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## REVISITING A STUDY OF AWARENESS AND PERCEPTION TOWARDS SUSTAINABILITY

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### Abstract:

Sustainability has long been discussed in many perspectives considering its importance to our lives. The practices embedded in Sustainability must consistently be done to achieve the goals that have been set in the Sustainability Development Goals (SDG) especially to fight a climate change and to create the sustainable cities and communities. To practise sustainability successfully, people should be aware and have a better understanding of sustainability issues and practices. Thus, this paper intends to look at the trends and issues in the awareness and perception towards sustainability. A conceptual paper in nature, this study reviewed past research works which included the perception and awareness of sustainability. This paper gathered study patterns and accessed the findings from multiple previous studies. Based on the findings, the awareness of sustainability was found to sustainability principles among the society. Education is recognised to have played a significant role of increasing the awareness of sustainability. Hopefully, this study will shed a light on the perspective of awareness and the perception towards sustainability from many different angles, which perhaps could lead to a new direction of study on this topic.

**Keywords:**Awareness, Education, Perceptions, Sustainability, Sustainability  
Development Goals (SDG)**Introduction**

The world that we live in now is considered to have been borrowed from our children; soon it will be returned to the next generations. As such, we are responsible of protecting and preserving this world by considering each action that would leave consequences for mother nature. The efforts of preserving the sustainability of nature have long been discussed by many parties across time. Yet, efforts are still ongoing despite the deteriorated stability this world has been experiencing. The failure of moulding human activities into a pattern that safeguards the environment and conserves energy is altering the stability of the ecosystem (Msengi et al., 2019). It is important for governments, NGOs, and communities to concentrate more on efforts of ensuring that any development must be in balance with sustainability, either in economic, social, or environmental endeavours.

The World Bank (2015) stated that sustainable development is a type of growth that should be mutually inclusive and environmentally sound to reduce poverty rates and build shared prosperities for the current population, by consistently meeting the needs of future generations. Such a development must be efficient with resources and be carefully planned to deliver both immediate and long-term benefits. Three main pillars in sustainable development are economic growth, environmental stewardship, and social inclusion. These pillars are carried across various sectors of development, from cities facing rapid urbanisation, to agriculture, infrastructure, energy development and use, water availability, and transportation. The United Nations (UN) is committed towards sustainability by introducing the Millennium Development Goals (MDG), and subsequently the Sustainable Development Goals (SDG), covering all aspects that should be treated to achieve sustainability.

The global understanding of sustainable knowledge and practices has been influenced by concerns about the increasing population worldwide and the impact of social systems, economic patterns, and environmental changes. Even though individuals and organisations worldwide have widely recognised, implemented, and used natural resources, developing countries around the world have shown low levels of awareness and actions when it comes to maintaining and sustaining environmental resources. Still, many consider sustainability as a complex term that lacks a shared understanding of causes, effects, roles, and strategies between environmental, economic, and societal views (Alsaati et al., 2020).

Realising the importance of perception and awareness that determines the successful implementation of sustainability efforts, this paper would access and review previous research works and studies on perception and awareness towards sustainability. This paper would go through the awareness and perceptions of stakeholders, the framework derived during the evaluation of awareness and perceptions of stakeholders, sustainability efforts, important areas of concern which include previous issues and sectors involved, the condensation of findings and discussions from previous studies, and recommendations, followed by a conclusion.

## Methodology

Since this study applied a review from previous studies, the methodology would begin from the process of searching and selecting related articles from Google search engine and Google Scholar. The publication years for all the articles to be reviewed were set from 2010 to 2020. One criterion for an article to be selected is that it should relate to perception and awareness towards sustainability or focus on efforts related to sustainability. After a rigid selection process, the total number of articles that matched to criteria was 37, where articles published in 2016 has the highest number. The selected articles would be reviewed and significant findings, issues, and sectors would be extracted for justification. It would then be discussed descriptively to achieve the articles' purposes.

**Table 1: Number of Articles Published in The Respective Years**

<i>YEAR</i>	<i>NO OF ARTICLES</i>
2010	1
2012	4
2013	3
2014	4
2015	1
2016	6
2017	4
2018	4
2019	5
2020	5
TOTAL	37

From the search, only 37 articles closely related to the subject matter were selected. The least number of journal articles published was in 2010 and 2015, with only one article each per the respective year. The highest number was in 2016 (6 articles), followed by 2019 (5 articles), and 2020 (5 articles).

