

THE AWARENESS OF HALAL GREEN AMONG POSTGRADUATE STUDENTS IN UNISSA FOR SUSTAINABLE CAMPUS

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ABSTRACT

In this study, a quantitative approach has been used as the research method, using a close-ended question to examine the awareness of the Halal green concept among postgraduate students in UNISSA for a sustainable environment. The research objectives are i) To analyse the level of knowledge of the postgraduate student on the Halal Green concept in maintaining a sustainable environment, ii) To measure the level of practices of postgraduate students on the Halal Green concept in maintaining a sustainable environment, and iii) To know the medium of attaining knowledge of the postgraduate student on the Halal Green concept. The respondents were found to have a high knowledge of the Halal Green Concept in maintaining a sustainable environment. However, there is a moderate level of practice among the respondents of the Halal Green Concept in maintaining a sustainable environment. Furthermore, it was also found that there are several alternatives and suggestions for attaining knowledge regarding the Halal Green Concept, such as awareness campaigns, the Halal Green Syllabus, active engagement in green practices, and the usage of solar energy power. With these recommendations, it is hoped that we can maintain a high level of awareness of this concept, regardless of the low level of practice.

Keywords: Awareness, Halal Green Concept, Postgraduate Student, UNISSA, Sustainable

1. Introduction

The concept of halal-green is widely accepted in various fields of research. Halal-green is a new term created by combining the terms halal and green. Halal comes from Arabic and means 'allowed', 'agree', and 'allowed'. Based on the literal definition of halal, it is clear that halal refers to something characterised by the religious decree as permissible according to Islamic law for humans to eat, use, engage in commercial transactions, etc. It covers all aspects, including sound, clean, sacred, safe, quality and harmless products and services. Tan and Lau (2010) state that "green" respects nature. Since there are no verses in al-Qur'an that explicitly mention directly about halal green, the halal-green concept may be built based on the interpretation of halal-tayyib exhorted by Allah SWT in al-Qur'an, such as in Surah al-Baqarah, verse 168.

“O humanity! Eat of that which is lawful and clean on earth, and do not follow the footsteps of Shaitan (Satan). Verily, he is to you an open enemy.”

The above verse shows that the term 'halalan tayyiban' has similarities with the meaning of halal-green, such as goodwill towards humans and nature.

Numerous studies have been made on the green concept and other topics related to this concept. However, few studies have been made on halal green globally, including in Brunei Darussalam. In addition, despite the development of halal courses in Brunei Darussalam, such as the introduction of Halalan Thayyiban Research Centre in UNISA and the incorporation of the Halal aspect under the Food Science and Technology programme in

UTB, there are no specific modules on Halal Green incorporated under these programmes for both undergraduates and postgraduates. This will probably lead to the student's lack of awareness of the Halal Green concept. Hence, this study has focused on the level of knowledge acquired, the practices done by the postgraduate students in maintaining a sustainable environment, and the medium of knowledge on the Halal Green concept.

2. Literature Review

2.1 Definition of Halal Green

Halal Green is a new term created by combining these two terms Halal and Green. In contrast to the phrase haram, which means not permitted and denotes that anything is outside of Allah SWT's forbidding law, the word halal is an Arabic term that implies permissible and not forbidden by Islamic law. According to Islamic law, it is a concept of cleanliness and purity that includes all things and actions permitted for Muslims.

According to Islamic law, halal means pure and lawful and is always combined with *Thayyiban*, which means pure, wholesome, and sound. Allah has stated in the Quran that He has made everything in the world halal to consume, except what has been made haram. It has been stated in the Quran that Allah commands Muslims to eat all that is halal.

“O Mankind, eat of that which is halal (lawful) and thayyib (wholesome and pure) in the earth, and follow not the footsteps of the Syaitan. Surely, he is an open enemy for you”. (Al-Baqarah 2: 168)

This indicates that Islam focuses not only on the halal aspect but on the aspect that brings goodness, benefits, and wholesomeness to the consumer. According to Imam Malik, the words halal and *thayyib* come in one sense as emphasising. Not only does Islam emphasise lawful and permissible things according to Islamic Law, especially in food, but they also emphasise the importance of *thayyiban* in all matters. Ibn Kathir (n.d.) in *Tafsir Ibn Kathir* stated that *thayyiban* brings the meaning of sound, benefit, helpfulness, and niceness regarding habits and attributes. While *halalan thayyiban* is always correlated to food, it is related to all sorts of matter. They have also been discussed widely in various fields, such as science and technology, especially medicine, cosmetics and consumer materials. According to Harlida Abdul Wahab and Alias Azhar (2014), halal is not limited to consumable products only just because it is not forbidden by *syarak*, but halal also includes good food (*tayyib*), such as being clean, safe, having quality and sacred as well as not detrimental.

