapa kerapkah anda berinteraksi dengan kawasan hijau di sekitar kediaman anda dalam tempoh satu minggu?

- ☐ 1-2 times/1-2 kali
- ☐ 3-4 times/3-4 kali
- ☐ 4-5 times/4-5 kali
- ☐ More than 5 times/Lebih dari 5 kali

Section C: KNOWLEDGE, ATTITUDE AND PRACTICE

Bahagian C: Pengetahuan, Sikap dan Amalan

INSTRUCTIONS: Please tick your answer based on the questions below

ARAHAN: Sila tandakan jawapan anda untuk soalan dibawah

i. Knowledge on the use of green areas./Pengetahuan terhadap kegunaan kawasan hijau.

No.	Statement/Penyataan	Right/ Betul	Wrong/ Salah
1.	Green areas are widely used for recreational activities such as enjoying the view./Kawasan hijau banyak digunakan untuk melakukan aktiviti rekreasi seperti menikmati pemandangan.		
2.	Green areas are widely used for recreation such as jogging./Kawasan hijau banyak digunakan untuk beriadah seperti jogging.		
3.	Green areas are a key term that refers to both protected and unmaintained natural areas./Kawasan hijau adalah istilah utama yang merujuk kepada kawasan semula jadi yang dilindungi dan tidak dilindungi.		
4.	Green areas are the green component and it is an important part of a city open public spaces./Kawasan hijau adalah komponen hijau dan merupakan bahagian penting dari ruang awam terbuka di bandar.		
5.	Green areas are critical components of resilient, sustainable and healthy communities./Kawasan hijau adalah komponen penting bagi membentuk komuniti yang berdaya tahan, mampan dan sihat.		
6.	Urban parks and green areas contribute numerous directly and indirectly to the prosperity, well-being, social ties and everyday life of people./Taman bandar dan kawasan hijau menyumbang secara langsung dan tidak langsung kepada kemakmuran, kesejahteraan, hubungan sosial dan kehidupan seharian masyarakat.		
7.	Green areas can improve mental health and well-being./Kawasan hijau dapat meningkatkan tahap kesihatan mental dan		

	<i>kesejahteraan kesihatan.</i>		
8.	Interaction with an environment such as green areas may increase the one's focus/ <i>Interaksi dengan alam sekitar seperti kawasan hijau boleh meningkatkan daya tumpuan seseorang.</i>		
9.	Interaction with an environment such as green areas may stabilize one's emotions./ <i>Interaksi dengan alam sekitar seperti kawasan hijau boleh menstabilkan emosi seseorang.</i>		
10.	Time allocated on the green areas will improve optimistic mood and emotions, reduce daily stress and stabilize emotions./ <i>Masa yang diperuntukkan pada kawasan hijau akan meningkatkan mood dan emosi yang optimis, mengurangkan tekanan seharian dan menstabilkan emosi..</i>		
11.	Individuals who interact less with green areas tend to suffer obesity and other health problems (Emotional stress)./ <i>Individu yang kurang berinteraksi dengan kawasan hijau cenderung mengalami obesiti dan masalah kesihatan yang lain (Tekanan perasaan).</i>		
12.	Green areas encourage individuals to do recreation and ultimately have a positive impact on health./ <i>Kawasan hijau mendorong individu untuk beriadah dan akhirnya memberi kesan positif terhadap kesihatan.</i>		
13.	Green areas can increase the economic value of real estate./ <i>Kawasan hijau dapat meningkatkan nilai ekonomi hartanah.</i>		
14.	Green areas can bridges' social divides within communities./ <i>Kawasan hijau dapat merapatkan jurang sosial dalam komuniti.</i>		
15.	Green areas can ensure socio-environmental sustainability./ <i>Kawasan hijau dapat memastikan kelestarian sosial-persekitaran.</i>		
16.	The presence of green areas leads to more social interactions./ <i>Kewujudan kawasan hijau mendorong lebih banyak interaksi sosial di kalangan komuniti.</i>		
17.	Green areas help by supplying clean air, lowers the ambient temperature and preserving the natural balance of the city./ <i>Kewujudan kawasan hijau menyumbangkan kepada udara bersih, merendahkan suhu persekitaran dan memelihara keseimbangan semula jadi bandar.</i>		

18.	Interaction with green areas provides various benefits including it can help reduce stress./ <i>Interaksi dengan kawasan hijau memberi pelbagai faedah antaranya dapat mengurangkan tekanan.</i>		
19.	Interaction with green areas provides various benefits including faster healing of the disease suffered./ <i>Interaksi dengan kawasan hijau memberi pelbagai faedah antaranya penyembuhan yang lebih cepat terhadap penyakit yang dialami.</i>		
20.	Interaction with green areas provides various benefits including crime reduction./ <i>Interaksi dengan kawasan hijau memberi pelbagai faedah antaranya pengurangan kadar jenayah.</i>		



ii. Attitude on the importance of green space area./*Sikap terhadap kepentingan kawasan hijau.*

