

Green Practice Implementation Among Residential Area In Kota Bharu

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Abstract

This study outlines the knowledge and implementation of green practices among the residential area in Kota Bharu. This study focuses on the green practice that was practiced at home. The respondents were among the resident of residential area in Kota Bharu. The objectives of this study is to know the level of green practice knowledge among the residents in Kota Bharu. The second objective is to know the level of green practice implementation among residential area in Kota Bharu and the last objective is to know the correlation and regression between the knowledge and implementation of green practices among residential area in Kota Bharu. There are two methods to be consider in this study. The methods used are observation and questionnaires. For the purpose of this study, questionnaires are divided into 3 main category. Which is respondent bibliography, green practice knowledge and green practice implementation in which contains three main aspect that contributes the environmental problem. The aspects are the daily activities that can reduce the energy consumption, reduce solid waste generation and reduce water use. This research analysis using descriptive analysis, Pearson Correlation and Linear Regression. Based on the results, the terms used at each points on the level measure were “0” = disagree, “1” = neither disagree nor agree and “2” = agree were adopted. The result show that respondent have a good knowledge (1.63) and good implementation of green practice (1.50). However, the correlation between green practice knowledge and green practice implementation shows the weak correlation with the Pearson Correlation 0.283. In addition, the percentage of linear regression is 7.9% show that the green practice knowledge give only small impact of green practice implementation of residents in Kota Bharu.

Key Words: green technology; sustainable; green practice; water usage; energy consumption

1.0 INTRODUCTION

The word of green technology is relatively new. Having been adopted just over the last couple of decades, green is the way to go today. The green technology definition means the technology which is environmentally friendly, developed and used in such a way so that it doesn't disturb our environment and conserves natural resources. Green technology also referred to as environmental technology and clean technology. In the stages of its development, the future only promises to bring bigger and better things for this field. It will in fact be a necessity of the future.

Relying on the availability of alternative sources of energy, the purpose of this technology is to reduce global warming as well as the greenhouse effect. It is the main objective to find ways how to create new technologies in such a way that they do not damage the planets natural resources. In general, it also expresses less harm to human, animal, and

plant health, as well as damage to the world. Today developed as well as developing countries are turning to green technology to secure the environment from negative impacts.

Actually, green technology gives us an idea about the messing up of the environment due to human intrusion and the important need to slow down and adopting healthier ways towards life. This study was conducted to identify the green practice at home among the resident in Kota Bharu. Green practice is a daily practice that promotes a variety of activities to help reduce the environmental footprint and promote sustainability. By adopting green practice wisely, the earth can be protected against environmental pollution. Today, green practice becomes more imperative. It is important to stay current with what is happening around. By using green technology, industries and regulatory bodies are already taking steps in the right direction. As a Malaysian, everybody should have taken an action and involved with this some easy environmentally friendly solutions.

Developing a planned community with green technology practice, making less packaging for foods, using environmental friendly machines are just a few examples for go green action. Green practices are step ahead in saving the environment and make the earth free from any danger. The importance of this study to know the level of knowledge about the green practice among the residents in Kota Bharu. Actually, green practice encourages the concept of cleanliness, freshness and safe. As we know, there are so many actions are taken by government to give the information and awareness to public about the importance of green practice. Social media as a major role in providing information and awareness to everyone. Soon, we will realize the importance of green practices, the better it will be for our environment and planet. Knowledge is important key to move forward for another step of green daily practice.

This study will show the daily practices are categorized as a green practice whether we know or not. There are some practices at home will encourage the household to get involved and make a difference and fantastic impact every day. Everywhere you turn, people are looking for ways to reduce their environmental footprint and act greener, not just in industry, but at home as well. In this study, there are three main category are divided in green practice. There are the green practice that will reduce energy consumption, green practice that will reduce the solid waste generation and last is the green practice that will reduce the water usage. Today, we can find technology in everywhere like computers, television, mobile phones, fans, washing machines, dishwashers and other electronic items have become a norm in our life. But this is the time we learn how to live sustainable lifestyles by using green technology and implement the green practice.

The way we heat and cool our homes, cook our food, wash our clothes, use energy resources and even the air breathe needs to be looked into. Green technology practice is the way will reduce pollution and improve the cleanliness as well. With green practice, even small changes at home can have a dramatic impact. Green practices will helps the development drive towards in sustainable energy practicing and better way of life. We can live more sustainable if we become more environmentally, learn from nature, live more modestly and become an active citizen in developing the environment.