## The Awareness and Perceptions of Stakeholders

It is very important to create an awareness of sustainability and enhance the knowledge, especially to younger generations. They will be playing an important role to develop a sustainable future and are likely to take on greater significance as the world is consistently and intensely pursuing globalisation and interdependency. Sustainable development is indeed an interesting current field that should be taught and instilled. Young generations need to be educated on a number of important issues in sustainability such as risk reduction, environmental design, climate change, and the principles and strategies towards sustainability. Students could develop the necessary skills in the field of sustainability. There is also a growing need to educate students with the knowledge on sustainability by integrating energy conservation, risk reduction, environmental design, climate change, and 114 sustainable resource use practices and strategies into the curricula or programmes of universities. This will consequently develop the skills of students in whichever area they venture into. Although higher education is known to be of interest, the degree of students' understanding of sustainability is still unknown and is yet to be discovered.

Hamid et al. (2017) justified in their study that higher education institutions play the role of shaping, creating, and nurturing students with sustainability awareness through the education system, activities, curriculum, syllabus, campaigns, and visions towards green marketing, all of which could be reflected in the attitudes of the younger generation in their priority and importance of preserving sustainability. Students in higher education institutions are the ones who have been selected and considered as the precious human capital for development, as leaders for our future. What they have learned and understood at the university level could shape their stand and vision for further actions in the future. It is important to create awareness and stimulate the concept of sustainability, so that they may apply what they have learned from academic institutions. Skills and lessons will eventually enhance students' competencies in the future course of career they might venture into. Thus, as university students have been considered an important asset for future developments, there is a pressing need to educate them with sustainability principles, practices, and issues, allowing them to discover the practices and strategies of energy conservation, resource efficiency, risk reduction, sustainable decision, and climate change.

According to Mohamad et al. (2020), creating awareness should begin from an early stage of the individual; the best is at a young age where one could easily understand and have tendency to act in parallel with actions that support sustainability. Hence, curriculum development must at least include a syllabus or a lesson that consists of the fundamental knowledge of sustainability. It should also be delivered in an easier language style, with attractive design and visuals, so that children will be interested to learn more about sustainability. Sustainability may become an exclusive connotation where it can only be understood by certain groups of people such as policymakers, academics, professionals, and practitioners. However, to achieve sustainability requires a commitment from all groups of stakeholders, especially among the local community. Hence, it is important to ensure that the community has a better understanding on what sustainability is. Matters that relate to sustainability must delivered well to the community. People must know the fundamental issues regarding sustainability such as the principles, efforts, or consequences of an unsustainable world, and most importantly, the significant role of the community in efforts towards sustainability.

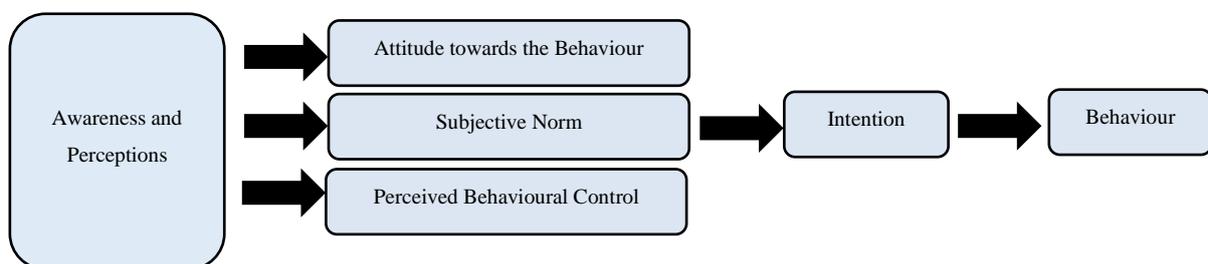
All groups of stakeholders should work together to achieve SDG goals. We must have a mechanism to facilitate the efficient dissemination of information to target groups. When a community perceives sustainability correctly, target groups' understanding can be enhanced and consciousness can be stimulated, which leads to shaping their behaviour towards sustainable environment as a reaction from appropriate perceptions. Pantzsch (2016) noted that environmental politics has the responsibility and the power to address serious environmental issues such as climate change, freshwater scarcity, and disruption of the living ecosystem. By improving coordination among all stakeholders, with more stable competent leadership, more significant community participation, greater devolution project management to the district level, and efficient management of resources, effective and impactful project implementation can be realised (Israr & Islam, 2006).