Strongly disagree/ <i>Sangat tidak setuju</i>	Disagree/ <i>Tidak setuju</i>	Not sure/ <i>Tidak pasti</i>	Agree/ <i>Setuju</i>	Strongly agree/ <i>Sangat setuju</i>
1	2	3	4	5

No.	Statement/ <i>Penyataan</i>	Scale/ <i>Skala</i>				
		1	2	3	4	5
1.	The green areas enhance my quality of life./ <i>Kawasan hijau mempertingkatkan kualiti hidup saya.</i>					
2.	I believe the existence of green areas like recreational parks is essential to maintain in a residential area./ <i>Saya berpendapat bahawa kewujudan kawasan hijau seperti taman rekreasi penting dikekalkan di sesuatu kawasan kediaman.</i>					
3.	The management of green areas is the responsibility of the local authority./ <i>Pengurusan kawasan hijau adalah tanggungjawab pihak berkuasa tempatan sahaja.</i>					
4.	The management of the green area is the responsibility of the community./ <i>Pengurusan kawasan hijau adalah tanggungjawab komuniti.</i>					
5.	I often use the green area for recreation./ <i>Saya kerap menggunakan kawasan hijau untuk berekreasi.</i>					
6.	I do not care if there is no green area like recreational park around me./ <i>Saya tidak peduli jika tiada kawasan hijau seperti taman rekreasi di sekitar saya.</i>					
7.	I feel relax whenever I am in green area./ <i>Saya berasa tenang setiap kali berada di kawasan hijau.</i>					
8.	I am aware that the green area helps me with my academic or my career performance./ <i>Saya sedar bahawa kawasan hijau membantu meningkatkan prestasi akademik atau kerjaya saya.</i>					
9.	Visiting green areas like recreational parks is just wasting my time./ <i>Mengunjungi kawasan hijau seperti taman rekreasi hanya membazirkan masa saya.</i>					
10.	We should preserve the green area because of its importance./ <i>Kita perlu memelihara kawasan hijau disebabkan kepentingannya.</i>					

11.	I feel like the green area is not beneficial to help improve human health and well-being./ <i>Saya berpendapat kawasan ruang hijau tidak bermanfaat untuk membantu mempertingkatkan kesihatan dan kesejahteraan manusia.</i>					
12.	I intend to visit the green area as often as possible because of its benefits./ <i>Saya berhasrat ingin mengunjungi kawasan hijau sekerap mungkin kerana kebajikannya.</i>					
13.	I will only go the green area near where I live or work./ <i>Saya hanya mengunjungi kawasan hijau yang berdekatan tempat tinggal/ tempat kerja saya.</i>					
14.	I believe that green area can contribute to the well-being of the surrounding space./ <i>Saya percaya bahawa kawasan hijau mampu menyumbang kepada kesejahteraan ruang persekitaran.</i>					
15.	I think frequent visits to the green area can reduce the health risks./ <i>Saya berpendapat bahawa kekerapan kunjungan ke kawasan hijau dapat mengurangkan risiko terhadap kesihatan.</i>					
16.	I think the subject syllabus should include indicators related to the environmental care such as the importance of green areas./ <i>Saya berpendapat silibus mata pelajaran harus memasukkan indikator berkaitan penjagaan alam sekitar seperti kepentingan kawasan hijau.</i>					

iii. Practice on the importance of green area./*Amalan terhadap kepentingan kawasan hijau.*

Never/ <i>Tidak pernah</i>	Seldom/ <i>Jarang-jarang</i>	Sometimes/ <i>Kadang-kala</i>	Often/ <i>Kerap</i>	Always/ <i>Sangat kerap</i>
1	2	3	4	5

