

Available Online at www.e-iph.co.uk Indexed in Clarivate Analytics WoS, and ScienceOPEN

ASLI QoL 2022



AicQoL2022Penang



https://www.amerabra.org 10<sup>th</sup> AMER International Conference on Quality of Life Shangri-la Rasa Sayang, Malaysia, 16-17 Mar 2022

# Youth and their Knowledge on the Sustainable Development Goals (SDGs)

# Tuan Nooriani Tuan Ismail <sup>1</sup>, Mohd Idham Mohd Yusof <sup>2</sup>, Farah Adilla Ab Rahman <sup>2</sup>, Dwi Harsono <sup>3</sup>

<sup>1</sup> Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA Shah Alam Campus, Malaysia <sup>2</sup> Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA Seremban Campus, Malaysia <sup>3</sup> Faculty of Social Sciences, Universitas Negeri Yogyakarta, Indonesia

> tnsya800@uitm.edu.my, idham708@uitm.edu.my, farah855@uitm.edu.my, dwiharsono@uny.ac.id Tel: 013-3555605

#### Abstract

The Sustainable Development Goals (SDGs) under the United Nations (UN) have highlighted the youth as the stakeholders. Their knowledge of the triple bottom line of sustainability (economic, social, and environmental) is a prerequisite for SDG accomplishment. This paper investigates the level of SDGs knowledge among university youth. It was discovered that youth at the Universiti Teknologi MARA (UiTM), Malaysia have a moderate understanding of SDGs and need to be attentive to environment-related SDGs. They were exposed to SDGs by educational institutions and various media platforms. The findings are relevant to SDG-related policy-making and enrich the existing literature.

Keywords: SDGs ; Youth ; Higher Education ; Malaysia

eISSN: 2398-4287 © 2022. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BYNC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians/Africans/Arabians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia. DOI: https://doi.org/10.21834/ebpj.v7i19.3240

## 1.0 Introduction

The SDGs are the UN global commitment to economic, social and environmental sustainability. Since their introduction in 2015, the UN member countries were requested to adopt the SDGs into their development policies at the national and subnational level. Though the implementation is voluntary, its execution is pertinent to continuing previous global sustainable development policies, such as the Millennium Development Goals (MDGs) and Agenda 21.

Youth have an integral role in guaranteeing the success of the SDGs. By including youth among the Major Groups and other Stakeholders (MGOS), the SDG initiative positioned the youth as one of the major groups to materialise the SDGs. Youth inclusivity into the country's SDGs governance mechanism could support the "whole of society" and "whole of nation" approaches for SDGs implementation, emphasising the significant role and voice of the younger population.

Malaysia's journey towards sustainable development began in the 1970s with the introduction of the New Economic Policy (NEP), and it has continued ever since. The concept of sustainable development is implicitly and explicitly endorsed in the National Development Plans (NDPs), which constitute the Malaysian Five-Year Plans, annual budget allocation, and specific policies, such as the New Economic Model (NEM) (Afroz & Ilham, 2020; Yusof & Ariffin, 2020). The Shared Prosperity Vision 2030, 11<sup>th</sup> and 12<sup>th</sup> Malaysian Plans are also linked with SDGs to lead Malaysia towards sustainable development. To this date, Malaysia has conducted Voluntary National Review (VNR) twice on SDG progression and produced it to the UN's High-Level Political Forum (HLPF) in 2017 and 2021. These official documents are the UN mechanism for SDG reporting and monitoring.

eISSN: 2398-4287 © 2022. The Authors. Published for AMER ABRA cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BYNC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), ABRA (Association of Behavioural Researchers on Asians/Africans/Arabians) and cE-Bs (Centre for Environment-Behaviour Studies), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia. UiTM is the largest public university in Malaysia, having state campuses nationwide. It aspires to make the sustainability agenda one of the university focuses by establishing the Institute for Biodiversity and Sustainable Development (IBSD) and UiTM Green Centre (UGC). UiTM has undertaken various initiatives to support SDGs: realising the Green Campus concept and Greenation@UiTM (Isa et al., 2021). In 2021, UiTM scored the 150<sup>th</sup> rank at the UI GreenMetric University Ranking (https://greenmetric.ui.ac.id/rankings/overall-rankings-2021). By ranking itself at 9<sup>th</sup> among the Malaysian universities, it is postulated that UiTM began its commitments towards SDGs and could contribute to SDG progression based on its Higher Education Institutions (HEIs) role.