In the perspective of business and customer priority, Punyatoya (2014) found that environmental problems are the most worrying of all public issues. Increasing government legislations, intensifying consumer environmentalism, and increasing stakeholder pressures have made business sectors to go green. There has been an increasing demand among consumers for eco-friendly (EF) product preferences, and this has made companies more

desperate to harness and seize this new business opportunity. Green marketing, in turn, is becoming more relevant for companies; yet, it is a holistic method of managing the responsibility to identify, anticipate, and satisfy the needs of customers and society, in a profitable and sustainable way.

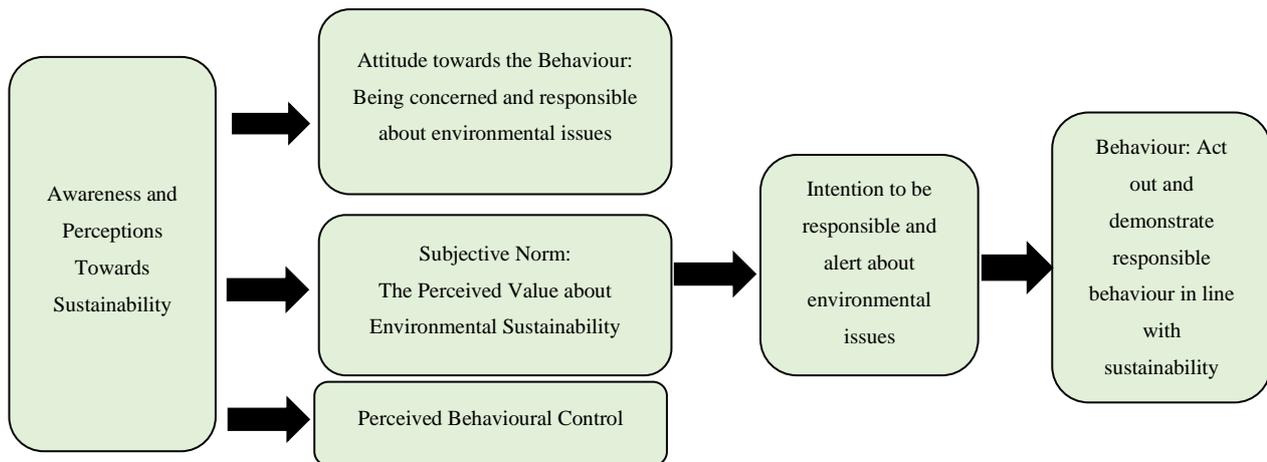
### The Framework

The Theory of Planned Behaviour has been proposed in several studies on awareness and perceptions of sustainability (Kim & Hall, 2019). These studies employed the theory according to its characteristics, in which attitude and behaviour may influence the intention of the behaviour and will then directly reflect the action. According to Ajzen (2011), this theory explains that human behaviour is guided by three kinds of considerations: beliefs on the likely consequences of the behaviour (behavioural beliefs); beliefs on the normative expectations of others (normative beliefs); and beliefs on the presence of factors that facilitate performance of the behaviour (control beliefs). The tendency of attitude towards the behaviour, either to propose or to oppose, is driven by behavioural beliefs, while normative beliefs will influence the perceived behavioural control or self-efficacy. The perception of behavioural control has acted as a moderator to the effects of attitude towards the behaviour and subjective norm on the intention. The most important highlight of this theory is that the more pleasing the attitude and subjective norm, and the higher the level of perceived control, the more is the intention for a person to act out the behaviour. The tendency of an individual is dependent on the types of the attitude and the subjective norm, as well as on the degree of perceived control, as shown in Figure 1 below.



**Figure 1: Theory of Planned Behaviour (TPB)**

When applied to the study of awareness and perception, as depicted in Figure 2, the awareness and perception towards sustainability will shape the attitude or behaviour of the individual to embed sustainability in the subjective norm and the perceived behavioural control. The attitude, the subjective norm, and the perceived behavioural control will progress into the intention to learn, to act, or to practise in line with sustainability. According to Alsaati et al. (2020), societal behaviour and perceptions among stakeholders are influenced by various factors such as education, age group, and culture. The existing intention has become a catalyst towards sustainable behaviour among the community or groups of stakeholders. Possessing the knowledge of sustainability is important, as it will become a foundation to create awareness on sustainability among stakeholders. If stakeholders are not familiar or do not even understand the underlying concepts of sustainability, they could not develop a good sense of responsibility and concern with sustainability issues.



