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RESEARCH BRIEF

Factors Influencing Eco Youth Sustainability Activity and Practices in Youth City, Muallim, Malaysia

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Global environmental issues such as biodiversity destruction, natural resource depletion, global warming, and environmental pollution are increasing every day and have become a challenge in the implementation of sustainable development (Auwalu, 2015). These environmental problems have gained the attention of the whole world (Asmawati, Nor Ba'yah, & Fatimah, 2011). Rampant exploration of forest lands has threatened the sustainability of resources. Therefore, the problem of resource shortages must be seriously taken as it will otherwise undermine natural resources for future generations. Awareness with regard to the importance of the environment should be emphasised because it constitutes a fundamental component in the efforts at achieving sustainable development goals (Aisyah & Zainora, 2012).

Efforts towards environmental sustainability are necessary to interpret and sustain economic progress, reduce pollution rates, and enhance the social development of a country. Systematic efforts are needed to realize sustainability and avoid negative impacts on the environment, as well as to improve ecosystem management (Mohamad Affendy, Nazirah & Wan Dagang, 2015). Therefore, awareness through sustainability practices is important in maintaining environmental, economic, and social harmony. Various efforts are required to enhance practice by requiring the involvement of community members, especially young people. In Malaysia, the government has formed various policies and regulations, including programs to realize environmental sustainability in line with the objectives of the 11th Malaysia Plan. Existing policies provide guidance to all parties, including the federal and state government agencies, local authorities (PBTs), the industrial sector, community, as well as youths, to minimize environmental impacts for future generations.

In Malaysia, there also exists the Rakan Alam Sekitar Program, which was launched on June 4, 2009, under the supervision of the Department of Environment Malaysia. The Program is an initiative led by the Ministry of Natural Resources and Environment to develop awareness and mobilize members of the community in environmental conservation and preservation. Rakan Alam Sekitar involves community members via a hands-on method by becoming the "eyes and ears" to assist government agencies responsible for combating activities that destroy or pollute the environment (Department of Environment, 2014).

In fact, these environmental programs are not only conducted at the national level but are additionally receiving encouraging responses at state and district levels. For example, in the Muallim District, the 11th district in Perak and recognized as a youth city, various parties have led initiatives, including the Tanjong Malim District Council, which has organized programs such as *gotong-royong* (mutual cooperation) and recycling (Tanjong Malim District Council, 2018). Programs to raise environmental preservation awareness and embrace the practice of the 3Rs (reduce,

reuse, recycle) also exist, as conducted by the National Blue Ocean Strategy Program (Tanjong Malim District Council, 2018). These environment-related activities prioritize youths as actors because they can influence peers and local communities (Garst, Browne, & Bialeschki, 2011).

Therefore, youths should be considered as a major group to be targeted for engagement in environmental sustainability efforts. Numerous studies have been conducted in educational institutions with the aim of engaging students. Youth participation in environmental practices can shape individual transformation, the environment, and the community. Hence, studies on youth engagement in environmental activities are necessary to develop an action plan and identify the suitability and accessibility of the programs conducted.

Youths and Environmental Eco-Activities

In dealing with the flow and challenges of technologies that alter the ways in which we live, work, and think, a new approach to building the talents and potential of youths in environmental activities is necessary, in line with current needs. The role of youths in environmental eco-activities is important because, in the future, this generation will depend on the extent to which they have handled contemporary concerns such as lack of resources, biodiversity loss, and long-term radioactive waste. Eco-activity is any action or activity in a program that aims to have a positive impact on the environment. Examples of eco-activities include environmentally friendly behaviors such as reducing the amount of paper used in offices or only buying products from companies with eco-friendly or sustainability products. There are also eco-activities that aim to have positive impacts on the living environment, such as clearing beaches, removing graffiti, supporting gardening activities, and replanting trees (Japan Ministry of the Environment, 2017). According to Hart (1992), active youth involvement in a program occurs through eight stages of manipulation, decoration, tokenism, assigned but informing, consulted and informed, initiated by adults, initiated by youths, and surrounding people.

