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CONSTRAINTS TOWARDS THE INTENTION FOR SUSTAINING ENGAGEMENT AS AN ENVIRONMENTAL VOLUNTEER

(*Kekangan terhadap Keinginan Kelestarian Penglibatan sebagai Sukarelawan Alam Sekitar*)

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ABSTRACT

Environmental volunteerism contributes to large-scale environmental conservation efforts. However, the constraints faced by volunteers have hindered the volunteers' intention to continue their environmental volunteer engagement. Thus, this study examined the constraints and recommendations to sustain environmental volunteers' involvement from the perspective of university students. This quantitative study employed the survey design. The questionnaire was distributed to 357 respondents who participated in environmental volunteering activities. The results showed that the constraints, recommendations and intention to sustain engagement as an environmental volunteer were at a high level. Both male and female volunteers experienced the same level of constraints. In terms of increasing environmental volunteer activities, female volunteers needed more support from the organization than male volunteers. The findings showed that female volunteers have had a higher intention to continue their involvement as environmental volunteers compared to men. In addition, there were significant differences between environmental volunteers from different categories of volunteerism in terms of constraints,

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suggestions and intention to continue their involvement as environmental volunteers. Therefore, the organizers of volunteer activities need to overcome the constraints faced by environmental volunteers by increasing social support, dissemination of information and emotional management to sustain the involvement of university students in environmental volunteering activities.

Keywords: Youth; environmental volunteerism; constraints; social work; environmental conservation and environmental behavior

ABSTRAK

Kesukarelawanan alam sekitar menyumbang kepada usaha pemuliharan alam sekitar berskala besar. Namun, kekangan yang dihadapi oleh sukarelawan menjadi salah satu faktor yang menghalang kepada keinginan meneruskan penglibatan sebagai sukarelawan alam sekitar. Justeru, kajian ini mengkaji kekangan dan cadangan untuk melestarikan penglibatan sebagai sukarelawan alam sekitar daripada perspektif pelajar universiti. Kajian kuantitatif ini menggunakan rekabentuk survei. Soal selidik ini diedarkan kepada 357 responden yang telah mengambil bahagian dalam aktiviti sukarelawan alam sekitar. Hasil kajian menunjukkan bahawa kekangan, cadangan serta keinginan melestarikan penglibatan sebagai sukarelawan alam sekitar berada pada tahap yang tinggi. Kekangan yang dirasai oleh sukarelawan lelaki dan wanita berada pada tahap yang sama. Bagi aspek cadangan meningkatkan aktiviti sukarelawan alam sekitar, wanita lebih memerlukan sokongan daripada organisasi berbanding lelaki. Dapatan juga menunjukkan wanita mempunyai keinginan meneruskan penglibatan sebagai sukarelawan alam sekitar yang lebih tinggi berbanding dengan lelaki. Di samping itu, terdapat perbezaan yang signifikan antara sukarelawan alam sekitar yang berbeza aliran pengajian daripada aspek kekangan, cadangan dan keinginan meneruskan penglibatan sebagai sukarelawan alam sekitar. Justeru, penganjur aktiviti kesukarelawanan perlu mengatasi kekangan yang dihadapi oleh sukarelawan alam sekitar daripada aspek sokongan sosial, penyebaran maklumat dan pengurusan emosi bagi meningkatkan kelestarian penglibatan pelajar universti dalam aktiviti kesukarelawanan alam sekitar.

***Kata kunci**: Belia; kesukarelawanan alam sekitar; kekangan; kerja sosial; pemuliharaan alam sekitar dan tingkah laku alam sekitar*

INTRODUCTION

Climate change issues have led to large-scale environmental disasters such as hurricanes, floods, landslides, and extinction of flora and fauna species require large-scale efforts and involve cooperation from various parties. Environmental volunteerism is one of the actions on environmental conservation that has a significant impact. Environmental volunteering is a form of pro-social activity conducted willingly without expecting rewards, such as financial rewards (Measham & Barnett 2007). Furthermore, environmental volunteerism can reduce environmental conservation costs (Woosnam et al. 2019).