**Figure 2: The Application of Awareness and Perceptions in Sustainability According to TPB**

To cultivate the awareness and perceptions towards sustainability is a relatively important task where the level of awareness and the type of perceptions would determine the attitude towards the behaviour through the concerns and reactions shown to environmental issues, the creation of perceived values about environmental sustainability, and the justification of a perceived behavioural control. These three elements finally determine the intention to become responsible and alert to environmental issues that will lead to acts and practices of a responsible behaviour in line with sustainability practices.

### **Sustainability Efforts, Importance and Area**

To date, there have been various initiatives implemented at the international and local levels. At the international level, it began with the Millennium Development Goals (MDG), followed by the Sustainable Development Goals (SDG), both proposed by the United Nations (UN). SDG emphasises seventeen (17) themes that encapsulate every aspect of living, with a mission to end poverty, improve health and education, reduce inequality, and spur economic growth, as well as to tackle climate-change and to preserve oceans and forests (SDG UN Website, 2020). To ensure that SDG is not just a rhetoric, many countries have worked in accordance with the agenda by embedding SDG principles into their policies. The commitment showed by the governments in certain of countries proves that how they truly realise the importance of sustainability, not just for the sake of maintaining power, but also for the wellness of present and future stakeholders. In addition, non-government organisations (NGO), corporate sectors, and other institutions strive for the best sustainable practices.

In the private sector, the high-risk companies such as the oil and gas, and petrochemical giants have thrust sustainability at the heart of their business operations. For example, the leading oil and gas company in the world, Saudi Aramco, believes that it has the responsibility to safeguard the natural environment for generations yet to come (Saudi Aramco Website, 2020). Other than high risk companies, the multinational conglomerate company that designs and sells ready-to-assemble furniture, kitchen appliances, and home accessories, IKEA has placed sustainability principles in its core business. IKEA has taken the lead in developing and promoting products and solutions that inspire and enable customers to live a more sustainable life at home. Other than that, IKEA has also taken a lead in turning waste into resources (IKEA

Sustainability Report, 2019). Same goes to the well-known apparel brand (H&M), which earnestly works in parallel of sustainability principles along its business operation by collecting 29,005 tonnes of garments for recycling and repurposing, equivalent to about 145 million t-shirts (H&M Group Sustainability Report, 2019).

Learning institutions around the world have also shown their support to sustainability. Xiong and Mok (2020) mentioned that higher education institutions have answered the call to practise sustainability throughout their operations, or by disseminating knowledge and sharing the experience with other stakeholders. In addition, Ramiso et al. (2019) stated that higher education institutions have the vision, the knowledge, and the power to lead the transition and to induce change towards a new paradigm of sustainable development. The study also explained that implementation of sustainability policies that addresses all areas of sustainable goals with consistent monitoring and communication is crucial to demonstrate such a commitment to all stakeholders.

The Global Registry of Voluntary Commitments and Multi-stakeholder partnerships (a partnership for SDGs) is an initiative of sustainability at the higher education level. The Higher Education Sustainability Initiative (HESI) was created in conjunction to the United Nations Conference on Sustainable Development (RIO +20). This platform has been established for institutions to take part or participate in answering the urgent calls for sustainable actions. It is also a medium that consists of networks across the globe so that participants could share their views or discuss points pertaining to sustainability issues. Non-Government Organisations (NGO) have also played a significant role in promoting and working on sustainability initiatives. NGOs sometimes have the ability and influence to enforce the disclosure of sustainability information by corporations. NGOs' negotiation strategies could motivate firms to desire for transparency, enhance reputation, promote community relations, and legitimise their activities. NGOs also consistently facilitate or advise firms on the participative governance of sustainable developments. Many NGOs work diligently to ensure that the goals set in SDG could be achieved. Some of the influential NGOs include, but not limited to, Doctors Without Borders, Food and Water Watch, Greenpeace, and the World Wildlife Fund (WWF). Becker (2016) also supported that NGOs have the significance influence in the global or local level by pressuring a reputable corporate company to adopt for a more environmentally responsible business practice.