Based on past study of “*Tahap Keprihatinan Alam Sekitar dan Kepenggunaan Produk Hijau*”, the result shows that the level of concern to environment are in high level but the level of green product consumption is at the modest level. The result of the study supposed to be a secondary data for this study and should be support the problems in implementation of green practice among the residents in Kota Bharu. Green product consumption is one of the element of green practice that will save the environment and our planet. The positive perception of green product does not mean the good implementation of green practice. This study hope will give the answer for the challenges in green practice implementation.

2.0 PROBLEM STATEMENT

From Per Christensen, based on his study of Different Lifestyles and Their Impact to Environment said that households have very different impacts on the environment. A difference in lifestyle can have a different impact on the environment. How we choose to live, such as transport and choose our provisions can have a dramatic impact on the environment. Humans affect the environment in several ways. Common effects include decreased water quality, increased pollution and greenhouse gas emissions, depletion of natural resources and contribution to global climate change. Some of these are the direct result of human activities, whereas others are secondary effects that are part of a series of actions and reactions. Unfortunately, humans are the most polluting species. Earth is very good at recycling waste, but people are generating far more than earth can cope with. Pollution occurs at different levels and it does not just affect our planet, it impacts all species, including mankind, who dwell on it.

3.0 OBJECTIVE

- To know the level of knowledge in green practice among residential area in Kota Bharu
- To know the level of implementation in green practice among residential area in Kota Bharu
- To know the corelation between the knowledge and implementation of green practice among residential area in Kota Bharu

4.0 RESEARCH SCOPE

This study focuses on the green practice that was practiced at home. There are three main aspects to be consider. There are the daily activities that will reduce energy consumptions, the activities that will reduce the solid waste generation and the last is the activities that will reduce the water usage. The respondents were among the residents of residential area in Kota Bharu.

5.0 IMPORTANCES OF RESEARCH

This study was conducted to expose the importance of green practices to society. This study is the early step in applying the concept of green practice in everyday life especially at homes. In addition, this study hope will be a step in preserving and conserving the environment.

6.0 LITERATURE REVIEW

6.1 Definition of Green Technology

Based on Official Portal Ministry of Energy, Green Technology and Water (KeTTHA), green technology is the development and application of products, equipment and systems used to conserve the natural environment and resources, which minimizes and reduces the negative impact of human activities.

6.2 Criteria of Green Technology

Based on Official Portal Ministry of Energy, Green Technology and Water (KeTTHA), Green Technology refers to products, equipment, or systems that satisfy the following criteria:

- It minimises the degradation of the environment
- It has a zero or low greenhouse gas (GHG) emission
- It is safe for use and promotes healthy and improved environment for all forms of life
- It conserves the use of energy and natural resources
- It promotes the use of renewable resources.

6.3 Sustainability

Sustainability, as a concept, is well established and commonly accepted. One of the reasons for its popularity is based on the argument that our planet can only supply life on Earth only for so long with the resources it currently has. When those natural resources are depleted, life on Earth as we know it is in danger of demise. The only solution is to make major changes as to how we consume Earth's resources (H.Peder Hagglund, 2013).

6.4 Sustainable Living

Based on Wikipedia, sustainable living or green living is the practice of reducing a demand on natural resources by making sure to replace what we use to the best of our ability. Sometimes that can mean not choosing to consume a product that is made using practices that don't promote sustainability and sometimes it means changing how you do things so that you start becoming more of an active part of the cycle of life.

We all know that climate change, global warming, depletion of ozone layer and resource depletion are real and their impact on human and animal lives can be devastating. It is an opportunity for people to adopt actions for green living that can help them to reduce their carbon footprint or environmental impact by altering their lifestyle. Simple measures like using public transportation more often, reducing energy consumption, becoming more eco-friendly can go a long way in reducing your environmental impact and making this planet a clean and safe place.

6.5 Definition of Green Initiative

Based on Wikipedia, green initiative has main objective the offsetting of Greenhouse gases emitted by human activities that can range from complex industrial production processes to simply driving a car, with reforestation projects in riparian areas that need to be recovered. The trees planted will absorb carbon dioxide from the atmosphere and provide, as well as environmental benefits, such as water and air quality preservation, and biodiversity protection.