From the perspective of Islam, the principal of *Islam Hadhari,* embodied in the ninth principle of nature conservation, emphasises the harmony between human life and the environment. Islam is a universal religion and focuses on all issues to ensure the well-being of mankind. One of the efforts in carrying out responsibilities as a caliphate is to engage in environmental volunteer activities (Fachruddin 2010).

Past studies focused on individual behaviour in finding solutions to environmental issues (Balundė et al. 2019; Farrow et al. 2017), whereas environmental volunteerism has a large-scale impact on environmental conservation and volunteer self-development (Woosnam et al. 2019; Omoto & Packard 2016; Measham & Barnett 2007). However, the on-off involvement of volunteers has hindered the achievement of environmental volunteers' program objectives. Therefore, ensuring the sustainability of volunteer involvement is an important yet challenging endeavour (Sheldon et al. 2016; West & Pateman 2016).

Challenges in sustaining environmental volunteers' involvement have caused difficulties for environmental organisations as training new environmental volunteers takes time, energy, and finance (Bruyere & Rappe 2007). The constraints experienced by volunteers influence the sustainability of their engagement as environmental volunteers. Based on the theory of planned behaviour, perceived behaviour can directly influence the behaviour toward environment conservation (Ajzen 2005). Thus, perceived constraints can affect individual behaviour towards the environment. Past studies identified that the constraints faced by volunteers include time, lack of information, commitment, depression, social isolation, financial issues, and transportation (Winch et al. 2020; Jacobson et al. 2012; O'Brien et al. 2010). In addition, Gage and Thapa (2012) found that values related to motivation were generally less critical factors in encouraging youths to engage in volunteerism, especially those facing more perceived constraints. Thus, the sustainability of one's engagement environmental volunteerism requires support, high commitment, and physical strength (Ding & Schuett 2020; Jacobson et al. 2012).

Various parties must play a role in enhancing and maintaining the sustainability of volunteers' engagement in environmental volunteerism, as these groups can influence their peers and local communities (Garst, Browne & Bialeschki 2011). However, the suggestions to increase the sustainability of engagement as an environmental volunteer needs to be based on the environmental volunteers' perspective to be more effective and in line with the current requirements. The sustainability of youth volunteers' engagement is also important for developing self-potential, such as communication skills and problem-solving capabilities, and creating more career opportunities (Larson et al. 2020; Measham & Barnett 2007).

Youth backgrounds also play an important role in predicting the sustainability of engagement as an environmental volunteer. Constraints in preserving engagement as environmental volunteers are influenced by their commitment and environment (Gage & Thapa 2012; Clary et al. 1996). Past studies have shown that male volunteers are more likely to engage in environmental volunteer activities than females. This is because while female volunteers have a higher commitment, they often have less physical ability than males (Fyall & Gazley 2015; Taniguchi & Marshall 2014; Taniguchi 2006). Similarly, students from environmental-related study streams are more likely to engage in environmental volunteering activities than students from other streams of study (Goldman et al. 2015; Heyl et al. 2013). The inconsistency of the findings of past studies on the sustainability of engagement as an environmental volunteer based on gender and study stream requires a comprehensive study. Thus, this study examined the levels and differences in constraints. It aimed to provide suggestions for overcoming challenges and increasing the sustainability of engagement in environmental volunteerism based on gender and study stream. This is due to limited studies in Malaysia that examined the constraints faced by environmental volunteers. Research on environmental volunteerism in Malaysia is focused on the experiences and benefits that affect involvement as an environmental volunteer (Wong et al. 2020).