Why should we be more concerned about sustainability? How important is it? The importance of sustainability can be categorised according to groups. From a large context, sustainability efforts made should result in improvements to the world we are living in. Since the world belongs to future generations, it is important to ensure that we leave its legacy in good condition. We have already seen the impact of abandoning sustainability principles, especially in environmental aspects. Global warming have caused numerous implications on us all. Droughts have led to the shortage of food supply and famine. The world that we are living in now has tremendously changed. Extinction of rare animal species, mass forest fires, haze, landslides, and floods are some catastrophes consequent to the disruption of the ecosystem when sustainability principles and practices are put aside. According to Allouche (2011), water and food management will become a major challenge because of the precarious pressure caused by climate change and rapid transformation of socio-economic conditions. The occurrence of climate change has provided evidence that water resources are vulnerable, which will severely affect human security. Five hundred million people around the world are living in the countries

where water and food supply is short, and as predicted by IPCC, this number will spike as climate change affects surface water levels that depend on rainfall and glacial melting. Climate change could strike the food system in certain ways, from the direct effect on crop production to the changes in marketing, food prices, and supply chain infrastructure. Climate change also has a detrimental impact on developing countries in terms of crop productivity, whereby inadequate supply will mean an increased risk of famine and hunger.

For policymakers or political bodies, their activities towards sustainability are linked to power retention and trust from citizens. To tackle environmental issues is considered a heroic act. By considering the elements of sustainability in their political manifestos, politicians prove that they are not just good leaders but also representatives for citizens to address critical issues. However, sustainability goals are mutually competitive and may conflict with the central government's targets. The political leaders hold an uncompromising view about sustainability initiatives which should not be enforced in conflict situations. Political involvement through support, priority, and direction, has become a critical success factor for the implementation of sustainability efforts. Thus, political leaders have a significant role to ensure that all strategies and work towards SDG should be executed well.

Up to this date, business companies worldwide have already implemented sustainability initiatives by embedding sustainability principles into their operations. Sustainability initiatives by business companies may provide advantages from the internal and external aspects. From the internal aspect, an organisation itself could gather a deeper understanding of customer needs, which could improve sales and customer loyalty. Besides, a company can build credibility, improve relationship with customers, and enhance brand awareness. Practising sustainability principles encourage companies to be creative in producing an innovation that ensures services and products exhibit sustainability features. The internal benefit will contribute for a better financial return. Sustainability principles also affect the external aspect regarding companies' relationship with their stakeholders. The community is one important group of stakeholders. Maintaining a good relationship with community will create a competitive advantage that ensures a smooth business operation. As sustainability principles are aimed for a better life, the community's interest must be taken into account. Business companies have created mutual relationships, where they give something back to the community by practising sustainability principles; in return, local communities support these companies, indirectly sustaining their business operations and competitive advantages.

### **Previous Studies on Sustainability Awareness**

The awareness on sustainability has been the attention of a growing number of published studies. During the literature research, it was found that studies on sustainability awareness reflect many issues involving various sectors. As shown in Table 1, several issues have been highlighted from previous studies. Some tried to seed the values and interest of sustainability, and others discussed the link between the awareness of sustainability and the level of awareness among stakeholders, while the rest elaborated the impacts of sustainability on a specific industry. Among the sectors involved are education, construction, hospitality, retailing, technology, and architecture and landscape. These sectors are important and have played their roles to the country's economic growth and development. It is crucial to cultivate the awareness of sustainability which may help determine the efforts to be taken for sustainability initiatives. People need to be aware and educated with the basic principles of sustainability so that they

could at least realise the impact, and to urge for a better commitment from sectors in implementing actions featuring sustainability principles.

**Table 2: Issues and Sectors on Sustainability Awareness**

<i>ISSUE</i>	<i>SECTOR</i>
i) Role of Institutions	Education
ii) Cultivating the values and interest of sustainability among students	
iii) Creating an effective curriculum	
i) Creating awareness among the public about the risks in the industry	Construction
ii) The impact of the industry on the environment	
i) The awareness of sustainability that influences customer preference	Hospitality
ii) Creating a responsible consumer behaviour through awareness	
i) Sustainability practices and corporate image	Retailing
i) Awareness that shapes the energy saving attitude	Technology
ii) Awareness of shifting to a new technology	
i) The stakeholders' awareness of sustainable designs	Architecture & Landscape

### Findings and Discussions

Previous studies that examined perception and awareness of sustainability have added value in the field of sustainability. Findings from the studies support the efforts for achieving SDG goals. The aspect of awareness and perception is not an obsolete issue; it needs to be given special attention because the assessment on level of awareness and perception will determine the level of implementation and action based on the principles of sustainability. Table 2 summarises the past study findings on stakeholder perspectives from 2010 to 2020; studies selected for this paper only focused on the aspects of awareness and perception of environmental sustainability.