Although the word ‘green’ is ambiguous and can indicate many different things, its exact meaning relies on where it is used in a phrase. Accordingly, ‘green’ is the colour between cyan and yellow on the visible spectrum. It is evoked by light, which has a dominant wavelength of roughly 495–570 nm. Chlorophyll, the substance that enables plants to photosynthesise and transform sunlight into chemical energy, is by far the primary source of green in nature. Several animals have developed green self-camouflage to adjust to their green surroundings. The emerald, which is made green by the presence of chromium, is one of many minerals that are green in colour. In American, European, and Islamic surveys, green is most commonly associated with nature, life, health, youth, spring, hope, and envy (Heller, 2009). Due to its wide association with nature, it became the colour of the environmental movement. The environmental movement (sometimes called the ecology

movement), including conservation and green politics, is a diverse philosophical, social, and political movement for addressing environmental issues.

2.2 Halalan Thayyiban and Halal Green Concept

The halal-green concept is universally accepted in various fields of study. However, there are still several issues concerning the concepts of halal and green. First, both of these concepts are practised separately, even though they must be combined to form a holistic and comprehensive (*syumul*) management model that considers physical and spiritual values.

Allah SWT expressly prohibits all forms of destruction of this universe.

“It appears that the damage on land and at sea is caused by the actions of human hands so that Allah will feel for them a part of (the result) of their actions so that they will return (to the right path)” (Surah Al-Rum 30: 41)

Damage to the ecosystem is artificial. Human nature is always greedy, oppressive, and so on, which is the ugly side of a human creature. In the view of humanism, environmental damage and imbalance occur due to humans putting their egos first and wanting to control everything (Rosowulan, 2019).

Thus, it is crucial to incorporate halal green as it and halalan thayyiban have comparable definitions in maintaining wellness and wholesomeness and ensuring the harmony of the creations by following the guidelines in the Islamic regulations.

2.3 Verses of Al-Qur'an that are Related to Halal Green

Mohd Shukri Hanapi et al. (2017) stated in their study that they had analysed a few verses of the Quran that can be related to halal green; although there are no direct discussions about halal green in the Al-Quran, they have selected some verses using a thematic approach to analyse the verses with similar meanings to halal-green, which is the aspect of goodness towards humans and nature. The selected verses are verses that discuss halalan-thayyiban. From their whole analysis of the four verses selected, this researcher aims to take the key points from what has been analysed through the verses below:

“O mankind, eat from whatever is on earth [that is] lawful and good and do not follow the footsteps of Satan. Indeed, he is to you a clear enemy. (Al-Baqarah (2: 168).

Bani Tha'qif, Khuza'ah, and Mudlij were the primary audience for the verses in Surah al-Baqarah (2:168) that included the order forbidding (haram) them from ingesting flesh from livestock. The order, though, was universal in nature and applied to everyone.

The word “consumes” or “eat” in the verse refers to "to benefit something from all aspects," according to al-Qurtubi (1993b:143). In other words, it benefits all types of natural resources Allah SWT provides, including food and drinks.

The prohibition (haram) of following Satan's example is mentioned after the verse in Surah al-Baqarah (2:168) that mentions halalan thayyiban, which encourages people to commit *Su'* and *Fahsya'*. When thoroughly examining the entire verse, it is possible to conclude that halal-tayyiban consumer behaviours and proper nutrition significantly impact a person's ability to avoid engaging in any activity connected to *al-Su'* and *al-Fahsya'*. It includes all types of sins and behaviours that encourage or contribute to vice.

From surah Al-Ma'idah (5:87- 88): *“O you who have believed, do not prohibit the good things which Allah has made lawful to you and do not transgress. Indeed, Allah does*

not like transgressors. Moreover, eat what Allah has provided for you [which is] lawful and good. And fear Allah, in whom you are believers.”

Similar to the previous verse, one other discusses the spiritual dimension of implementing the halalan-thayyiban principle. According to At-Thabariy, the word halalan tayyiban, which appears early in this verse, is related to the *al-mu'tad* idea, which indicates an excessive or extreme attitude or a violation from Shariah set limits. So, since it is related to the idea of halalan thayyiban, it also forbids any attempt to convert something from halal to haram or vice versa and avoids excessive attitudes and immorality.

2.4 Maintain Halal Green

According to the Department of Environment, Parks, and Recreations statistics through the Ministry of Development, Brunei Darussalam, in 2019, over 297,218 metric tonnes (MT) of waste was generated in Brunei Darussalam. Of that amount, only 11.3% was recycled (Sulaiman, N.S. et al. 2022; 2023; Sulaiman, N.S. 2023). The remaining waste is mainly disposed of at our Sungai Paku Engineered Landfills, emitting about 0.23 MT CO₂e of methane gas to the atmosphere yearly, accounting for about 2.2% of Brunei's total greenhouse gas emissions in 2018.