6.6 Water Saving

Based on Official Portal of Penang Green Council, there are some tips for water saving in our daily activities, such as:

- Never live a tap running
- Teach your children to shut taps properly
- Fix all leaking taps, pipes or toilet system in your home immediately
- Avoid using a hose as far as possible. Hosing usually waste water
- Wash your car or motorcycle less often. Use a bucket and a damp clothes or sponge
- Water your plants with watering can. Water your plant at the roots, not the leaves
- Mop your floor instead of using a hose or splashing water from a bucket
- Sweep your porch or driveway out your home instead of using a hose
- Turn off the tap when brushing your teeth. Turn it on only to rinse
- Turn off the shower when you are soaping your body. Turn it only to rinse
- Turn off the tap when you are soaping your hand. Turn it only to rinse
- Take shorter showers
- Fill and plug the sink when washing/ rinsing food and cutlery
- Install double-flush toilet systems. A half-flush usually does the job
- Use your washing machine when you have full load of clothes
- Do not leave the water running when washing clothes by hand
- Do not flush rubbish down the toilet. Put it in the rubbish bin

6.7 Household E-Waste

Based on Official Portal of Penang Green Council, electrical and electronic appliances which are not in use by the original user and doesn't bring any value to the user. For example personal computer, TV, radio, refrigerator, washing machine, air-conditioner, printer, mobile phone, DVD/ VCD player, mobile phone battery and etc. We need to recycle household e-waste because it will gives adverse impact on human health and the environment.

For example, electroplating process involved in computer circuits manufacturing uses several types of heavy metal and computer chip production involves the usage of chemicals such as organic & inorganic acids and solvents. All these substances are affecting human health as well as damaging the environment. Therefore, it requires a proper disposal method and management.

7.0 RESEARCH FLOW CHART

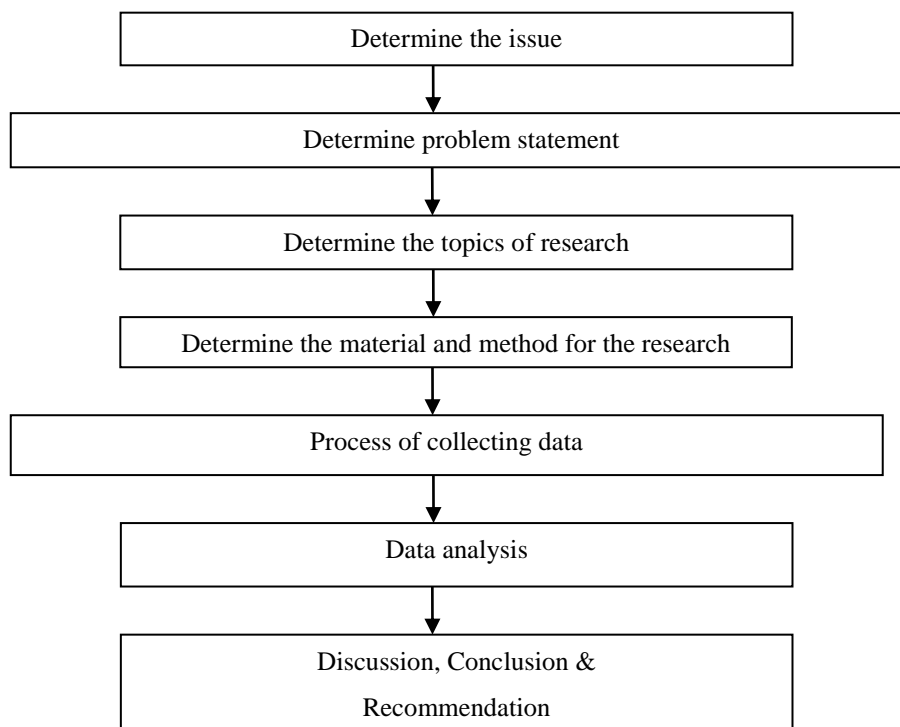


Figure 1: Methodology research flow chart

8.0 RESEARCH METHODOLOGY

There are 2 method to be consider in this research . There are observation and questionnaire.