Despite the university's commitment to sustainability, scarce (negligible) academic research was conducted at the UiTM level to evaluate student perspective and SDG knowledge; hence, this research could pave the way for novel findings. The SCOPUS database identified studies concerning Green Campus implementation in UiTM (Isa et al., 2021) and sustainable transportation implementation in UiTM Selangor and Universitas Negeri Semarang (Sundram et al., 2021). Hence, this current study attempts to augment the literature on youth and SDG knowledge, specifically in UiTM.

This paper aimed to investigate the knowledge of the Malaysian youth concerning SDGs as the current global sustainable development agenda. This paper has several specific objectives: a) to analyse the youth's understanding of the SDGs, b) to identify youth's SDGs priorities, c) To assess youth's SDGs knowledge sources, and d) to identify the impact of SDGs exposure to the youth.

## 2.0 Literature Review

Globally, youth and SDG comprehension studies have been conducted by many authors (i.e., by Mawonde & Togo, 2021; Odelami & Fasakin, 2019; Polese et al., 2018; Vambe, 2018; Zamora-Polo et al., 2019). Based on past literature, youth across the region has low knowledge and awareness of SDGs. Due to that, they were less involved in SDG-related programmes. Lack of exposure and lack of SDGs promotion were also reasons for youth not participating in SDGs. Hence, traditional and social media should be fully utilised as they are influential (Zaharrudin & Zakaria, 2021). In Malaysia, Afroz and Ilham (2020) studied youth knowledge and its correlation with the SDGs; their work assessed students from higher education institutions to understand SDG awareness, attitude and practice. Their results indicate knowledge did not influence SDGs practices, but attitude did.

Nevertheless, the connection between knowledge, skills, attitude, roles and behaviour has been explained and considered crucial for SDG-related discussion. For instance, sustainability and SDGs are proposed to be included in the specific field of education and courses offered to the students at schools and HEIs to nurture knowledge and behaviour. Nuringsih and MN (2021) considered knowledge paramount and highlighted the importance of sustainability components in the entrepreneurial courses so that young learners can appreciate the SDGs. In this context, a study by Ashari et al. (2022) validated the Theory of Planned Behaviour (TPB) to explain and predict the entrepreneurial intention among university students; the intention could be the pillar in achieving the SDGs. As for Zakaria et al. (2021), the Global Citizenship (GC) elements must be part of the Malaysian education system to expose the younger generation to global sustainability issues. Technology adoption is emphasised in the learning approach for engineering courses offered in Universiti Kebangsaan Malaysia, leading the students to propose a sustainable solution relevant to SDG specific issues (Zaman et al., 2020). Besides formal education, exposure to SDG-related knowledge should also be provided via stakeholder engagement and off-campus activities. It will regulate youth response to aspects like disaster risk management (Muda et al., 2020) and nurture pro-environmental behaviour (Ilham et al., 2020). These aspects indicate that SDGs should be embedded in a multidisciplinary field of study to expose the students to its underlying principles.

Other academic works in Malaysia emphasise sustainable development or Education for Sustainable Development (ESD) than SDGs as the central theme. Similarly, these studies emphasised youth or students' knowledge, understanding, opinion, perception, attitude and roles in sustainable development within school and university boundaries. These studies were conducted by Ariffin et al. (2020), Ariffin and Ng (2020), Isa et al. (2021) and Mohamad et al. (2021). Students' practice and behaviour on SDG-related themes are also being studied, such as preferences concerning sustainable transportation in universities (Sundram et al., 2021) and sustainable consumption (Ahamad & Ariffin, 2018). Nevertheless, the common opinion indicates that universities must promote sustainable development and SDGs awareness (Ilham et al., 2020; Isa et al., 2021). Their legitimacy to govern the institution could be improved by making SDGs part of its culture and daily practices.