LITERATURE REVIEW

The constraints experienced by environmental volunteers affect their engagement in volunteer activities (Gage & Thapa 2012; O'Brien et al. 2010; Clary et al. 1996). Gage & Thapa (2012) study involved American university students and found that constraints of time, money, and transportation significantly influenced an individual's engagement in volunteer activities compared to altruistic values and motivations. As a result, structural constraints influence the decision of environmental volunteers not to continue their engagement in volunteer activities (Martinez & McMullin 2004). It could be argued that if individuals feel that voluntarily spending time, money, or resources will negatively impact themselves or their friends and family, they will

be less motivated to use these resources for the benefit of others (Pagès et al. 2018; Fennell 2008).

The sustainability of involvement as an environmental volunteer is also influenced by the management of volunteer program organizers (Terry et al. 2013). Environmental volunteering programme organisers should focus not only on the organisational benefits but also on reducing structural constraints faced by environmental volunteers. Good management of volunteer programs could bring behaviour shifts, as efficient management can inculcate high satisfaction levels among volunteers (Hyde et al. 2016). Volunteer self-satisfaction influences individual engagement and acts as an additional motivation for the sustainability of environmental volunteer engagement (Cho et al. 2020) such as the perceived benefits of environmental volunteers (Cho & Joo 2022) and enhance relationship to the environment (Teixeira et al. 2023; Hatty et al. 2022). Thus, the organisers play an important role in planning programmes that combine learning, socialisation, and relevant networking to benefit the volunteers while helping reduce their constraints.

Individual engagement volunteering activities are closely related to gender background. Past studies have found that there are differences in engagement in gender-based environmental conservation (Piyapong 2019; Goldman et al. 2015; Taniguchi & Marshall 2014) where environmental preservation behaviour among female respondents is higher than males (Macias & Williams 2016; Longhi 2013; Lynn & Longhi 2011). On the other hand, a study by Piyapong (2019) found that male students were more involved in environmental-related activities than female students. In this light, male students' engagement volunteer activities illustrate the strength of value and social elements, which are influenced by a high intention to help society (Nicholas 1999). In contrast, Salas (2008) found that women have a more positive perception of volunteering than men as they are more concerned about surrounding issues than men. Women also have more empathy (Tam 2013), adherence to moral values (Nock et al. 2008) and are more motivated by religious factors (Musick & Wilson 2008) than men.

Past studies examining differences across study streams found that science (Biology) students have stronger pro-environmental attitudes than students not from the science stream (Arba'at et al. 2010). The findings of past studies have found significant differences between students in the environment and non-environmental students in their attitude and behaviour toward the environment (Heyl et al. 2013). However, no significant differences were found between the attitude of students enrolled in environment-related courses and non-environmental-related courses toward development sustainability (Tuncer 2008). Despite the high pro-environmental attitudes among science and non-science students, participation and experience are

low in environmental-related activities such as environmental volunteers (Christian 2018; Abbas & Singh 2014). Fang (2017) stated that environmental education can help foster pro-environmental behaviour but does not necessarily lead to decisions on changing behavioural patterns. The same is true of the flow of studies where a study by Goldman et al. (2015) and Sumarmi et al. (2022) found that students from environmental-related studies were more exposed to environmental volunteer activities than students from other streams of study. Therefore, there is also a need to study the differences in the constraints faced by students from different study streams in sustaining their engagement as environmental volunteers.

METHODOLOGY

Research Context

This study comprised a survey that involved 357 environmental volunteers. The environmental volunteers involved in this study were students studying in the Klang Valley area. The Klang Valley was selected as it has the largest number of non-governmental organisations (NGOs) registered under the Malaysian Environmental NGOs (MENGO). There are eight NGOs in the Klang Valley out of a total of 19 registered NGOs, of which the remaining are in Penang (3), Sabah (4), Pahang (1), Terengganu (1), Sarawak (1) and Perak (1). In addition, higher education institutions are also abundant in the Klang Valley, which is six public universities and 30 private universities.

This study focused on youths as they play a significant role in the development of society and the country. According to Nesbit (2017), volunteers among youth are more likely to engage in volunteer activities than older people. Youth are the future leaders who must be mature and highly committed to caring for the environment (McDougle, Greenspan & Handy 2011).