The manipulation stage is the activity level that is instructed by adults without any input from youths. The tokenism stage is the level of activity instructed by adults, with minimum input from teenagers. The assigned but informed stage is a stage where the activity is instructed by adults, but youths are asked to play a role in making the decisions. This can lead to higher interest among youths towards the outcome. The consulted and informed stage is a stage where the activity is instructed by adults, and youths are informed on how their inputs will be used. The fourth and fifth stages are where most people start their work, supporting youths as collaborators in a process. A decision initiated by adults together with youths takes place when adults initiate a project or program, but the decision-making is shared with youths to provide feedback on the program. The stage that begins and is instructed by young people is where youths start and manage a project or program. Adults play the role of supporters. The stage where youths make a decision together with adults takes place when young people initiate a project or program, and decision-making is shared with adults. A summary of Hart's (1992) youth participation levels is displayed in Figure 1.

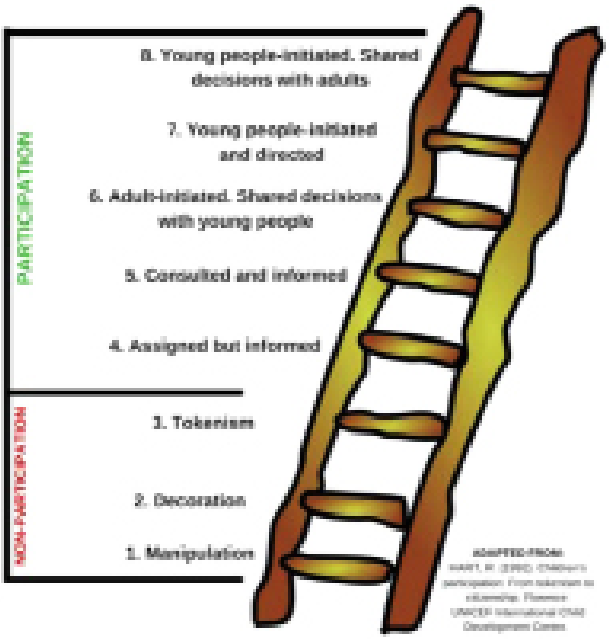

Figure 1. Stages of youth engagement. Source: Hart (1992)

However, in Malaysia, youth engagement and practices in environment-related activities remain at an unsatisfactory level (Norhusna, 2014). Some young people refuse to be involved in environmental preservation even though they understand the importance of environmental preservation, as shown in a study by Ahmad, Rahim, Pawanteh, and Ahmad (2012), which was conducted in Klang Valley

involving young people aged 18 to 25. The study also found that youths generally thought that individual participation would not be able to change the world. The results of a study conducted by Norhusna (2014) acknowledged how different parties should play a role in exposing knowledge pertaining to the environment, especially via social media, as a means of generating environmental awareness through knowledge. This medium allows groups of young people to easily create awareness when they engage in environmental activities. Riemer, Lynes, and Hickman (2014) have also identified youths as an influential target group owing to their ability to encourage peers to participate in environmental activities. According to Schusler, Krasny, Peters, and Decker (2009), the outcomes shared by environmentalists who practiced environmental sustainability in their study helped facilitate youth participation in environmental actions.

Numerous factors exist that encourage young people to participate in environmental preservation activities. A study by Sharififar, Jamalian, Nikbakhsh, and Ramezani (2011) revealed that motivating factors are important in promoting the interest and commitment of young people in carrying out an activity. In addition, the influence of rewards implemented in a study by Phillips and Phillips (2010) found that a reasonable reward could boost participation if the current economic situation suppressed living conditions in society. However, Bowman (2009) and Fiorillo (2011) noted that monetary rewards did not make a person more motivated to carry out a task. Increasing knowledge is also a fundamental factor in self-development through volunteering involving environmental activities (Schlegelmilch & Tynan, 1989).