#### 3.0 Research Methodology

This is a quantitative study, and respondents were selected based on purposive random sampling. The primary respondents for the study are youth who studied at the UiTM, aged 15-30 (Malaysian), as mandated by the youth law and legislation. The selection of youth from UiTM will enrich the university's SDG-related research. Quantitative research methods were used to investigate youth knowledge concerning SDGs and identify their knowledge sources. This method was chosen because it will elicit a large number of responses. Data for this study were collected using an online survey designed using Google Forms. The survey consisted of six (6) sections to investigate respondents' knowledge of SDGs, SDG priorities, knowledge sources, most preferred social media, the impact of the SDGs exposure and demographic profile questions. Respondents were requested to rank their answers based on five Likert scale responses, including "strongly disagree, disagree, moderate, agree and strongly agree". A total of 223 respondents answered the survey, and the data were analysed using Statistical Package for the Social Sciences (SPSS) software. Descriptive statistical analyses were conducted by analysing answer frequency and the variable's mean values. The whole research process is illustrated in Fig.1, and the subsequent section presents the study's findings.





# 4.0 Findings

This study measured five different constructs, as shown in Table 1. The Cronbach's Alpha reliability coefficient for every construct shows a high degree of value, indicating the data is eligible for quantitative analysis.

Table 1. Cronbach's alpha for survey constructs				
Construct	Number of Questions	Cronbach's Alpha		
		Value		
Part A: Youth's understanding of the SDGs	12	0.938		
Part B: Youth's SDGs priority	17	0.992		
Part C: Sources of youth SDGs knowledge	11	0.940		
Part D: Types of social media	10	0.894		
Part E: The impact of youth SDGs exposure	9	0.974		

## 4.1 Demographic Profile

Fig. 2 and 3 details the demographic profile of study participants. The majority of the respondents were female (71%) compared to male (29%); most respondents were in the 21–25-year age bracket (72%).



Fig. 2: Respondent's gender



Fig. 3: Respondent's age

#### 4.2 First Objective: Youth's Understanding of the SDGs

Table 2	Vouth's	understanding of the SDCs	
Table Z.	YOUTH S	understanding of the SDGs	

Items	SD		N		SA	
	n	%	n	%	n	%
The United Nations introduced the SDGs	60	26.9	88	39.5	75	33.6
The SDGs are a continuation of the Millennium Development Goals (MDGs)	62	27.8	93	41.7	68	30.5
I am familiar with the SDG governance system in my country	71	31.8	90	40.4	62	27.8
I know the SDG implementation timeline	75	33.6	85	38.1	63	28.3
I know all the goals, targets and indicators outlined in the SDGs	94	42.2	57	25.5	72	32.3
SDGs are about "inclusivity" and "leaving no one behind"	62	27.8	60	27	101	45.2
SDGs are implemented using a "whole of nation" and "whole of society" approach	69	31	58	26	96	43
Youth are considered stakeholders and anchors in SDG implementation	56	25.1	54	24.2	113	50.7
SDGs are closely associated with the 5Ps concept (People, Planet, Prosperity, Peace and	57	25.6	69	30.9	97	43.5
Partnership)						
SDGs are relevant to daily life issues	57	25.6	50	22.4	116	52
SDGs comprise comprehensive global plans.	57	25.6	52	23.3	114	51.1