**Table 2: Findings from Previous Studies in 2010–2020**

<b>AUTHORS</b>	<b>FINDINGS</b>	<b>STAKEHOLDERS</b>
Michael et al. (2020)	About 41% of student respondents had insufficient knowledge on sustainable development. There were significant differences of sustainability awareness between different levels of study among students. Social media plays an important role to stimulate the awareness of sustainability among students.	Students
Putri et al. (2020)	Majority of respondents considered the application of sustainable development as important, according to the landscape concept at university.	Students
Al Saati et al. (2020)	The respondents knew the term sustainability via education materials, but still lacked in the knowledge of sustainability, especially in relation to sorting materials that can be recycled, renewable materials, and energy consumption measures.	Students
Balakrishnan et al. (2020)	Respondents showed positive perceptions and attitudes towards all sustainability dimensions: environmental, economic, and social. Sustainable development education in higher institution is important as it has cultivated a proper sense of responsibility towards sustainability.	Students
Mohamad et al. (2020)	Environmental awareness from the aspect of attitudes was at a high level, while the awareness from the aspects of knowledge was at a moderate level. The awareness attitude and behaviour positively correlated.	Community – Administrator Level
Msengi et al. (2019)	Only several respondents realised what sustainability is. However, almost all agreed that it is important. Many respondents do not realise the sustainability initiatives taken by their institution.	Students
Volken et al. (2019)	There was a significant gap in awareness and knowledge, as well as the misunderstanding related to both technologies and Environmental, Safety, and Health risks.	Local Community
Kim & Hall (2019)	Climate change awareness has significant effects on attitude and behavioural intention; pursuing climate change mitigation actions positively influence attitude and behavioural intention towards reducing waste.	Customer
Gao et al. (2019)	Environmental knowledge is linked to information channel factors and cognitive evaluation factors.	Community

AUTHORS	FINDINGS	STAKEHOLDERS
Mohiuddin et al. (2018)	Environmental knowledge and awareness have a significant influence on business students' favourable attitudes toward green vehicles.	Students
Siddique & Hossain (2018)	Promotional activities on eco-friendly products and reference groups significantly influence consumer green products awareness; Green products awareness is a critical success factor that affects consumers green purchasing decision.	Consumer
Chin et al. (2018)	The respondents were aware that motor vehicles represent the primary source of pollution.	Local Community
Azmi et al. (2017)	Knowledge is the most influencing factor that brings awareness of green practices in the organisation.	Workers
Wee et al. (2017)	The awareness of sustainability among respondents about the concept and issue of sustainable development has been developed, but is still in a different perspective on the semantics and how it encompasses. The study found that respondents were highly concerned about sustainability and were willing to act in a sustainable manner.	Students
Lo King et al. (2017)	Respondents were concerned about the environmental challenges, whereby reduced energy and sustainable water consumption are the most commonly adopted environmentally-friendly lifestyles.	Community
Guo et al. (2017)	The familiarity with sustainable development concepts was positively associated with education, income, affiliation, and personal health, but negatively correlated with age. Environmental pollution and social inequality are considered important.	Local community
Buerke et al. (2016)	Consumer awareness and sustainability-focused value orientation have a direct positive influence on responsible consumer behaviour.	Consumer
Ju & Chang (2016)	Consumers were not so familiar with the green activities implemented in the foodservice sector.	Consumer
Keinonen et al. (2016)	Media has a significant role on students' perceptions on environmental issues. Higher education needs to think or take an appropriate action to stimulate the knowledge and awareness of environmental sustainability among students.	Students
Fabbrizzi et al. (2016)	The younger generation does not know much about sustainability, especially in schools as the first place to set lessons on the fundamentals of sustainability. They can only relate sustainability with the environment.	Students