Social factors additionally affect youth environmental practices (Charlie & Ng Yuen, 2014). Wahid, Rahbar, and Tan (2011) have stated that social influence is a proxy of subjective norms; in other words, social influence has the same meaning as subjective norms. Furthermore, DeLamater and Myers (2010) have stated that social influence represents an alteration in someone's attitude and behavior that is influenced by the actions of others, such as persuasion or threat. Moreover, Rashotte (2007) has stated that social influences can be defined as a change in the minds, feelings, attitudes, or behaviors of individuals resulting from interaction with other individuals or groups. This shows that young people are easily influenced by the people around them, such as friends, family members, and the community.

Therefore, it is evident that youths play an important role in shaping a more glorious future for the country while maintaining the natural environment for the sake of mutual sustainability. Young people are the primary group that requires attention because their influence can easily spread among the community. Hence, studies on the driving factors and levels of eco youth sustainability activity practices in Malaysia are important in order to identify the readiness of Malaysian youths to participate in environment-based activities.

Methods

The investigation utilized a questionnaire instrument to study the factors of pro-environmental behavior among Malaysian youths in environmental activities by focusing on locations in Muallim District, Perak, Malaysia, which have the potential to become youth cities.

Study Location

This study was conducted in Muallim, Perak, Malaysia, which is the 11th district in the state of Perak, under the administration of the Tanjung Malim District Council. There are three sub-districts (mukim) within this district, namely Mukim Slim, Mukim Hulu Bernam Barat, and Mukim Hulu Bernam Timur (Official Portal of Perak State Government, 2016). However, only two sub-districts, Slim and Hulu Bernam Timur, constitute the focus of this study because their populations are greater, enabling us to obtain information. As Bhasah and Yuslina (2013) argued, more information has the benefit of bringing the research closer to the real situation.

Muallim District was selected as the study area because it is located in the Hulu Lembangan Sungai Bernam, a unique area because it lies at the foot of Banjaran Titiwangsa and is famous for its green landscapes, rivers, waterfalls, and low temperature. Therefore, the influences of the human and physical environments, especially the forests, are undeniably important to every ecosystem in Tanjong Malim, both to abiotic and biotic components (Che Ngah, Hashim, Nayan, Saleh, & Mat Said, 2014). The study location is displayed in Figure 2.