8.1 Observation

For the achievement of the objectives, this study used an observation to get the information of making the questionnaires. This study use a observation that involves studying the spontaneous behavior of participants in natural surroundings. The researcher records what have been see throughout the observation. This observation used to generate daily activities among the residents. These observations conducted on a small community to get the summarization of the green practice aspects.

8.2 Questionnaires

A questionnaire was develops after conducting an observation and literature review of green practice implementation among residential area. Eighty-three item were listed under four categories. The categories are:

- Section A : Demography Respondent
- Section B : Green practice knowledge among the residential area of Kota Bharu
- Section C : Green practice implementation among the residential area of Kota Bharu that will reduce the energy consumption
- Section D : Green practice implementation among the residential area of Kota Bharu that will reduce the solid waste generation
- Section E : Green practice implementation among the residential area of Kota Bharu that will reduce the water usage

The first section is respondent demography including gender, status and household numbers. The items are selected due to observation that have been done. This research is to know the indicator that affected the green practice implementation among the residential area of Kota Bharu. Section C, D and E are section to know the green practice that implemented by respondent. The items were generate from the observation and literature reviews. Three major dimension are created such as, the green practice that will reduce the energy consumption, the green practice that will reduce the solid waste generation and the last one is the green practice the will reduce the water usage. All this three section were combined to get the level of green practice implementation. This questionnaire used 3-point Likert Scale items based on from disagree =”0”, neither disagree nor agree =”1” and last scale is agree =”2”. This scale is measure from poor to excellent for performance measure.

9.0 POPULATION AND SAMPLING PROCEDURE

For the purpose of this research project, the target population consist all the residents among residential area in Kota Bharu. For the sampling, 600 residents are taken as a respondents. The respondents interviewed by every items and the choice answers are ticked by researcher. Data was collected over six months between January until Jun in 2017.

10.0 DATA PROCESSING AND ANALYSIS

Complete questionnaire were inspected and edited, and the data were transferred to SPSS spreadsheet. The data were analysed by SPSS statistical software package. The techniques used during the data analysis stage of the research project include descriptive statistics such as mean score, percentage, correlation coefficients and regression. This research using the Pearson Correlation by assuming the sample taken are random sample. Based on the results, the terms used at each points on the level measure were “0” = disagree, “1” = neither disagree nor agree and “2” = agree were adopted.

11.0 RESULT

This chapter presents the results of the data analysis performed to examine green knowledge and green practice implementation among the residential area in Kota Bharu. All information used in this study was derived by questionnaire data. Six hundred sets of questionnaires were coded and the raw data was transferred into Statistical Package of Social Science (SPSS) version 20 for analysis. The data was separately performed in Microsoft Excel 2013 to present the results. The results are divided to three categories based on the research objectives.

11.1 Frequency Analysis for Demography Respondent

11.1.1 Gender

Table 1: Frequencies for Respondent Gender

<i>Gender</i>	<i>Frequency</i>	<i>Percentage</i>
Men	268	45
Women	332	55
Total	600	100

11.1.2 Status

Table 2: Frequencies for Respondent Gender

<i>Status</i>	<i>Frequency</i>	<i>Percentage</i>
Single	343	57
Married	257	43
Total	600	100

11.2 To Know The Level of Green Practice Knowledge among Residential Area in Kota Bharu

Table 3: Mean Score For Green Practice Knowledge Among Residential Area In Kota Bharu

<i>Item No</i>	<i>Item</i>	<i>Score Mean</i>
S4	Green practice is a good practice among of us to protect the environment	1.7
S5	Green practice is an activity that will preserve our environment and reduce the pollution	1.72
S6	Implementation of green practices can reduce energy consumption	1.59
S7	Implementation of green practices can reduce waste generation from daily activities	1.57
S8	Global warming happens caused of depletion of the ozone layer	1.48
S9	Human activities will contribute to the increase of greenhouse gases and the depletion of ozone layer	1.58
S10	Green practice is an alternative introduced by the government to get the solution of weather change phenomenon	1.59
S11	Green practice will contributes to improve the quality of human life and environment	1.68
S12	Green practices can improve healthy by reducing the infection and spread of the diseases	1.63
S13	We as a human of the world are responsible to ensure our earth is a safe place for all living	1.69
S14	Green practice is a best way to enhances the economy and will save your money	1.58
S15	Green Technology is an application of science to conserve our environment	1.65
S16	Carbon dioxide is the largest contributor to greenhouse effect	1.55
S17	Natural disasters such as hurricanes, ice melts in the North and South Pole, rising sea levels and temperatures, extinction of flora and fauna are the effects of global weather phenomenon	1.58
S18	We as a consumer are the largest contributors in greenhouse gas emissions through our daily activities	1.62
S19	Daily activities that contribute to global climate change is fuel combustion from vehicles, electricity, chemicals use such as insecticides, chemical fertilizer and others	1.6
S20	Air pollution, water pollution, noise pollution and so on will affect the quality of life and environment	1.7
S21	We should practice green practices as possible as we can do	1.72
S22	Lifestyle and mind changes will move towards for awareness and practicing of green technology	1.61
S23	The small changes that we make today will give a good impact in the future	1.72
Score Mean Average		1.63