As it stands, an average person in Brunei Darussalam generates about 1.14kg of municipal solid waste per person per day based on 2019 data, making Brunei Darussalam among the highest waste generator per capita in the ASEAN region. As the economic and population growth continues to increase, waste management is increasingly getting complex as our landfill capacity runs out, which made a growing concern for a proper sustainable strategy to protect the environment by implementing the halal-green concept in the focus.

There are four types of waste that we should know, bringing unique challenges in how they are collected, handled, and disposed of. More often than not, domestic, agricultural, commercial, and industrial wastes are mainly disposed of rather than recycled. Municipal solid waste, which includes waste from domestic, agricultural and commercial sectors, has become a significant concern over the past years as the amount of waste generated has increased tremendously. The top four compositions of municipal solid waste disposed at the Sungai Paku Engineered landfill are mainly made up of food waste, which accounts for 32% of the total waste disposed of, followed by plastic waste, green waste and paper, which accounts for 29%, 11% and 10% respectively (Sulaiman, N.S. et al. 2022; 2023; Sulaiman, N.S. 2023).

The Ministry of Department added that these wastes are sent to the Sungai Paku Engineered landfill with a total waste at a daily rate of 672 MT per day and are then buried within four excavated areas known as landfill cells. The landfill cells are estimated to reach total capacity by 2030. Numerous initiatives and programmes have been implemented collaboratively with the primary goal of minimising waste generation, particularly with implementing 3R initiatives, namely Reduce, Reuse and Recycle. As stated by Musa Mohamed (2021), the 3R is a viable strategy to increase landfill lifespan while minimising resource exploration. In addition to the environmental advantages of lowering the demand for land for trash disposal, recycling building wastes can assist in recycling natural resources and reduce the cost of waste treatment before disposal.

Among the simple steps that the Ministry itself has explicitly outlined, we can do our part to make halal green as a focus for a sustainable environment by reducing packaging and paper waste, i.e. consumers can buy products with less packaging, bringing reusable bottles while purchasing beverages, reuse plastic containers for take-away, order fewer take-outs, etc. Secondly, consumers should reduce food wastage by ordering or cooking with the right

portion, not overbuying perishable foods and correctly storing them, donating excess food instead of throwing it away and practising composting. Thirdly, consumers should switch to reusable products such as recyclable bags and reuse glass jars as flower vases or plastic containers to store food. Fourthly, consumers should practice segregating cans, plastic, and paper in recycling bins. Lastly, consumers should practice composting organic waste, such as food waste.

3. Methodology

In this study, a quantitative approach has been used as the research method, using a close-ended question to examine the awareness of the Halal green concept among postgraduate students in UNISSA for a sustainable environment. In addition, the study also measures the postgraduate students' level of practice on the Halal green concept in maintaining a sustainable environment. The study also assesses the medium attaining knowledge of postgraduate students on the Halal Green concept.

This research study would involve any Postgraduate students in UNISSA, Negara Brunei Darussalam, since the total number of postgraduate students at UNISSA is small compared to Undergraduate students. Furthermore, due to the limited amount of time and the refusal of some postgraduate students to participate in answering the questionnaire, the scope of this study would be limited to the postgraduate students in UNISA only. For this reason, this study will focus on 30 students taking postgraduate courses in UNISSA, divided into three sub-categories, i.e., those aged between 20 and 30 years old. The social demographic the researcher will target is male and female, Muslim, and those living in Brunei Darussalam only. These participants are selected due to their educational background as postgraduate students, which will lead them to provide more valid and accurate data. However, this study will not include non-Muslims, the elderly, or children.

The survey questions consist of 4 sections. The first section focuses on the socio-demographics of the respondents, such as their gender, age, higher educational level, and the respondent's name faculty; the second section focuses on the respondent's level of knowledge of the Halal Green concept in maintaining a sustainable environment, while the third section was about the respondents' level of practices done by postgraduate student on the Halal Green concept in maintaining sustainable environment, followed by the last section of the survey which is on the respondents' medium of attaining knowledge on Halal green concept. In this regard, the data collection for this research study took place for about two weeks using a survey. The survey questions were distributed to several targeted respondents, and each was to answer at any time. All questions provided in the survey were made compulsory for the respondents to answer.

For analysis purposes and since this research study is based on a quantitative approach, all data collected will be examined and interpreted based on statistics or figures. All recorded data will be analysed using IBM SPSS Statistics version 26. In addition, the data collected will be analysed to produce the percentage, frequency, mean and standard deviation of the respondents' data. All of the frequencies were illustrated in tables.

4. Finding and Discussion

In this section, the data studied will be analysed from survey questions through IBM SPSS Statistics version 26. The results are in line with the research questions and research objectives. The data collected are divided into frequency, percentage, mean, and standard deviation. The table below shows the mean score from low to high, according to Idrus et al.