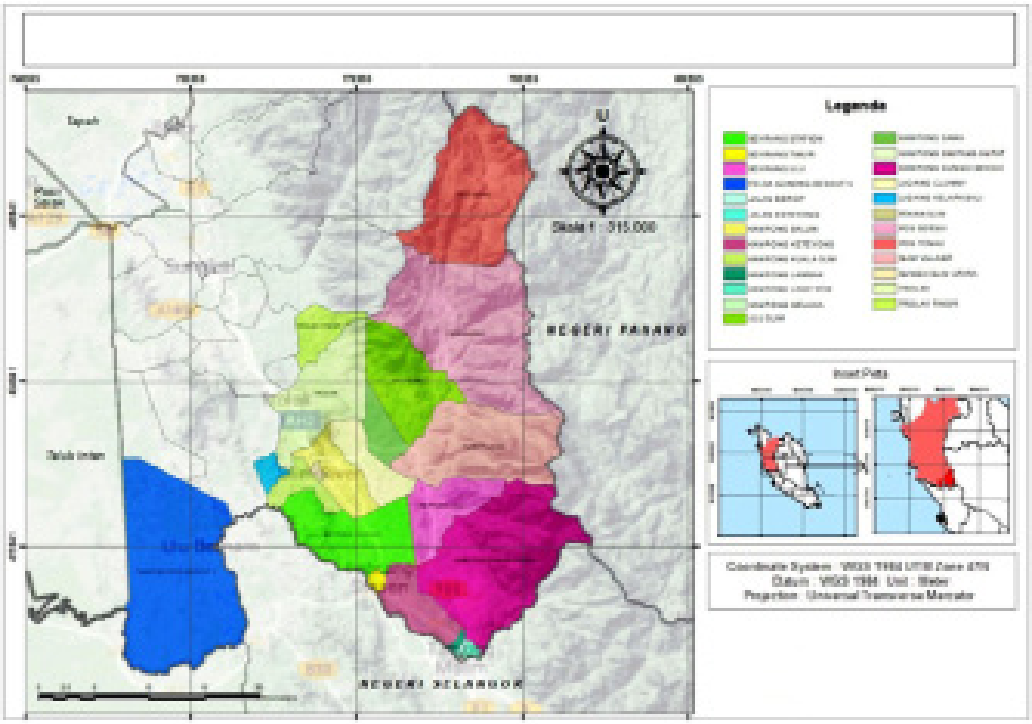

Figure 2. Map of the study area

Population and Sample

The youth population in Muallim comprises 35,400 people, including 18,900 male and 16,500 female youths. To select the sample size, Krejcie and Morgan's (1970) guidelines were used in such a way that when the population of a study is between 30,000 and 40,000, a total of 380 samples are required. Hence, this study used a sample of 400 respondents to represent the youths in these two sub-districts (200 respondents in Slim sub-district and 200 respondents in Hulu Bernam Timur). Simple random sampling was used to ensure that every subject in a population had the same likelihood of being selected as a respondent (Chua, 2006).

Study Instruments

The instrument used in this study was a questionnaire, which consisted of three sections. Section A focused on respondents' demography, comprising sub-district information, age, sex, race, marital status, level of education, employment sector, and household income. Next, the questions in Section B focused on youths' engagement in environmental activities. They began with the options "Yes" or "No." If "Yes," the respondent was obligated to answer questions regarding the type of activity in which they had participated and the organizers who had run the environmental activities. Section C examined the factors that encourage respondents to engage in environment-related activities. Finally, Section D referred to environmental sustainability practices pertaining to electricity saving, water saving, eco-friendly products use, and travel modes. Twelve items were included in this section using Likert scales to examine youths' practices (1 = never, 2 = sometimes, 3 = occasionally, 4 = often, and 5 = very often). The questionnaire information is summarized in Table 1.

A descriptive analysis was then used to explain or summarize the population or sample information. Descriptive analysis can explain data or information by simplifying several sets of data or information in various media such as tables or diagrams. To classify the levels of eco-youth sustainability activity practices, Landell's (1997) benchmark was used, as shown in Table 2.

Table 1

Questionnaire Information

Part	Constructs	Sub Constructs	No. of Item	Source
Part A	Respondents' Background	Distinct	1–8	Built by the researcher according to study needs
		Age		
		Gender		
		Races		
		Marital Status		
		Level of Education		
		Employment Sector		
		Household income		
Part B	Background of Environmental Activity Engagement	Activity Attend	1–27	Built by the researcher according to study needs
		Activity Organizer		
		Affected Factors		
Part C	The Driving Factors of Eco Youth Activity Engagement		8	Built by the researcher according to study needs
Part D	Eco Youth Sustainability Activity Practices		1–12	Built and modified from KeTTHA (2015)

Table 2

The Levels of Classification of Mean Scores

Mean Scores	Levels of Classification
1.00–2.33	Low
2.34–3.66	Medium
3.67–5.00	High

Source: Landell (1997)

Results

The findings and discussion of the study comprise four main sections, which include respondents' demography, a background to youths' environmental activity engagement, factors contributing to environmental activities, and levels of engagement in environmental activities in Muallim District.

Table 3 displays the respondents' profiles or information about their backgrounds, such as sub-district, age, sex, race, marital status, level of education, employment sector, and household income. Based on Table 2, 400 individuals were surveyed in two sub-districts, namely Slim and Hulu Bernam Timur, with 200 individuals (50%) representing each.

In terms of respondents' age, the 25 to 30 age group comprised the largest number of respondents with 136 respondents (34%). In terms of sex, a total of 169 people (42.3%) were male and the remaining 228 (57%) were female. The majority ethnic group involved was Malay, with 262 respondents (65.5%), and the second-highest was Chinese, with 83 respondents (20.8%).