Respondents

The survey respondents were environmental volunteers who participated in volunteer activities conducted by government bodies, non-governmental organisations, or schools and institutions of higher learning in Malaysia. The environmental volunteers involved in this study were Muslim youths aged between 18 and 30 years old. Random sampling was used due to the constraints of sampling participants and observing environmental volunteer activities in the field following the COVID-19 pandemic. Respondents to this study were derived from the recommendations of other volunteers and recommendations from NGOs that had organised environmental

volunteering activities. Table 1 presents the demographic profiles of the study's respondents.

TABLE 1 Profile of the Survey Respondents

Respondent Profile	Frequency	Percentage (%)
Gender:		
Male	151	42.3
Female	206	57.7
Types of Universities:	336	94.1
Public	21	5.9
Private		
Study Stream:	84	23.5
Pure science	138	38.7
Social Sciences	102	28.6
Professional	33	9.2
Islamic Studies		
Total	357	100

Research Instruments

The study instrument was a questionnaire on the respondent's perception of constraints they faced in engaging in environmental volunteer activities and suggestions to encourage environmental volunteer activities that influenced the intention to continue engaging in environmental volunteering activities. The questionnaire consisted of four sections: Section A probed into the demographic background of the study's respondents, Section B focused on the constraints of sustaining involvement as an environmental volunteer, Section C: Recommendations for sustaining involvement as an environmental volunteer, and Section D: Intention in sustaining involvement as an environmental volunteer. All questions were contructed by researchers based on past studies. Sections C and D required the respondent to rate the items based on a Five (5) Point Likert Scale, ranging from 1 (Highly Disagree) to the value of 5 (Highly Agree).

Validity and Reliability

Two experts in environmental education and environmental conservation reviewed the questionnaire developed. The completed questionnaire was determined by pre-testing the questionnaire with five environmental volunteers to ensure that the respondents could understand the items in the questionnaire. The findings showed that all five respondents understood the items in the questionnaire.

A pilot study was conducted in September 2020 on 36 environmental volunteers. Based on the pilot study findings, the construct of constraints, suggestions, and intention to sustain involvement as an environmental volunteer has a Cronbach Alpha value of 0.70 and above, as shown in Table 2. Therefore, the item reliability for this questionnaire was high and accepted, according to Hair et al. (2010).

TABLE 2 Cronbach Alpha Values for Constraints, Suggestions and Intention to Sustain Engagement as an Environmental Volunteer

Construct	Cronbach Alpha
Constraint	0.741
Suggestion	0.863
Desire	0.792

Data Collection Procedure

The questionnaire developed was distributed online in the form of Google Forms. The link to the survey was distributed through Facebook, WhatsApp, and Telegram, and a total of 357 environmental volunteers took part in the survey. This data collection is relevant for use during the pandemic and data were collected from December 2020 until March 2021. Data obtained in Excel form were transferred to SPSS software for analysis.

Data Analysis Protocol

Data were analysed using descriptive statistics and inference statistics. Description statistics involve frequency, percentage, mean and standard deviation to study the degree of constraint suggestion and desire to sustain engagementin environmental volunteer activities. The mean interpretation was adapted from Nunnally (1997) (Table 3).

TABLE 3 Mean Score Interpretation

Scale	Mean Score Interpretation
1.00 – 2.33	Low
2.34 – 3.66	Moderate
3.67 – 5.00	High

Adapted from Nunnally (1997)

Inferential analysis, specifically the t-test, was used to study the mean differences in recommendations and desire to sustain engagement in environmental volunteer activities according to gender. Meanwhile, the ANOVA test was used to analyse the mean differences in recommendations and the desire to continue engaging in environmental volunteer activities between study streams. The data were analysed using SPSS version 23 software.

RESULTS AND DISCUSSION

Constraints for Sustaining Engagement as an Environmental Volunteer

The descriptive analysis found that the constraints in engaging in environmental volunteerism were at a high level with 79.74% overall mean percentage (mean = 3.987, s.p = 0.811). The subconstructs for constraints in environmental volunteerism, which were the lack of information, transportation, motivation, support from people's representatives, friends, family, and commitment were at a high level while emotional constraint was at a moderate level. The results of the analysis are shown in Table 4.