(Idrus et al.; Muhammad, 2018). In the research, the overall findings will use the mean score range as in Table 4.1 to interpret reasoning components.

Table 4.1 Mean and Score Range

| Mean Score | Reasoning Level |
|-------------|-----------------|
| 1.00 – 2.33 | Low |
| 2.34 – 3.67 | Average |
| 3.68 – 5.00 | High |

Source: Idrus et al. (2018)

According to Table 4.1, if the mean score ranges above 3.68, it constitutes a high level of reasoning. However, if the mean score ranges below 2.33, it will be considered a low level of reasoning.

In addition, this research used Cronbach's alpha to test the reliability level for items in the findings, as shown in the table below.

Table 4.2 Cronbach Alpha Score Range

| Alpha Coefficient Range | Strength of Association |
|-------------------------|-------------------------|
| <0.6 | Poor |
| 0.6 to 0.7 | Moderate |
| 0.7 to <0.8 | Good |
| 0.8 to <0.9 | Very Good |
| 0.9 | Excellent |

Source: Hair et al. (2000)

Regarding reliability, if the alpha value is less than 0.6, it is considered low and unacceptable; while the alpha value is over 0.6, the result (questionnaire) is excellent and acceptable. (Hair, J. F. Jr., Babin, B., Money, A. H., & Samouel, P. (2003). In this study, a reliability analysis was carried out on 13 items, and the section on respondents' medium of attaining knowledge of the Halal green concept was not accounted for in the reliability statistics as the questions of the section are string variables. The result from the Cronbach alpha showed the questionnaire to reach good reliability, $\alpha=0.732$. This is shown in the table below.

Table 4.3: Cronbach's Alpha for respondents' level of knowledge acquired and practises done by the postgraduate students in maintaining sustainable environment.

| Cronbach's Alpha | N of items |
|------------------|------------|
| 0.732 | 13 |

4.1 Respondents' Socio-Demographic

In this section, the questions are mainly focusing on the respondents' age, gender, higher education level, and name of faculty, which will be shown in the form of a table.

Table 4.4 Information based on respondents' age

| Characteristic | Respondent | N | % |
|----------------|------------|----|------|
| Age | 20-25 | 22 | 73.3 |
| | 26-31 | 8 | 26.7 |

Table 4.4 shows that most respondents were 20 to 25 years old (73.3%, n=22), while the other respondents were 26 to 31 years old (26.7%, n=8).

Table 4.5 Information based on respondents' gender

| Characteristic | Respondent | n | % |
|----------------|------------|----|----|
| Gender | Male | 6 | 20 |
| | Female | 24 | 80 |

It was found that according to Table 4.5, the majority of the respondents were female, with a percentage of 80% (n=24), and male respondents with a percentage of 20% (n=6).

Table 4.6 Information based on respondents' higher education level

| Characteristic | Respondent | n | % |
|------------------------|-----------------|----|-----|
| Higher Education Level | Master's Degree | 30 | 100 |

The data above, table 4.6, shows that all respondents are currently master's degree students with a percentage of 100% (n=30).

Table 4.7 Information based on respondents' faculty

| Characteristic | Respondent | n | % |
|-----------------|------------|----|-----|
| Name of faculty | PPHT | 24 | 80 |
| | FSL | 2 | 6.7 |
| | FOU | 1 | 3.3 |
| | FIT | 3 | 10 |

PPHT was the major faculty/Centre of the respondents, with a percentage of 80% (n=24), followed by FSL (6.7%, n=2), FOU with 3.3% (n=1), and FIT with a percentage of 10% (n=3).

4.2 Level of Knowledge on the Halal Green Concept

Table 4.8 below shows the respondents' level of knowledge of the Halal Green concept in maintaining a sustainable environment. The Likert scale used a 1 to 5 scale, with 1 indicating strongly disagree, 2 disagree, 3 neutral (neither agree nor disagree), 4 Agree and 5 strongly agree.

Table 4.8: Analysis of the respondent's level of knowledge on the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|---|--------------------------------|-----|-------------|------------|--------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I know and understand Halal Green's concept of a sustainable environment by saving water. | | | 5 (16.7) | 12 (40) | 13 (43.3) | 4.27 | 0.740 |

According to the results shown in Table 4.8, most respondents understand the Halal green concept of a sustainable environment by saving water, with 43.3% (n=13) strongly agreeing and 40% (n=12) agreeing. Only a few respondents answered neutral (16.7%, n=5), and none disagreed with the statement.