SD: Strongly disagree; N: Neutral; SA: Strongly agree

Table 2 depicts this paper's first objective: to analyse the Malaysian youth's understanding of the SDGs. It was discovered that respondents had limited knowledge of the SDGs, especially concerning SDG history and origination. The majority of the youth are unsure who introduces the global agenda, its SDG governance system, the overall goals/targets/indicators and implementation timeline. However, most of them better understand SDGs' basic concepts associated with sustainable development. Though the percentage is not significantly high, most respondents strongly agreed that SDGs are about inclusivity (45.3%), SDG implementation is based on the approach of "whole of nation" and "whole of society" (43%), SDGs are associated with the 5Ps principle (43.5%), SDGs are relevant to daily life issues (52%), and SDGs comprise comprehensive global plans (51.1%). The majority of the respondents also agreed that youth are SDG stakeholders and should work for SDG implementation (50.7%), indicating that their generation should be responsive towards the global agenda.

# 4.3 Second Objective: Youth SDGs Priority

Table 3. Youth SDG priority				
Items		Mean value		
	SDG6 (Clean water and sanitation)	3.659		
Top three most important SDGs	SDG4 (Quality education)	3.654		
	SDG7 (Affordable and clean energy)	3.618		
Top three least important SDGs	SDG14 (Life below water)	3.426		
	SDG5 (Gender equality)	3.533		
	SDG13 (Climate action)	3.529		

Table 3 presents findings for the second objective, identifying youth SDG priority. It would enlighten our understanding of the most and least essential SDGs from the Malaysian youth perspective. Mean values were used in this analysis. Respondents considered the following SDGs the most important (based on the ranking); SDG6 on clean water and sanitation, SDG4 on quality education and SDG7 on affordable and clean energy. Interesting findings in this study is that the SDGs related to hygiene, sanitation, and energy are critical to the youth. SDG 4 is a preferred goal, and previous studies align with this observation. However, environment-related SDGs, such as SDG14 (life below water) and SDG13 (climate action), are the least essential SDGs. It is worrying because environmentalists call for environmental protection action; however, youth do not consider it critical. SDG5 on gender equality is also not an issue for the respondents, even though most respondents are female, indicating they agreed with the status quo.

#### 4.4 Third Objective: Sources of Youth SDGs Knowledge and Preferred Social Media Platform

The third research objective assesses SDG knowledge sources and the most frequent platforms used to access SDG-related knowledge. The three most relevant and frequent sources include the education system, mass media, and social media. These findings confirm that schools and tertiary education expose youth to SDGs (or sustainable development) through formal and informal educational activities. Mass media, such as television, radio, and newspaper are also sources of knowledge, indicating that the traditional way of promoting sustainable development is still relevant. The third source is social media. YouTube, Twitter, and Instagram were recorded as the three most popular online platforms preferred by these informants to acquire SDG exposure, based on the mean value and descriptive statistic of the analysis (refer to Table 4 and Illustration 1). Findings also revealed that family, friends and relatives were minor sources of SDG exposure and knowledge (mean value=2.928), indicating that SDGs or associated topics were not frequently discussed in the circle due to their complexity.

Table 4. Sources of you	uth SDGs knowledge and	preferred social media
-------------------------	------------------------	------------------------

	Items	Mean value		Items	Mean value
Sources of	Education system	3.394	Social media platforms	YouTube	3.439
youth SDGs	Mass media	3.282	as a source of SDG	Twitter	3.349
knowledge	Social media	3.233	knowledge for youth	Instagram	3.269



Illustration. 1: The most preferred social media used by youth in acquiring SDGs knowledge



#### 4.5 Fourth Objective: The Impact of Youth SDG Exposure

Fig. 4 indicates how SDG exposure impacts the respondents. Their SDG exposure has been affected moderately as the percentage is not very high. The most significant impact is increasing personal knowledge of SDGs (57.8%) and catalysing the respondents to initiate SDG-related projects (50%). This implication corresponds to knowledge gathered from education systems and various media sources. Their exposure to SDGs did not provide platforms to create better networks and advocate the SDGs; it was recorded among minor impactful factors. Furthermore, these respondents were not exposed to the national SDGs progression (40.3%), causing a lack of information about the country's SDG progress.