Table 3

Respondents' Backgrounds

Background of Respondent		N	%
Distinct	Slim	200	50.0
	Hulu Bernam Timur	200	50.0
	Total	400	100
Age	19 – 24	62	15.5
	25 – 30	136	34.0
	31 – 36	129	32.3
	37 – 40	73	18.3
	Total	400	100
Gender	Male	169	42.3
	Female	228	57.0
	Total	400	100
Races	Malay	262	65.5
	Chinese	83	20.8
	Indian	50	12.5
	Sarawak's Bumiputera	4	1.0
	Sabah's Bumiputera	1	0.3
	Total	400	100
Marital Status	Single	154	38.5
	Married	226	56.5
	Widows	18	4.5
	Widower	2	0.5
	Total	400	100
Highest Level of Education	Never Attended School	2	0.5
	Up to Standard 6	4	1.0
	SRP/PMR	7	1.8
	SPM	63	15.8
	STPM/Pra U/Matriculation	155	38.8
	Diploma	51	12.8
	Bachelor Degree	107	26.8
	Master Degree	11	2.8
	Total	400	100
Employment Sector	Government	206	51.5
	Private Sector	109	27.3
	Self-Employed	48	12.0
	Unemployed	9	2.3
	Student	28	7.0
	Total	400	100
Household Income	<RM1000	72	18.0
	RM1,001-RM2000	147	36.8
	RM2001-RM4000	144	36.0
	RM4001-RM6000	33	8.3
	RM5001-RM10000	4	1.0
	Total	400	100

Majority of the respondents (226 or 56.5%) were married. In terms of the education level, the respondents predominantly have a bachelor's degree (107 individuals or 26.8%). Also, the majority (206 people, or 51.5%) worked in the government sector, and about a quarter of them (27.3%) worked in the private sector. For the household income, 147 respondents earn between RM1,001 to RM2,000 (36.8%), and 144 people (36%) have incomes ranging from RM2,001 to RM4,000.

Background of Environmental Activity Engagement

The background of youth engagement in environmental activities encompassed questions pertaining to any environment-based activities in which youths had ever participated, as well as the organizers of these environmental activities and youth engagement. The findings revealed that almost all of the youths had participated in environmental programs (60.8%). However, there were also 157 respondents (39.2%) who had never participated in such environment-based programs. Only 132 respondents (33%) had been involved in 3R (reduce, reuse, recycle) activity. Indeed, 268 respondents (67%) who had never participated in any recycling activity. In terms of plastic bag-free day, only 127 respondents (32%) had participated in this activity.

On the activity pertained to car-free day, a total of 363 respondents (90.8%) had not participated in a car-free day activity. In terms of an Earth hour activity, a total of 123 respondents (31%) had participated, and the remaining 277 respondents (69%) had not. As for planting a tree, the majority of the respondents (78%) had not participated in such activity. The gotong-royong activity of cleaning a residential area had seen 149 respondents (37.2%) participate, and 251 had not (62.8%), as Figure 3 shows. In terms of the no-polystyrene day, only a small percentage (11.7%) had participated.

Additional activity included was making compost fertilizers from waste materials for environment-related activities. The number of youths who had been involved in this activity was a meager 20 people (5.0%). As for hiking while cleaning the forests, 369 respondents (92.2%) said they had not done so. For cleaning the river, only 39 respondents (9.8%) had been involved. A total of 12 respondents stated "Yes" on having been involved in other activities but did not elaborate, while the remainder of the 388 respondents stated 'No' to other activities. Each of these environment-based activities is shown in Figure 3.

Overall, the results indicated that the environment-based activities most commonly attended by youths were the car-free day followed by making compost fertilizers from waste materials, hiking while cleaning