Table 4.9: Respondents' level of knowledge on the Halal Green about 3R concept: Reduce-Reuse-Recycle.

| <i>Frequency f and Percentage (%)</i> | | | | | | | |
|---|------------|------------|-------------|--------------|--------------|-------------|-----------|
| Item(s) | (1) | (2) | (3) | (4) | (5) | Mean | SD |
| I know and understand about Halal Green concept for sustainable environment by practising the 3R concept: Reduce-Reuse-Recycle. | | | 5 (16.7) | 14 (46.7) | 11 (36.7) | 4.20 | 0.714 |

It is one of the significant findings to conclude, based on table 4.9, that the majority of the respondents know that practising the 3R concept contributes positively towards the sustainability of the environment, with 3.7% (n=11) answering strongly agreeing and 46.7% (n=14) who have answered agree. Only 16.7% (n=5) answered neutral, and none disagreed.

Table 4.10: Analysis of the respondent's level of knowledge on the Halal Green concept about Environment-Friendly Products

| <i>Frequency f and Percentage (%)</i> | | | | | | | |
|---|------------|------------|------------|--------------|--------------|-------------|-----------|
| Item(s) | (1) | (2) | (3) | (4) | (5) | Mean | SD |
| I know and understand about Halal Green Concept for Sustainable environment by using Environment-Friendly. products such as biodegradable cutlery, stainless steel straws, etc. | | | 6 (20) | 13 (43.3) | 11 (36.7) | 4.17 | 0.747 |

As stated in Table 4.10, most respondents strongly agreed (11%, n=36.7) and agreed (13%, n=43.3) about the Halal green concept for the sustainable environment by using environment-friendly products. In contrast, only 20% (n=6) have answered neutrally.

Table 4.11: Analysis of the respondent's level of knowledge on the Halal Green concept about saving energy (electricity)

| <i>Frequency f and Percentage (%)</i> | | | | | | | |
|---|------------|------------|------------|--------------|--------------|-------------|-----------|
| Item(s) | (1) | (2) | (3) | (4) | (5) | Mean | SD |
| I know and understand about Halal Green Concept for Sustainable environment through saving energy (electricity) | | | 6 (20) | 13 (43.3) | 11 (36.7) | 4.17 | 0.747 |

Table 4.11 indicates that 36.7% (n=11) of the respondents strongly agreed that they have the Halal green concept of a sustainable environment through saving energy, followed by 43.3% (n=13) who agreed with the statement, and only 20% (n=6) who answered neutral.

Table 4.12: Analysis of the respondent's suggestion(s)

| Item | Characteristic | Respondent | n | % |
|---|-----------------------|--------------------------------------|----------|----------|
| Please give your suggestion(s) to improve the level of knowledge and understanding in empowering of halal green concept among UNISSA Postgraduate students for sustainable environment. | Suggestions | Awareness campaign | 17 | 56.1 |
| | | Halal Green Syllabus | 5 | 16.5 |
| | | Active engagement in green practices | 5 | 16.5 |
| | | Solar energy power in UNISSA | 1 | 3.3 |

Based on the data shown in Table 4.12, most respondents have suggested that conducting an awareness campaign could improve the knowledge and understanding of empowering the halal green concept among UNISSA Postgraduate students for a sustainable environment (56.1%, n=17). The other suggestion would be to incorporate specifically Halal green syllabus in university courses (16.5%, n=5), followed by active engagement in green practices (16.5%, n=5), and to introduce the solar energy power in UNISA (3.3%, n=1).

4.3 Respondents' Level of Practices

Table 4.13: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|--|--------------------------------|------------|--------------|-------------|-------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I print or make copies only when necessary and used both sides of paper. | 3 (10) | 2 (6.7) | 10 (33.3) | 8 (26.7) | 7 (23.3) | 3.47 | 1.224 |

As shown in Table 4.13, 23.3% (n=7) of the respondents strongly agreed that they print or make copies only when necessary and use both sides of the paper, and 26.7% (n=8) also agreed with the statement. Regardless, 33.3% (n=10) of the respondents answered neutral, followed by 6.7% (n=2) who disagreed with the statement, and 10% (n=3) strongly disagreed with the statement.

Table 4.14: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|--------------------------------------|--------------------------------|-------------|-----------|-----------|-------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I print draft copies on used papers. | 6 (20) | 5 (16.7) | 9 (30) | 3 (10) | 7 (23.3) | 3.0 | 1.438 |

As indicated in Table 4.14, 23.3% (n=7) strongly agreed that these respondents only print draft copies on used papers, followed by 10% (n=3) who agreed with the statement. Nevertheless, 30% of the respondents answered neutral (n=9), followed by 16.7% (n=5) who answered disagree, and 20% (n=6) strongly disagreed with the statement.

Table 4.15: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|-------------------------------|--------------------------------|-----------|--------------|-----------|-----------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I use recycle bins correctly. | 2 (6.7) | 3 (10) | 10 (33.3) | 9 (30) | 6 (20) | 3.47 | 1.137 |

Table 4.15 shows that 20% (n=6) of the respondents strongly agreed that they used the recycle bins correctly, and 30% (n=9) agreed with the statement. On the other hand, 33.3% (n=10) only answered neutral, 10% (n=3) answered disagree, and 6.7% (n=2) answered strongly disagree.