## 5.0 Discussion

A previous study by Zamora-Polo et al. (2019) investigated the youth knowledge of the SDGs and concluded that university students had low knowledge levels. According to Mawonde and Togo (2021), students' lack of SDG understanding is due to structural and agency barriers. The findings of this study revealed that UiTM Malaysia youth have moderate SDG knowledge, especially on its fundamental concepts. Conversely, their comprehension of the sustainable development concept (i.e., inclusiveness and sustainability principles) associated with SDGs is acceptable. Respondents' sustainable development exposure in the educational system could account for the observations.

The lower and tertiary education level has been regarded as the best platform to promote and nurture SDG knowledge throughout its operationalisation (Odelami & Fasakin, 2019). Exposure of SDGs in the educational system will nurture the younger generation's sustainable behaviour and conduct, encouraging stakeholder engagement and executing a sustainability approach. It is confirmed because youth respondents acquired SDG knowledge from the school and tertiary education level. Thus, tertiary education should continue focusing on SDGs as their primary agenda and institutional policy with youth as their primary target, as Zamora-Polo et al. (2019) suggested.

Moreover, this study highlighted traditional mass media and social media as the most preferred SDG knowledge sources for youth. It indicates that youth in Malaysia preferably gathered SDG knowledge through institutional mechanisms and promotional strategies using numerous media platforms (e.g., newspaper, television, radio and social media). Mawonde and Togo (2021) and Odelami and Fasakin (2019) emphasise the importance of communicating SDG-related programmes to youth and university students through various mediums. Furthermore, YouTube, Twitter, and Instagram are the most popular mediums respondents use for SDG knowledge. It indicates that the youth widely accesses these three social media platforms. Thus, various SDG stakeholders should take this opportunity to use these online platforms to comprehend the broader goals of the younger population.

The SDGs prioritised by the respondents in this study are interesting. Unlike a survey by Polese et al. (2018) that reported SDG4, 3 and 5, the Vietnamese youth prioritised more. This study results indicate that the youth in Malaysia emphasised education, sustainable energy, cleanliness and sanitation. SDGs concerning gender equality and the environment were least prioritised. This trend is worrying, and remedial actions are needed as environment-related SDGs require more youth action to address the current global biodiversity deficiency. Youth participation in environmental SDGs is important, as proposed by Vambe (2018). While promoting gender equality is vital for conflicted countries (Vambe, 2018), a peaceful country like Malaysia should also strengthen the youth understanding of SDG5. It is part of the government's aspiration to have gender-balanced representation in all sectors.

Being exposed to SDGs has also increased respondents' SDG comprehension. They have started initiating SDG-related programmes and initiatives using existing SDG knowledge. However, more exposure to SDGs is needed to ensure the youth can significantly participate in SDG implementation to create partnerships, networking and familiarity with the country's SDG progression.

The previous studies suggested that the role of tertiary education be intensified in exposing students to SDGs, but other SDG stakeholder engagements are also a prerequisite. Authors, such as Mawonde and Togo (2021), Polese et al. (2018) and Zamora-Polo et al. (2019) have highlighted the gap in stakeholders' governance and university's roles in highlighting SDGs to the youth, requiring a more coordinated and inclusive approach to expose the younger generation to SDGs.

#### 6.0 Conclusion and Recommendation

Overall, the results of this study revealed that university students generally know about SDGs; however, SDG knowledge sources are scarce because exposure is limited to educational institutions and traditional and social media exposure and strategies are paramount. It has offered new avenues towards innovative solutions concerning SDG promotional strategies. This study could also start more promising research involving SDGs in Malaysia.

This study provides the fundamental element of evaluating the younger population and their SDG orientation. Hence, by knowing their SDG comprehension, further research could be done by explicitly focusing on their SDG-related attitudes and practices. Only then can we evaluate and measure the relationship and continue working on SDGs, actual behaviour, and conduct concerning the 17 SDGs. Other SDG stakeholders' knowledge of the global agenda must also be researched.