Table 3 presents the mean score of green practice knowledge of residents in Kota Bharu. All the items of green practice knowledge have a mean scores greater than 1. It indicates that the residents of Kota Bharu have knowledge of green practice, means the respondent knowledge to be “agree”. The means score for knowledge of green practice in agree measure ranged over than 1.63. Similarly, the importance and benefits of green practice (S5 and S21) with the mean of 1.72 was the highest-rated while the S8 (global warming are caused of of depletion ozone layer) had the lowest mean score with 1.48.

11.3 To Know The Level of Green Practice Implementation among Residential Area in Kota Bharu

11.3.1 Green Practice Implementation That Will Reduce Energy Consumption

Table 4: Mean Score For Green Practice Implementation Among Residential Area In Kota Bharu (Reduce Energy Consumption)

<i>Item No</i>	<i>Item</i>	<i>Score Mean</i>
S24	I always switch off the lights when lighting is sufficient	1.74
S25	I only turn on the light at night	1.59
S26	I always turn off the light if not using the associated space	1.77
S27	I will make sure to switch off all the switch during sleeping time	1.67
S28	I only turn on the switch for used area at night	1.72
S29	I always open the window for natural lighting	1.59
S30	I always keep the lights in a clean condition to get maximum efficiency of lighting	1.54
S31	I always switch off the television when not watching	1.63
S32	I always keep the refrigerator door closed after using it	1.77
S33	I will make sure the refrigerator door is in good shape and condition	1.65
S34	I always switch off the fan when not in use	1.74
S35	I just turn on the computer / laptop when I want to use it	1.74
S36	I only use air conditioners at the time required	1.57
S37	I always keep the temperature of the air conditioner in a comfortable condition	1.6
S38	I will keep the doors and windows closed when the air conditioning is turned on	1.69
S39	I always do a maintenance of air conditioning to ensure the maximum energy efficiency	1.49
S40	I only use the water heater for a certain time only	1.67
S41	I will make sure not to let the phone in a charged for a long time	1.58
S42	I will make sure to switch off all the equipment after use. Ex: washing machine, blenders etc.	1.69
S43	I use a light bulb that has a higher efficiency	1.69
Score Mean Average		1.66

Table 4 presents the mean score of green practice implementation that will reduce the energy consumption. All the items of green practice have a mean scores greater than 1. It indicates that the residents of Kota Bharu have a good implementation of green practice, means the respondent implementation to be “agree”. The means score for these green practice implementation in agree measure ranged over than 1.66. Similarly, daily practice of lights and refrigerator (S26 and S32) with the mean of 1.77 was the highest-rated while the S39 (maintenance of air-conditioning) had the lowest mean score with 1.49.

11.2.2 Green Practice Implementation That Will Reduce The Generation Of Solid Waste

Table 5: Mean Score For Green Practice Implementation Of Residential Area In Kota Bharu (Reduce The Generation Of Solid Waste)