Table 4.16: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|--------------------------------------|--------------------------------|--------------|--------------|-----------|------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I avoid using plastic water bottles. | 6 (20) | 55 (16.7) | 14 (46.7) | 3 (10) | 2 (6.7) | 2.67 | 1.124 |

As reported in Table 4.16, most respondents disagreed with the statement (16.7%, n=55), and 20% (n=6) strongly disagreed. There are only 46.7% (n=14) who answered neutral, 10% (n=3) who answered agree and 6.7% (n=2) who answered strongly disagree.

Table 4.17: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|---|--------------------------------|-----------|-------------|------------|-----------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I set the temperature of the air conditioner between 24°C-26°C. | 9 (30) | 9 (30) | 7 (23.3) | 2 (6.7) | 3 (10) | 2.37 | 1.273 |

From the analysis shown in Table 4.17, most respondents did not set the air condition temperature between 24°C-26°C, with 30% (n=9) answering strongly disagree and another 30% (n=9) answering disagree. The rest of the respondents answered neutral (23.3%, n=7), 6.7% (n=2) answered agree, and 10% (n=3) answered strongly disagree.

Table 4.18: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|---|--------------------------------|-------------|------------|-------------|------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I purchase environment-friendly products. | 2 (6.7) | 4 (13.3) | 15 (50) | 7 (23.3) | 2 (6.7) | 3.10 | 0.960 |

Table 4.18 indicated that 50% (n=15) of the respondents were unsure whether they purchase environment-friendly products. Nevertheless, 6.7% (n=2) of the respondents did purchase environment-friendly products, followed by 23.3% (n=7) who also agreed with the statement. Despite this, some respondents still did not purchase environment-friendly products, with 13.3% (n=4) who disagreed and 6.7% (n=2) who answered strongly disagree.

Table 4.19: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|------------------------------------|--------------------------------|------------|-------------|--------------|--------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I turn off all unnecessary lights. | 1 (3.3) | 2 (6.7) | 7 (23.3) | 10 (33.3) | 10 (33.3) | 3.87 | 1.074 |

According to the data shown above, table 4.19, most respondents turned off all unnecessary lights when not in use, with 33.3% (n=10) who answered strongly agree and another 33.3% (n=10) who answered agree. There are only 23.3% (n=7) who answered neutral, and only a few who answered disagree (6.7%, n=2) and strongly disagree (3.3%, n=1).

Table 4.20: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|--|--------------------------------|-------------|--------------|-------------|-------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I use stairs instead of using elevators. | 1 (3.3) | 4 (13.3) | 16 (53.3) | 4 (13.3) | 5 (16.7) | 3.27 | 1.015 |

On the data shown in Table 4.20, most of the majority were quite unsure whether they used the stairs instead of elevators or not (53.3%, n=16), followed by others who did use the stairs (16.7%, n=5) (13.3%, n=4), and the vice versa (13.3%, n=4) (3.3%, n=1).

Table 4.21: Analysis of the respondents' level of practices of the Halal Green concept in maintaining sustainable environment

| Item(s) | Frequency f and Percentage (%) | | | | | Mean | SD |
|---|--------------------------------|------------|-----------|------------|------------|------|-------|
| | (1) | (2) | (3) | (4) | (5) | | |
| I switch my PC to "Sleep" Mode when unused. | 3 (10) | 1 (3.3) | 9 (30) | 2 (6.7) | 15 (50) | 3.83 | 1.367 |

In Table 4.21, most respondents had set their PC to 'sleep' mode when not in use, with 50% (n=15) answering strongly agree and 6.7% (n=2) answering agree. Meanwhile, 30% of the respondents answered neutral (n=9), 3.3% (n=1) answered disagree and 10% (n=3) answered strongly disagree.

4.4 Medium of Attaining Knowledge on the Halal Green Concept

Table 4.22 Analysis of respondents' medium of attaining knowledge on the Halal Green concept.

| Characteristic | Respondent | n | % |
|----------------|------------|----|------|
| Instagram | Yes | 26 | 86.7 |
| | No | 4 | 13.3 |

According to the results shown in Table 4.22e, the majority of the respondents have attained knowledge of the halal green concept through Instagram, with 86.7% (n=26) of them answering yes and only 13.3% (n=4) of them who have answered no.

Table 4.23 Analysis of respondents' medium of attaining knowledge on the Halal Green concept

| Characteristic | Respondent | n | % |
|----------------|------------|----|------|
| Facebook | Yes | 16 | 53.3 |
| | No | 14 | 46.7 |

As illustrated in Table 4.23, it was found that most respondents have attained knowledge of the halal green concept through Facebook, with 53.3% (n=16) answering yes and 46.7% (n=14) answering no.