No.	Statement/ <i>Penyataan</i>	Scale/ <i>Skala</i>				
		1	2	3	4	5
1.	When visiting a green area, I throw garbage in the appropriate place./ <i>Ketika mengunjungi kawasan hijau, saya membuang sampah di tempat yang sepatutnya.</i>					
2.	After doing recreational activity, I will make sure that the area is clean./ <i>Selepas melakukan sesuatu aktiviti seperti beriadah, saya akan memastikan kebersihan kawasan tersebut.</i>					
3.	I pick and throw the garbage that is surrounding the green area into the dustbin./ <i>Saya mengutip dan membuang sampah yang terdapat di sekitar kawasan hijau ke dalam tong sampah.</i>					
4.	I don't do anything that could destroy the green areas such as doing an open burning./ <i>Saya tidak melakukan perbuatan yang menjejaskan kawasan hijau seperti pembakaran terbuka.</i>					
5.	I always educate my family and friends about the importance of the green area./ <i>Saya sentiasa mendidik keluarga dan rakan tentang kepentingan kawasan hijau.</i>					
6.	I always get latest updates in efforts of preserving green areas./ <i>Saya sentiasa mendapatkan maklumat terkini dalam usaha memelihara kawasan hijau.</i>					
7.	I would participate in programs that are related to the preservation of green areas./ <i>Saya akan mengambil bahagian dalam program yang berkaitan dengan pemeliharaan kawasan hijau.</i>					
8.	When I visit green areas, I'd bring my own container for drinks and food that could be reused so that it'd would reduce the amount of total garbage that might pollute green areas./ <i>Ketika saya mengunjungi kawasan hijau, saya membawa bekas air dan makanan yang boleh diguna semula agar dapat mengurangkan penghasilan sampah yang boleh mencemarkan kawasan hijau.</i>					
9.	I would read brochures that are related to all aspects of green areas if					

	given to me./ <i>Saya akan membaca risalah berkaitan segala aspek kawasan hijau jika diberi kepada saya.</i>					
10.	I search and find information about the importance of green space areas./ <i>Saya berusaha mencari maklumat tentang segala aspek berkaitan kawasan hijau.</i>					
11.	I would share information on all aspects that are related to green areas with family and friends./ <i>Saya akan berkongsi maklumat tentang segala aspek berkaitan kawasan hijau bersama keluarga dan rakan-rakan.</i>					
12.	I'm ready to lend some money to donate for preservation of green areas./ <i>Saya bersedia mengeluarkan duit untuk sumbangan bagi pemeliharaan kawasan hijau.</i>					
13.	I am willing to contribute my energy in (Communal works) to maintain the sustainability of green areas./ <i>Saya sanggup menyumbang dari segi tenaga (Gotong royong) untuk mengekalkan kelestarian kawasan hijau.</i>					
14.	I will report to authorities if I see any damaging acts to green areas (Cutting down plants or trees)./ <i>Saya akan melaporkan kepada pihak berkuasa apabila melihat perbuatan yang menjejaskan kawasan hijau (Menebang pokok).</i>					
15.	I am willing to defend green areas from getting repealed or revoked to other uses./ <i>Saya sanggup mempertahankan kawasan hijau daripada dimansuhkan kepada kegunaan lain.</i>					
16.	I am willing to participate in Non-governmental Organizations that focus on green areas conservation efforts./ <i>Saya sanggup menyertai badan bukan kerajaan yang menjurus terhadap usaha pemeliharaan kawasan hijau.</i>					
17.	I support efforts to urge the government to gazette more green areas because of its importance./ <i>Saya menyokong usaha mendesak kerajaanewartakan lebih banyak kawasan hijau disebabkan kepentingannya.</i>					

Section D: RECOMMENDATION

Bahagian D: Cadangan

INSTRUCTIONS: Please tick your answer based on the questions below

ARAHAN: Sila tandakan jawapan anda untuk soalan di bawah

1. In your opinion, what is the most appropriate medium to disseminate information regarding the importance of green areas? Choose **ONE** and please provide the reason for your answer./Pada pendapat anda, apakah medium yang paling sesuai untuk mendapatkan maklumat mengenai kepentingan kawasan hijau. *Sila pilih **SATU** dan nyatakan sebab anda.*

☐ Mass media (etc. television/ radio)./Media massa (etc. televisyen/ radio).

☐ Printed Media (etc. newspaper/ magazine)./Media bercetak (etc. surat khabar/ majalah).

☐ Social Media (Instagram, Facebook, Twitter, Tiktok)./Media Sosial (Instagram, Facebook, Twitter, Tiktok).

☐ Public education programmes./Program pendidikan awam.

☐ Local Community./Komuniti setempat.

☐ Non-Governmental Organization./Badan Bukan Kerajaan.

Others. Please state:/Lain-lain. Sila nyatakan: _____

2. What is the most effective measure to preserve the green area? Choose only **ONE**/Apakah kaedah yang paling berkesan untuk melestarikan kawasan hijau? Pilih **SATU** sahaja.

☐ Strengthen the policies and the legislation regarding the green areas./Memperkukuhkan dasar dan perundangan berkaitan kawasan hijau.

☐ Engagement of the communities in the green area management./Penglibatan komuniti dalam pengurusan kawasan hijau.

☐ Enhancing reforestation or replantation./Mempertingkatkan penghutanan semula atau penanaman semula.

☐ Allocate sufficient funds for the green management./Memperuntukkan dana yang mencukupi untuk pengurusan kawasan hijau

☐ Strengthen the role of government agencies (local authority) in efforts to preserve green areas./Memperkasa peranan agensi kerajaan (kerajaan tempatan) berkaitan dalam usaha melestarikan kawasan hijau