<i>Item No</i>	<i>Item</i>	<i>Score Mean</i>
S44	I always buy stuff that in less packaging	1.22
S45	I prefer to use recyclable items instead of disposable items	1.36
S46	I prefer to use personal bags for shopping	1.23
S47	I will take care and repair the items for last longer	1.5
S48	I always buy stuff in bulk rather than small packages that can cause the waste of packaging materials	1.28
S49	I always use the items in high concentration eg soap to reduce packaging due to the smaller size	1.32
S50	I always buy vegetables are not in plastic packaging	1.1
S51	I produced compost fertilizer from food and plant waste	1.17
S52	I give excessive food waste to animals	1.47
S53	I prefer to sell or donate unused items instead of throwing them. Ex: clothing, books	1.44
S54	I prefer to borrow, rent or share items that are less expensive than buying	1.06
S55	I prefer to use cloth and sponge instead of tissue	1.38
S56	I will not take more than necessary. Ex: tissue and flavors in the restaurant	1.36
S57	I will let the plant waste on the ground so that the decomposition process can done perfectly	1.38
S58	I will use the compost bins for the rest of the plant	1.23
S60	I always use reusable containers instead of disposable cartons, plastics, etc.	1.44
S61	I always use paper on both sides of the page	1.44
S61	I always keep the paper that has been used for reuse	1.42
S62	I always wash plastic containers for reuse	1.5
S63	I always buy items in plastic containers or reusable glass	1.54
Score Mean Average		1.34

Table 5 presents the mean score of green practice implementation that will reduce the solid waste generation. All the items of green practice have a mean scores greater than 1. It indicates that the residents of Kota Bharu have a good implementation of these green practices, means the respondent implementation to be “agree”. The means score for these green practice implementation in agree measure ranged over than 1.34. Similarly, excessive food waste for animals (S52) with the mean of 1.47 was the highest-rated while the S54 (I prefer to borrow, rent or share items that are less expensive than buying) had the lowest mean score with 1.06.

11.2.3 Green Practice Implementation That Will Reduce The Water Usage

Table 6: Mean Score For Green Practice Implementation Of Residential Area In Kota Bharu (Reduce The Water Usage)

<i>Item No</i>	<i>Item</i>	<i>Score Mean</i>
S64	I use rainwater for watering	1.5
S65	I will make sure the grass is not cut too short to minimize evaporations	1.48
S66	I will make sure that the sprinklers overflow is not too delicate because it is easily blown by the wind and will minimize the effectiveness	1.45
S67	I plant trees that need the minimum watering	1.41
S68	I always watering the plants early morning or late afternoon	1.6
S69	I use a sprinkler that has time control	1.42
S70	I always reduce the time of watering the trees	1.37
S71	I always reduce water wastage	1.57
S72	I use a bucket to wash the vehicle	1.56
S73	I used the compost fertilizer material to reduce soil drying	1.49
S74	I use a glass to rinse while brushing	1.32
S75	I use a small shower head	1.47
S76	I limit the use of bathrooms to clean themselves to all family members	1.33
S77	I will make sure the leakage on the toilet is repaired immediately	1.63
S78	I use a dual flush toilet	1.54
S79	I will use the minimum of detergent when washing the dishes to reduce the water quantity of rinsing	1.44
S80	I did not dump the frozen food with running water	1.59
S81	I wash clothes using a washing machine in large quantities	1.64
S82	I use a dishwasher in large quantities	1.42
S83	When I bought a washing machine, I will considere the water use of the machines	1.62
Score Mean Average		1.49

Table 6 presents the mean score of green practice implementation that will reduce water usage. All the items of green practice have a mean scores greater than 1. It indicates that the residents of Kota Bharu have a good implementation of these green practices, means the respondent implementation to be “agree”. The means score for these green practice implementation in agree measure ranged over than 1.49. Similarly, washing clothes using a washing machine in large quantities (S81) with the mean of 1.64 was the highest-rated while the S74 (using a glass to rinse while brushing) had the lowest mean score with 1.32.

11.2.4 Average Score of Green Practice Implementation in All Aspects

Table 7: Mean Score For Green Practice Implementation Of Residential Area In Kota Bharu

<i>GREEN ASPECTS</i>	<i>Score Mean Average</i>
Reduce Energy Consumption	1.66
Reduce Solid Waste Generation	1.34
Reduce Water Usage	1.49
Average	1.50

11.3 To Know The Corelation and Regression Between The Knowledge and Implementation Of Green Practice among Residential Area in Kota Bharu

Table 8: Correlation Between Knowledge And Green Practice Implementation Of Residential Area In Kota Bharu

	knowledge	practices	
knowledge	Pearson Correlation	.283**	
	Sig. (2-tailed)	0	
	Sum of Squares and Cross-products	27304.693	13563.695
	Covariance	45.584	22.758
	N	600	597
practices	Pearson Correlation	.283**	
	Sig. (2-tailed)	0	
	Sum of Squares and Cross-products	13563.695	84127.028
	Covariance	22.758	141.153
	N	597	597

Table 8 presents the Pearson Correlation between the knowledge of green practice and the implementation of green practice of residents in Kota Bharu. The significant value is 0.000 and Pearson Correlation is 0.283.