This study offers new insight into youth participation theories derived from their sustainability knowledge. It requires SDG governance and stakeholder engagement at the vertical and horizontal structure by including the youth. The study findings cannot be universally extrapolated and generalised but offer new empirical evidence that can be explored further. The reliability and trustworthiness of the survey instruments enable it to be extended for future research. This study presents a survey applied to one of the largest public universities in Malaysia. The students in this university shared similar socio-cultural identities; a "Bumiputeras". Thus, the study outcomes reflect SDG comprehension from the younger population representing the majority of the country's race.

Thus, a similar area of study on identifying and evaluating SDG knowledge of the youth could be extended by considering youth diversity at public and private universities, different fields of studies, and other categories of youth. The SDGs cover all categories of life within its 17 goals and should cover as many as community categories to offer exhaustive empirical evidence. Furthermore, the extension of the study scope will provide new findings and understanding on various categories of youth and their SDGs comprehension.

The main limitation of this study is the number of survey responses and the level of quantitative analysis. Similar data could be used for a more detailed inferential analysis offering more exciting results and findings.

### Acknowledgements

This research was made possible by the support of the Faculty of Administrative Science and Policy Studies (FSPPP), Universiti Teknologi MARA (UiTM), Grant Number: 600-TNCPI 5/3/DDF (FSPPP) (002/2021). Researchers would like to express their gratitude to the participants of this study who spent their time answering the online survey. We are thankful to Muhammad Harith Haiqal for sketching the illustrations in this article.

#### Paper Contribution to Related Field of Study

This paper has identified a few research gaps; selecting the right social media platforms to promote SDGs to the youth and the importance of educating the youth on the concept of sustainable development. The findings in this study could enrich the literature related to youth, education and sustainable development.

#### References

Afroz, N., & Ilham, Z. (2020). Assessment of Knowledge, Attitude and Practice of University Students towards Sustainable Development Goals (SDGs). The Journal of Indonesia Sustainable Development Planning, 1(1), 31-44.

Ahamad, N. R., & Ariffin, M. (2018). Assessment of Knowledge, Attitude and Practice towards Sustainable Consumption among University Students in Selangor, Malaysia. Sustainable Production and Consumption, 16, 88-98.

Ariffin, F. N., & Ng, T. F. (2020). Understanding and Opinion on Sustainable Development among Youths in Higher Educational Institutions in Penang, Malaysia. Social Indicators Research, 147, 421-437.

Ariffin, F. N., Ng, T. F., & Ghazali, M. (2020). Knowledge and Opinions amongst Youths in Secondary and Tertiary Education on Sustainable Development in Penang, Malaysia. In W. L. Filho, A. L. Salvia, R. W. Pretorius, L. L. Brandli, E. Manolas, F. Alves, U. Azeiteiro, J. Rogers, C. Shiel, & A. Do Paco (Eds.), Universities as Living Labs for Sustainable Development, World Sustainability Series (pp. 515-531). Springer.

Ashari, H., Abbas, I., Abdul-Talib, A.-N., & Zamani, S. N. M. (2022). Entrepreneurship and Sustainable Development Goals : A Multigroup Analysis of the Moderating Effects of Entrepreneurship Education on Entrepreneurial Intention. Sustainability, 14(431), 1-13.

Ilham, J. I. J., Zaihan, M. H., Hakimi, S. M., Ibrahim, M. H., & Shahrul, S. (2020). Mobilising the Sustainable Development Goals through Universities: Case Studies of Sustainable Campuses in Malaysia. In W. L. Filho, A. L. Salvia, R. W. Pretorius, L. L. Brandli, E. Manolas, F. Alves, U. Azeiteiro, J. Rogers, C. Shiel, & A. Do Paco (Eds.), Universities as Living Labs for Sustainable Development, World Sustainability Series (pp. 121-133). Springer.