<b>AUTHORS</b>	<b>FINDINGS</b>	<b>STAKEHOLDERS</b>
Choudry et al. (2016)	Community puts environmental issues as a priority, focusing on solid-waste pollution, degradation of coastal areas, saltwater intrusion, and land degradation.	Local community
Alsanad (2015)	Lack of awareness among local stakeholders has become a challenge to the application of Sustainability construction approvals. Government must take an action and introduce a policy to encourage Sustainability construction practices.	Community
Dach & Almedinger (2014)	Corporate sustainability communications are on average, which should be improved to increase the effectiveness and the ability of instilling awareness of the company's sustainability efforts.	Customer
Birdsall (2013)	Most respondents showed a basic understanding of sustainability, while the rest of the respondents were not able to rate their level of understanding accurately.	Teachers and Students
Khalil et al. (2013)	The respondents indicated that Sustainable Development is an excellent and important concept.	Students
Simpson & Radfrod (2012)	Consumer perceptions of sustainability are heavily influenced by the environmental aspects, where they perceive sustainability as subjects that relate to resources, environment, and waste.	Consumer
Asmawati Desa et al. (2012)	More than half of the respondents showed high awareness concerning the practise of Solid Waste Management, and very few showed low awareness. Around 34 percent of respondents showed a positive attitude towards SWM and about 66 percent have a negative attitude. Relating to the perception, only 40 percent of the subjects indicated a positive perception.	Students
Wong (2010)	The level of the public's environmental awareness is rising, but the institutions that represent public interest are weak. People rely on the government to solve environmental issues, while public environmental awareness provides an opportunity to improve the public development.	Community

The trend from the findings obtained indicates an increase in the awareness of sustainability. However, some stakeholders are still one-dimensional and do not understand the basic concept and practice of sustainability. The level of knowledge and awareness does indeed influence the practice and behaviour in sustainability. In addition, the main findings obtained also found that knowledge drives sustainability practices or actions. Knowledge of sustainability is needed from an early age. The formation of sustainability awareness depends on the knowledge

received by individuals. Therefore, a sustainability-oriented curriculum or syllabus needs to be formulated to provide individuals with sustainability-oriented knowledge. Rationally, if individuals do not have the basic knowledge and knowledge-related tendencies, the interest and the desire to act certainly will certainly be hindered.

Also emphasised in the previous study are matters related to the role of awareness and perception that will affect the quality of services, product specifications, and operations of an organisation. The knowledge of stakeholders, especially among the local community in terms of sustainability, is able to determine the type of demand and supply of a service and the type of product for production. In addition, communication channels and media received attention as the platform to create sustainability awareness. Although education is obtained through formal education in schools, knowledge of sustainability can also be obtained through the presentation of information in the media. The media is an influential tool for disseminating information, so it should be utilised in more interesting forms. Any information presented by the media may also reach a larger audience of various backgrounds and age groups. Based on the observation made from previous studies between 2010 and 2020, the focus of awareness and perspectives of sustainability continues to be given attention and covered in different sectors with specific issues. This shows that awareness and perception of sustainability is the main catalyst toward implementing efforts to support sustainability-related policies and principles.

### **Conclusion**

Completely, this study has explored issues and findings from previous studies related to sustainability awareness and perception involving various sectors and different interest groups. Stakeholders' awareness and perception of sustainability are important indicators in the direction of implementing sustainability efforts at the local and international levels. Sustainability efforts need to be made consistently and planned to support the SDGs. They cannot continue to be rhetorical; and must be done to ensure that life is valued and quality is guaranteed for posterity. Awareness and knowledge of sustainability, especially in environmental aspects, are very important towards forming a perspective and influencing actions supporting environmental sustainability. If there is no awareness, all goals to preserve and repair worldly damages and destructions will remain fictitious. Actions and practices towards sustainability cannot rely only on certain parties. It requires proactive actions and coordination from various parties. There is no denying that society is a group of stakeholders who have the power to influence other stakeholders in applying the principles of sustainability. Therefore, it is very appropriate if community groups are given exposure and equipped with the knowledge of sustainability.

Education acts as an important medium for inculcating awareness and shaping sustainability perspectives. The early age is the best time and method to inculcate education and knowledge about sustainability among children, which can be done through a comprehensive curriculum designed for sustainability principles and practices. Individuals will be equipped with sufficient knowledge about sustainability through continuous exposure, and in turn, will influence genuine actions in line with the principles of sustainability. As described in the TPB, individual awareness, perception of behaviour, acceptance of values, and acceptance of behavioural control, will in turn determine actions. There is still much more to be done to raise sustainability awareness. Therefore, integrated efforts must be implemented with the involvement of various parties, to foster awareness and to educate stakeholders on the principles and practices of

sustainability, especially among community groups. The target is to achieve SDG goals and to ensure a sustainable livelihood in the present and in the future.

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