Table 9: Linear Regression Between Knowledge And Green Practice Implementation Of Residential Area In Kota Bharu

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.283 ^a	0.08	0.079	11.40301	0.08	51.989	1	595	0

a. Predictors: (Constant), knowledge

Table 9 presents the linear regression between the knowledge of green practice and the implementation of green practice among residents in Kota Bharu. The adjusted R Square value is 0.079.

12.0 DISCUSSION

The goal of this study was to know correlation between green practice knowledge and green practice implementations among the residents in Kota Bharu . This chapter is designed to provide further insight on the results of this research as they relate to the findings. First is a discussion of green practice knowledge and the second one a discussion about green practice implementation. Third is a finding on the correlation and regression between green practice knowledge and green practice implementations among the residents in Kota Bharu.

12.1 Respondent Demography

Table 1 shows the frequencies of respondents gender. The majority of respondents for this study were female (55%) and the rest are male with percentage 45%. Table 2 shows the respondent status. Based on Figure 2, 57% of respondents are single with frequency 343, and the rest 257 respondents are married with 43%. Total respondents are taken for this research are 600. The respondents are the residents in Kota Bharu. Single respondents majority are students who lives in Kota Bharu.

12.2 To Know The Level of Green Practice Knowledge among Residential Area in Kota Bharu

The analysis find the mean score of green practice knowledge of residents in Kota Bharu. From the literature study, several items such as the benefit of green practice, effects of daily activities, human responsibility of environmental protection, lifestyle and so on are brought to this part. First, it was assume that the level of green practice at a low level among the residents. However, based on the research findings, residents have a good knowledge of green practice.

Table 3 shows the mean score of green practices knowledge of residents in Kota Bharu. Data were analyzed by SPSS by using the frequency analysis. From the data analysis, the level of knowledge shows the score mean 1.63. Knowledge of residents may be due to social media such as television, internet, newspapers and the changes that have been introduced in public to ensure the greening lifestyle in our society. It shows a positive change because the green practice approach is still new in our country. Based on the items in the questionnaires, the residents have an awareness that the lifestyle is a main contributor to environmental pollution. They acknowledge, as a human, the responsibility for supporting green practices is to ensure the well-being of the environment. Actually, the transition in our country to a green society is happening too slow in many aspects like individual, industrial and others. So, this study tries to show that households have very dramatic impacts on the environment.

12.3 To Know The Level of Green Practice Implementation among Residential Area in Kota Bharu

Based on data analysis, green practice implementation among residents in Kota Bharu are divided into three categories. The first category is a green practice that can reduce energy consumption. There are twenty items listed in the questionnaire including the daily lifestyle and activities that will reduce the energy consumption. The item that gives the highest mean score is 1.77 which is related to the use of basic electrical equipments for lighting and refrigerator. The majority of respondents did not turn on the lights for whole space in the house. They only turn on the lights in the space are used only. Similarly, the respondent agrees they closed the fridge door after use. Letting open the fridge door will use a lot of energy to keep the temperature. Indirectly, this is a one step to save energy and money. In addition, the second highest mean score is 1.74 which is the practice of using fan and computer. Majority of respondents only turn on the fans and computers when they want to use it. While the lowest mean score is 1.49 which is the maintenance frequencies for air conditioning system. This may be due to less expertise in maintenance of air conditioning systems. Respondents need to use specialist services and the cost a bit higher. So that, the respondent does not maintain the maintenance. Actually, maintaining the air conditioning system can be done by himself. Overall, the average score mean for green practice that will reduce energy consumption among the population is 1.66.

The second category is green practice that will reduce the solid waste generation. There are twenty items listed in the questionnaire including the daily lifestyle and activities that will reduce the energy consumption. From Table 5 above, it was found that the average score mean for green practices that will reduce the generation of solid waste is 1.34. As we can see, this value is lower than compared to green practices that will reduce energy consumption in first category. The highest score mean is 1.54 which is related to the purchase of goods in reusable plastic or glass containers. Most respondents reused the packaging containers such as plastic bottles and glass. The second highest score mean is 1.47 which is related to the food waste.