Table 4.24 Analysis of respondents' medium of attaining knowledge on the Halal Green concept

| Characteristic | Respondent | n | % |
|----------------|------------|----|------|
| Twitter | Yes | 14 | 46.7 |
| | No | 17 | 56.7 |

Table 4.24 shows that 46.7% (n=14) of the respondents do not attain knowledge of the halal green concepts through Twitter, and 56.7% (n=17) of the respondents answered otherwise.

Table 4.25 Analysis of respondents' medium of attaining knowledge on the Halal Green concept

| Characteristic | Respondent | n | % |
|----------------|------------|----|----|
| Google | Yes | 27 | 90 |
| | No | 3 | 10 |

As indicated in Table 4.25, Google has been the predominant platform for attaining knowledge on the halal green concept of the respondents, with 90% (n=27) answering yes and only 10% (n=3) answering no.

Table 4.26 Analysis of respondents' medium of attaining knowledge on the Halal Green concept. [item (5)]

| Characteristic | Respondent | n | % |
|----------------|------------|----|----|
| Podcast | Yes | 12 | 40 |
| | No | 18 | 60 |

Based on Table 4.26, most respondents do not attain knowledge of the halal green concept through pod-cast, with 60% (n=18) of them answering no and 40% (n=12) answering yes.

Table 4.27 Analysis of respondents' medium of attaining knowledge on the Halal Green concept. [item (6)]

| Characteristic | Respondent | n | % |
|----------------|------------|----|------|
| Radio | Yes | 25 | 83.3 |
| | No | 6 | 20 |

In Table 4.27, the majority of the respondents have attained knowledge of halal green through radio, with 83.3% (n=25) of them answering yes and 20% (n=6) answering no.

Table 4.28 Analysis of respondents' medium of attaining knowledge on the Halal Green concept.

| Characteristic | Respondent | n | % |
|----------------|------------|----|------|
| Television | Yes | 25 | 83.3 |
| | No | 7 | 23.3 |

Table 4.28 illustrates that Television was one of the respondents' ways of attaining knowledge of the halal green concept, with 83.3% (n=25) answering yes and 23.3% (n=7) answering no.

Table 4.29 Analysis of respondents' medium of attaining knowledge on the Halal Green concept

| Characteristic | Respondent | n | % |
|----------------|------------|----|------|
| Forum | Yes | 23 | 76.7 |
| | No | 7 | 23.3 |

As indicated in Table 4.29, most respondents answered yes (76.7%, n=23), where they have attained knowledge of the halal green concept through the forum, while other respondents answered no (23.3%, n=7).

Table 4.30 Analysis of respondents' medium of attaining knowledge on the Halal Green concept

| Characteristic | Respondent | n | % |
|--------------------|------------|----|------|
| University courses | Yes | 25 | 83.3 |
| | No | 5 | 16.7 |

As shown in Table 4.30, most respondents have attained knowledge of the halal green concept through university courses, with 83.3% (n=25) answering yes and only 16.7% (n=5) answering no.

Table 4.31 Analysis of respondents' medium of attaining knowledge on the Halal Green concept

| Characteristic | Respondent | n | % |
|----------------|------------------|----|------|
| Others | Social Media | 5 | 16.5 |
| | Personal Source | 1 | 3.3 |
| | Library | 1 | 3.3 |
| | Campaign | 3 | 9.9 |
| | All of the above | 20 | 66.4 |

From the data shown in Table 4.31, majority of the respondents have answered that they have attained knowledge on halal green concept through all of the items mentioned above (66.4%, n=20), followed by those who have gained the knowledge through social media platforms such as WhatsApp, YouTube and Pinterest (16.5%, n=5), through campaigns (9.9%, n=3), personal sources such as family and friends (3.3%, n=1), and through library (3.3%, n=1).

4.6 Discussion

4.6.1 Level of Knowledge on the Halal Green Concept

This research has explored the respondents' level of knowledge on the Halal Green Concept in Maintaining Sustainable Environment. From the data collected, it can be said that the level of knowledge on the Halal Green Concept in Maintaining a Sustainable Environment is good. The respondents will understand the halal green concept of a sustainable environment by saving water as most are aware of the definition, and none of the respondents disagrees. Furthermore, most of them understand the Halal Green concept for a sustainable environment by practising the 3R concept: Reduce-Reuse-Recycle. This indicates that most of them have been practising the 3R concept and are familiar with it due to adequate exposure. Moreover, most of the respondents also believed that among the characteristics of the Halal Green Concept for a Sustainable Environment is using environmentally friendly products such as biodegradable cutlery, stainless steel straws, etc. This reflects that the respondents have a fair amount of knowledge on the environmentally friendly products that help keep the environment sustainable through the Halal Green Concept. The understanding of saving energy from electricity is well understood, which shows a fair level of understanding from the respondents on the said area.