TABLE 4 Means for Constraints in Environmental Volunteerism

Aspect	N	Mean	Standard Deviation	Percentage (%)	Mean Interpretation
Support of the people's representative	357	4.18	1.083	83.6	High
Lack of information	357	4.17	1.018	83.4	High
Transport	357	4.16	0.981	83.2	High
Commitment	357	4.13	0.943	82.6	High
Friends	357	4.00	1.011	80.0	High
Motivation	357	3.91	1.060	78.2	High
Family	357	3.88	1.118	77.6	High
Emotion	357	3.47	1.200	69.4	Moderate
Constraint	357	3.987	0.811	79.74	High

Suggestions to Promote and Increase Environmental Volunteering Activities

The findings showed that the suggestions to increase environmental volunteer activities were at a high level with 92.58% with a mean value of 4.629 and a Standard Deviation of 0.566. The suggestions to increase environmental volunteering

activities included financial assistance, people representatives' support in organising environmental volunteer programmes, opportunities to learn environmental management, campaigns in print/electronics/social media, making environmental education as a compulsory subjects, and environmental volunteer activities as a prerequisite for co-curricular activities. The results of the analysis are shown in Table 5.

TABLE 5 Means for Suggestions to Increase Environmental Volunteer Activities

Aspect	N	Mean	Standard Deviation	Percentage (%)	Mean Interpretation
Financial assistance	357	4.67	0.646	93.4	High
Support of people representatives	357	4.63	0.697	92.6	High
Opportunities to learn environmental management	357	4.63	0.665	92.6	High
Campaign on social media/print/electronic	357	4.63	0.596	92.6	High
Environmental education subject	357	4.61	0.759	92.2	High
Extra-curricular activities prerequisites	357	4.61	0.721	92.2	High
Suggestions	357	4.629	0.566	92.58	High

The Intention for Sustaining Engagement as an Environmental Volunteer

Overall, the intention for sustaining engagement as an environmental volunteer is at a high level of 91.66% (mean = 4.583, s.d = 0.620). The results of the analysis are shown in Table 6.

TABLE 6 Means for Sustaining Engagement as an Environmental Volunteer

Aspect	N	Mean	Standard Deviation	Percentage (%)	Mean Interpretation
The intention for sustaining engagement	357	4.583	0.620	91.66	High

Differences in Constraints, Suggestions and Intention Toward Sustaining Engagement as an Environmental Volunteer Based on Gender

The findings showed no significant difference between the constraints faced by male and female volunteers. The t-value was t = -0.279, with the significant level p = 0.896 (p > 0.05). However, there were significant differences between the suggestions to increase engagement in environmental volunteering activities based on gender (t = -2.726 and significance level, p = 0.000). The mean scores showed that the suggestion for increasing environmental volunteering activities among female volunteers (mean = 4.702, s.d = 0.478) was higher than male volunteers (mean = 4.530, s.p = 0.656). The effect size of this construct was 0.31 or 31%. According to Cohen (1988), the effect size of 1 is small, .06 is moderate, and .14 is large. Therefore, the difference between the suggestions for male and female volunteers has a large effect size.

Similarly, there was a significant difference in the intention to sustain their engagement as an environmental volunteer across gender, with t = -2.735 with a significant value of p = 0.000. The mean showed that female youths' intention to sustain engagement in volunteer activities (mean = 4.662; s.d = 0.545) was higher than male youths (mean = 4.475; s.d = 0.698). The effect size for this construct was 0.304, or 30.4%. Therefore, the impact size for the difference in the intention to sustain engagement as an environmental volunteer across was large. The summary of the findings is shown in Table 7.