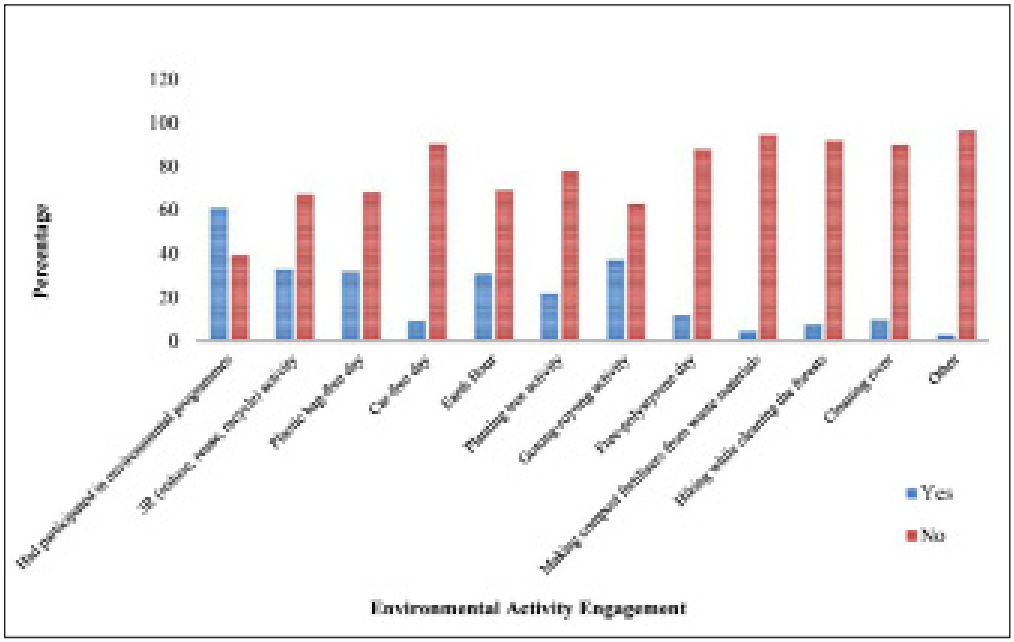

Figure 3. Environment-based activities.

the forests, and river cleaning. In contrast, activities such as attending environmental programs, gotong-royong of cleaning the residential areas, 3R practices, and plastic bag-free day saw less involvement.

The Driving Factors of Eco Youth Activity Engagement

The factors that drive environmental eco-activity engagement indicated that 191 respondents (47.8%) had been involved in environmental activities due to self-awareness. The respondents were also given the choice of whether parental encouragement represented a factor in stimulating environmental activity, or whether it acted to the contrary. A total of 84 respondents (21%) stated that they had been encouraged by parents to engage in recycling activity. However, 316 respondents (79%) engaged in environmental activities without parental impetus. Respondents were additionally asked about youth engagement in environmental activities due to peer encouragement. The findings indicated that 333 respondents (16.8%) stated "No" to this question. Encouragement from teachers or lecturers was another factor that stimulated youths to engage with the environment; however, 335 individuals (88.8%) claimed never to have been involved for this reason. A total of 100 respondents (25%) stated "Yes" that they merely wanted to spend their leisure time as a factor for being involved in these activities. In contrast, 300 respondents (75%) stated otherwise because their engagement was not influenced by leisure time.

Respondents were also given the choice of whether they were forced by any party to engage with the environment, but the majority of the respondents (95.2%) stated "No" to this. Next, referring to Figure 4, a total of 383 respondents (96%) stated "No" to attractive rewards being the factor explaining why they became involved in environment-related activities. Except for one respondent, the respondents had no other factors behind their engagement in environmental activities. This suggests that Malaysian youths are still at the first and second stages of Hart's (1992) model of participation: the manipulation and tokenism stages, which require adult-instructed activities, with minimum or no input from teenagers. In addition, the findings of this study are congruent with a study by Phillips and Phillips (2010), which shows that the rewards factor can increase engagement spirit among youths (Figure 4).