This aligns with the study by Nurul Amalina et al. (2016), who state that environmental sustainability is the sine qua non for sustaining quality of life and economic competitiveness for a country like Brunei Darussalam. The level of understanding comes from the efforts of several agencies to provide measures to build awareness among Bruneian society to make a more sustainable environment. Nur Amalina et al. added that in Brunei, environmental matters continue to be the concurrent responsibility of several ministries, especially the Department of Environment, Parks and Recreations (DEPR) and the dominant Shell Petroleum Company. The inter-agency National Committee on Environment (NCE) also coordinates some measures. It is established to pursue the overall goal of environmental protection and service, to ensure a more comprehensive approach to environmental management by implementing formulated environmental policies and strategies, and moving towards Brunei Vision 2035, which stresses sustainable development.

Furthermore, from the results in this section, the respondents have suggested a few ways to improve knowledge and understanding in empowering the Halal Green concept among UNISSA Postgraduate students for a sustainable environment. Findings show that most respondents have suggested that conducting an awareness campaign could improve the level of understanding of the Postgraduate students in UNISSA. At the same time, other suggestions include incorporating the Halal green syllabus in university courses with a fair amount of suggestions from the participants, followed by active engagement in green practices and introducing solar energy power in UNISSA. Since the higher education institution's primary mode of conduct is through learning, it is more beneficial for them to be more aware and exposed to the notion through awareness campaigning and lecture-style instruction.

4.6.2 The Level of Practices

This research study has analysed the respondents' level of Practice of the Halal Green Concept in maintaining a sustainable environment. From the data collected, it was found that a moderate number of the respondents practice the Halal Green Concept, but some do not practice this concept. Regardless of the high level of knowledge of the respondents on this Halal Green Concept, there is a lower percentage level of the respondents' practices of this

concept. The reason behind these findings should be investigated more. Moreover, among all the practices, the least practised among the respondents is setting the air condition between 24°C-26°C, probably because of the respondents' unwillingness to endure the hot weather in Brunei.

The critical condition of the global environment has led to a new pattern of consumer groups that call themselves green consumers. This group refers to those with specific characteristics, notably having a strong commitment to green products, being critical and concerned about the environment, searching for companies that produce green products, reflecting wise behaviour in daily life, and always being eager to address environmental issues. They tend to care for the environment and fulfil their needs, seeking environmentally friendly products. (Ryan (2006).

4.6.3 The Medium of Attaining Knowledge

This research has also looked into the data collected on the respondents' medium of attaining knowledge on the Halal Green Concept. Based on the data collected, it can be said that most respondents have attained their knowledge through media, mainly social media such as Instagram, Facebook, Twitter, Google, Podcast, WhatsApp, YouTube, Pinterest, and mass media such as radio and television. Respondents have also learned the Halal Green Concept through personal sources such as family and friends. This indicates that through online or offline platforms and the upbringing from their surroundings, respondents can still attain a high level of knowledge on the Halal green concept. Moreover, most of the respondents have also attained knowledge of the Halal Green Concept through education, such as through forums conducted by schools and university courses. In addition, instructional media has also provided the respondents with knowledge of the Halal Green Concept through libraries and campaigns. This shows that education played an important role in conveying information to the respondents on matters related to the Halal Green Concept, leading to their high knowledge of this concept.

As agreed, the media plays a very constructive role in today's society. Media plays an important role in increasing public awareness and collecting views, information and attitudes toward certain issues. Media is the most powerful communication tool in the emerging world; it increases awareness and presents the real stage of society. Pradeep K.D. (2013). Therefore, taking the opportunity from the media to increase people's awareness of the concept of Halal Green is crucial in today's society, especially in this era of environmental sustainability, which is one of the biggest issues faced by humanity at present. No part of the Earth is now untouched by the effects of human activities or pollution. (Arora, N.K. 2018)

Apart from the media, everyone has a fundamental duty to make an effort to implement the Halal Green concept. The rising number of environmentally conscious consumers brings about more go-green campaigns and a go-green movement along with solutions and calls for consumers, corporations, and governments to be more proactive in going green in every aspect. (Arnold Mwanzu (2022). This shows just how critical it is to implement this idea into practice in order to lessen the effects of global warming and other emerging environmental concerns.

5. Conclusion

This study helps the researcher explore the respondents' awareness of the Halal green concept. It was found that respondents have a high level of knowledge of the Halal green concept of maintaining a sustainable environment. However, there is a moderate level of practice among the respondents of the Halal green concept in maintaining a sustainable environment. Furthermore, it was also found that there are several alternatives and suggestions for attaining knowledge regarding the Halal green concept, such as awareness campaigns, the Halal Green Syllabus, active engagement in green practices, and the usage of solar energy power. With these recommendations, it is hoped that we can maintain a high level of awareness of this concept, regardless of the low level of practice.

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