TABLE 7 T-test Results on the Differences in Perception of Constraints, Suggestions, and Intention Based on Gender

Construct	Gender	Total	Mean	Standard Deviation	t-value	Significance Level	Effect Size
Constraint	Male	151	3.973	0.792	-0.279	0.896	0.03
	Female	206	3.997	0.827			
Suggestion	Male	151	4.530	0.656	-2.726	0.000	0.31
	Female	206	4.702	0.478			
Intention	Male	151	4.475	0.698	-2.735	0.000	0.304
	Female	206	4.662	0.545			

Differences in Perceived Constraints in Engaging in Environmental Volunteerism Based on Study Stream

The results in Table 8 show no significant difference in constraints experienced by students from different study streams with F = 2.543 (df = 3, 353; p = 0.056). In contrast, there was a significant difference in the suggestions with F = 5.654 (df = 3, 353; p = 0.001). The effect size was as large as 0.22 or 22%. These results indicated that volunteers from the Social Science study stream have more suggestions to increase engagement in environmental volunteering activities compared to volunteers from Professional study stream. There was also a significant difference between students' intention to sustain as an environmental volunteer with F= 8.772 (df = 3, 353; p = 0.000), and the effect size = 0.27 was large.

TABLE 8 Differences in Perceptions of Constraint Based on Study Stream

Construct		Squared Value	Degree of Freedom	Mean Square	F	Level of Significance	Effect Size
Constraint	Between Group	4.959	3	1.653	2.543	0.056	0.14
	Within Group	229.415	353	0.650			
	Total	234.374	356				
Suggestion	Between Group	5.223	3	1.744	5.654	0.001	0.22
	Within Group	108.902	353	0.309			
	Total	114.135	356				
Intention	Between Group	9.504	3	3.168	8.772	0.000	0.27
	Within Group	127.490	353	0.361			
	Total	136.995	356				

The Post Hoc Scheffe Test was conducted to determine which of the four streams of study has a significant mean difference. Table 9 shows significant differences between volunteerism among students from Social Science streams (mean = 4.752) and Professionals (mean = 4.461).

The results of the Post Hoc Scheffe test are shown in Table 9. The study found significant differences between youth volunteers from the Professional study stream (mean = 4.360), youth volunteers from the Social Science study stream (mean =

4.737), and from the Islamic Studies stream (mean = 4.750), $p < 0.05$. The mean score showed that volunteers from the Islamic Studies and Social Sciences stream have a higher desire to sustain their involvement as environmental volunteers than those from the Professional study stream.

TABLE 9 Post Hoc Scheffe Test for Suggestions and Intention between Study Stream

Construct	Group	Mean	Pure Science	Social Science	Professional	Islamic Studies
Suggestion	Pure Science	4.637				
	Social Science	4.752			*	
	Professional	4.461		*		
	Islamic Studies	4.670				
Desire	Pure Science	4.574				
	Social Science	4.737			*	
	Professional	4.360		*		*
	Islamic Studies	4.750			*	

* Significant at $p < 0.05$

DISCUSSION

Overall, volunteers experienced a high level of constraints in sustaining their engagementin environmental volunteering activities. The constraints faced included the lack of information, transportation, motivation, emotional distress, lack of support and interest by the local representatives in environmental conservation programmes, lack of family and friends' participation in environmental volunteer activities, and many other commitments.

Past studies found that environmental volunteers face constraints in time, lack of information, finance, transportation, low motivation, emotional constraints, and social isolation (Winch et al. 2020; Gage & Thapa 2012; O'Brien et al. 2010). Personal factors such as the lack of awareness and knowledge of environmental information also impact university students' engagement in environmental volunteer activities (Anderson, Maher & Wright 2018). There is a need to overcome these constraints so that the goals of environmental volunteerism can be spread widely to larger groups of society (Hobbs & White 2012).