Isa, H. M., Sedhu, D. S., Lop, N. S., Rashid, K., Nor, O. M., & Iffahd, M. (2021). Strategies, Challenges and Solutions towards the Implementation of Green Campus in UiTM Perak. Journal of the Malaysian Institute of Planners, 19(2), 60-71.

Mawonde, A., & Togo, M. (2021). Challenges of Involving Students in Campus SDGs-related Practices in an ODeL Context: The Case of the University of South Africa (Unisa). International Journal of Sustainability in Higher Education, 22(7), 1487-1502.

Mohamad, Z. F., Mamat, M. Z., & Muhamad Noor, M. F. (2021). Students as Change Agents for Campus Sustainability in Malaysian Universities. International Journal of Sustainability in Higher Education, 22(2), 404-422.

Muda, R. S., Tukiman, I., Khidzir, A. B. M., Ibrahim, A. I. N., Hussain, M. R., Rabe, N., & Abdul Razad, A. Z. (2020). Building Capacity through School-Based Engagement on Dam Safety Program in Cameron Highlands. In Water Resources Development and Management (pp. 51-63). Springer.

Nuringsih, K., & MN, N. (2021). The Role of Green Entrepreneurship in Understanding Indonesia Economy Development Sustainability among Young Adults. Studies of Applied Economics, 39(12), 1-13.

Odelami, B. J., & Fasakin, R. I. (2019). In Pursuit of 2030 Global Agenda; Awareness, Perception and Involvement of Nigerian Youths in Achieving Sustainable Development Goals and the Role of Libraries. Library Philosophy and Practice, 1-9.

Overall Rankings 2021, https://greenmetric.ui.ac.id/rankings/overall-rankings-2021

Polese, A., Phuong, D. T., Kerikmae, T., & Troitino, D. (2018). On Sustainability and its Perceptions: Presenting the Results of the First National Survey on Sustainable Development Goals and its Understanding by Vietnamese Youth. Rivista Di Studi Sulla Sostenibilita, 49-69.

Sundram, V. P. K., Hashim, N., Shariff, S. H., Pujiati, A., & Ardiansari, A. (2021). Sustainable Transportation on University Campus: A Case at UiTM Selangor, Puncak Alam Campus, Malaysia and Universitas Negeri Semarang, Indonesia. Asian Journal of University Education (AJUE), 17(2), 262-272.

Vambe, J. T. (2018). Impact of Youth Participation on Attainment of Agenda 2063 and Sustainable Development Goals (SDGs) in Nigeria. Journal of Progressive Research in Social Sciences (JPRSS), 8(3), 649-661.

Yusof, M. I. M., & Ariffin, M. (2020). A Journey towards Sustainability: A Review on Sustainable Development Implementation in Malaysia. IOP Conference Series: Earth and Environmental Science, 494, 1-11.

Zaharrudin, N. Z., & Zakaria, A. (2021). Media and Funding: A Qualitative Study of Malaysian Social Welfare NGOs. Environment-Behaviour Proceedings Journal, 6(18), 11-17.

Zakaria, S. Z. S., Bakar, R. N. A. R. A., Isa, N. M., Mahmud, S. N. D., Abdullah, A., Ahmad, C. N. C., Syed, S. I. S., Abdullah, Majid, N. A., & Razman, M. R. (2021). Global Citizenship Elements in Malaysian Primary School Curriculum towards Sustainable Development Goals (SDGS). Ecology, Environment and Conservation, 27(1), 178-186.

Zaman, M. H. M., Mokhtar, M. H. H., Ibrahim, M. F., Huddin, A. B., & Beng, G. K. (2020). Integration of 3D Printing in Computer-aided Design and Engineering Course. International Journal of Evaluation and Research in Education (IJERE), 9(4), 934-938.

Zamora-Polo, F., Sánchez-Martín, J., Corrales-Serrano, M., & Espejo-Antúnez, L. (2019). What Do University Students Know about Sustainable Development Goals? A Realistic Approach to the Reception of this UN Program Amongst the Youth Population. Sustainability, 11, 1-19.