Food waste from home are not thrown away, even it given to pets. From observation, it was found that it becomes a habit of the population to have a pets in order to avoid food wastage. The lowest score mean for this category is 1.22 which is related to the purchase of non-packaged goods. The result found that the population still does not make packaging as factor when making a purchases of goods. This may be due to the habits of sellers and buyers who use plastic wrapper from the past. Nevertheless, various measures have been introduced by the government in the process of reduce the generation of solid waste such as the use of private bags during shopping, non-plastic day in shopping centers and payment for plastic prices to buyers.

The third category is green practice that can reduce the water usage. There are 20 items listed in this category. Based on Table 6, the score mean of these green practices is 1.49. It shows that respondents adopting a water saving measures. The highest score item is 1.63 which is related to leakage maintenance. Majority of respondents are sensitive to leakage problems in their homes. So, they make an immediate maintenance to avoid wastage of water. The second highest score mean is 1.62 which is related to the purchase of washing machines. Majority of the respondents take water use as a factor when purchasing a washing machine. It shows that respondents have long-term awareness in supporting water saving measures. The lowest score mean practice is related to water usage in bathroom. The item of using glasses when brushing have a score mean of 1.32. Filling water in the glass while brushing the teeth can reduce the water usage. This is because most of our society let the water flow continuously into the sink when brushing. This practice is still considered a minor contributor to the wastage of water among our communities. Therefore, awareness of the amount of water wastage from daily activities should be noted. The amount of water wastage that occurs in a year is quite high.

Overall, the score mean of green practice implementation among the residents in Kota Bharu is 1.50. The highest score mean is the practices that reduces energy consumption(1.66), followed by the green practice that reduce water usage(1.49) and the lowest score mean is green practice that reduce generation of solid waste(1.34). This shows that level of awareness and green practice among residents in Kota Bharu are quite good. However, lifestyle society is still need attention, especially in terms of the use of energy-saving tools, the use of natural resources and so forth.

12.4 To Know The Corelation and Regression between The Knowledge and Green Practice Implementation among Residential Area in Kota Bharu

The third objective is to make a correlation between the green practice knowledge and green practice implementation among the residents in Kota Bharu. Data are analyzed by using Bivariate Analysis Correlation because there are two variables are taken in this research. The first variable is knowledge in green practice among residents and the second variable is the green practice implementation among the residents in Kota Bharu. Pearson Correlation is using to analyze the correlation between these two variables with assuming the sample taken is random sample. 95% confidence level are using for this analysis.

From the Table 7 above, the variable are significant with two-tail significant 0.000 and the significant value is under 0.05. The Pearson Correlation value from the above table is 0.269 with positive correlation. It shows that the higher of knowledge, the higher of green practice implementation. From the result, the value of 0.269 shows the weak correlation between knowledge in green practice and green practice implementation of residents in Kota Bharu. This is because of there are many other factors or variable that will affects the green practice implementation, such as attitude, household income, placement area such as urban or rural, race, awareness and many other factors.

The regression between these two variables is 7.9%. This value shows that knowledge factor only has a small impact on green practice implementation. If this study takes some other factors, the percentage of relationships among these variables can be seen more clearly. Linear regression are using with the knowledge will be a factor that affected the green practice implementation of residents in Kota Bharu. Green practice implementation is taken as dependent variable.

13.0 CONCLUSION

These preliminary results clearly show that the residents have a good level in green practice knowledge and green practice implementation. This study also found that the most people implement the green practice in their daily life. Gender and status do not affect the implementation of green practice among the residents. Most of residents have knowledge that daily practices will contribute the environmental problems. In green practice implementation, there are still resident who do not implement the green practice. They didn't do all the green practice in their daily life, such as practices in reducing the electricity consumption, the use of natural resources, reducing the use of packaging materials and water saving such as planting trees that require minimum watering. Two variables are taken in this study are green practice knowledge and green practice implementation. Correlation between green practice knowledge and green practice implementation shows the weak correlation. Variable of green practice knowledge only give a small impact in green practice implementation. This study should take some other variables to get more precisely correlation and regression.

10.0 RECOMMENDATION

- This study should take the awareness factor to the importances of green practices in our society
- Some variables need to be taken as a factor affected the implementation of green practice in our society
- This study need to use the observation and field study methods to get more precisely data and result

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