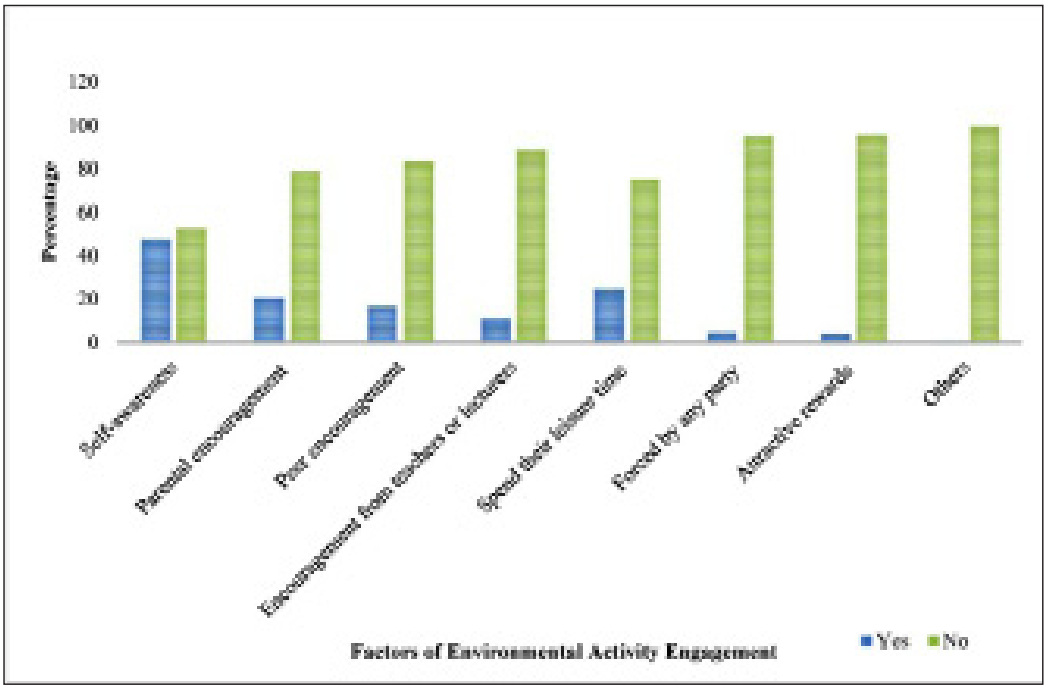

Figure 4. Factors of environmental activity engagement.

Table 4

Levels of Eco Youth Sustainability Activity Practices

Contructs	Low Level		Medium Level		High Level		Mean	SD	Mean Level
	N	%	N	%	N	%			
Eco Youth Sustainability Activity Practices	6	1.5	158	39.5	236	59.0	3.78	.67	High
Electricity Saving	43	10.8	162	40.5	195	48.8	3.70	.92	High
Water Saving	22	5.5	128	32.0	250	62.5	3.98	.82	High
Eco-Friendly Products Use	48	12.0	181	45.3	171	42.8	3.56	.91	High
Travel Modes	8	2.0	182	45.5	210	52.5	3.87	.76	High

Eco Youth Sustainability Activity Practices

Table 4 displays the levels of environmental sustainability engagement practices among the respondents. The variables for practices were related to electricity saving, water saving, eco-friendly products use, and travel modes. The results of the study also include the overall variable and sub-variable levels with high means. The mean scores for levels of practices comprised M=3.78 and SP=.67. The levels of practice for electricity saving (M=3.70 and SP=.92), environmental sustainability in terms of water saving (M=3.98 and SP=.82), environmentally-friendly products use (M=3.56 and SP=.91), and environmental sustainability practice in terms of travel modes were all high (M=3.87 and SP=.76). Even though the driving factor for youths to engage in eco-activities was force, the level of eco youth sustainability activity practices in Muallim District is impressive, in line with the basic components of efforts to achieve the goals of sustainable development (Aisyah & Zainora, 2012).

Conclusion

The results of the study indicate that the most commonly attended environment-based activities among youths were the car-free day, followed by making compost fertilizers from compost waste, hiking while cleaning the forests, and river cleaning. However, attending a talk on how to take care of the environment was less commonplace. This suggests that youths prefer participating in environment-based activities via hands-on and interactive ways, rather than through talks. As for the factors that motivate youths to undertake eco-activities, attractive rewards, being forced, encouragement from friends, and encouragement from teachers or lecturers were salient. This suggests that self-awareness among youths in Malaysia remains unsatisfactory as rewards and being forced have become the main factors behind their participation in eco-activities. However, the results of the levels of eco youth sustainability activity practices demonstrated that each variable was at a high level for electricity saving, water saving, eco-friendly products use, and travel modes. It can thus be concluded that youths are very influential and able to make changes, especially in matters regarding the environment. Therefore, youths are the main group that should be given attention because their influence can easily spread across the community.

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Declaration of ownership

This report is our original work.

Conflict of interest

None.

Ethical clearance

This study was approved by the institution.

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