The suggestions presented in this study may help future studies to take into account the constraints faced by environmental volunteers. These suggestions will facilitate the implementation of intervention programmes that can attract youths to engage in environmental volunteer activities. Collaborative efforts between different parties, such as program organisers, and related institutions, such as government agencies, private sector, and NGOs, can take into account the constraints faced by volunteers and help overcome them. For example, in terms of transportation, organisers can apply financial grants to provide buses for environmental volunteers at the location of the environmental programme. Furthermore, to overcome the lack of information, organisers can take steps to intensify campaigns on social, print and electronic media. Social and digital media can be used to increase awareness of the dire state of the environment today (Mallick & Bajpai 2019; Carpenter et al. 2016).

Furthermore, the internet has a far-reaching influence that impacts human life (Castells 2014) and it has great potential to promote volunteer activities (Winch et al. 2020). In addition, the organizers also need to take the initiative in providing other training to volunteers, such as emergency assistance and healthy eating, in preparation for environmental volunteer activities (Molsher & Townsend 2016). This is because, environmental volunteering involves using physical and mental energy.

Environmental volunteers are strongly intent to sustain their engagement in environmental volunteerism despite the constraints. This is due to the positive relationship between volunteering and perceived well-being (Elias et al. 2016) which motivates them to continue to engage in volunteer activities (Bauer & Lim 2019). Nevertheless, the relationship between psychological well-being and volunteerism, especially among long-term volunteers, is still under-explored (Elias et al. 2016). Therefore, there is a need to understand the well-being felt by long-term volunteers to predict the desire to continue volunteering. Among the initiatives to be taken into account by the organisers of environmental volunteering programmes to enhance the well-being of environmental volunteers are inculcating the curiosity of volunteers, providing knowledge and skills in environmental management, as well as stimulating the development of values in environmental volunteers such as empathy, admiration for the environment and appreciation for the environment (Portocarrero et al. 2023; Anderson et al. 2018; Curtin & Kragh 2014).

In the meantime, there was no significant relationship between the constraints faced by male and female environmental volunteers. However, female volunteers needed more support from people's representatives, environmental campaigns, and environmental education to sustain their engagement in environmental volunteer activities. Such support can improve the well-being of women engaged in

environmental volunteering activities as it was found that volunteering activities are more suitable for males (Kim 2013). Past finding has also found that women with pro-environmental attitudes are more likely to engage in pro-environmental behaviour (Vicente-Molina et al. 2018). Therefore, more support should be given to women to improve their well-being and enhance the sustainability of their involvement as volunteers.

Comparisons between the study stream showed that volunteers from the Social Science study stream have a stronger desire to engage in volunteerism than those from the Professional stream. The researchers assume this difference is caused by the level of Environmental Education taken by youths in educational institutions. The academic syllabus that does not expose students to sustainability and environmental-related subjects is a constraint in achieving Sustainable Development Goals from the educational aspect (Lozano et al. 2013). In this light, finding effective ways to create awareness and cultivate positive behaviour toward the environment is challenging. Innovative approaches and more holistic environmental elements are needed to raise environmental awareness and knowledge across different streams of study (Lozano et al. 2013). Students from Professional streams need support from organisations and institutions because they are more concerned with the benefits it brings to their careers. Hence, there is a need to design a programme that adds value to environmental volunteers' resumes and career development. This is because youths now are concerned about experiences that benefit them at work.

CONCLUSION

Environmental management and conservation implemented in the context of sustainable development require collective efforts through the activities of environmental volunteers. Volunteer activities are initiatives that pave the way for greater participation of people in preserving the environment through community engagement. In addition, environmental volunteering activities are a form of social practice connecting individuals with the environment. Environmental volunteering impacts the community through relationships with the local community, enhancing the personal development of youth as well as improving mental and physical health in the community. Environmental management costs incurred by the government can also be reduced through environmental volunteering activities.

Organisers of environmental volunteer programs need to take note in addressing the constraint felt by environmental volunteers. The suggestions put forward by environmental volunteers can serve as a guide in overcoming the constraints faced by environmental volunteers. Organisers must apply exposure and sharing of

knowledge related to the environment and generic skills such as communication skills, socializing leadership, and innovation toward environmental problem-solving. When environmental volunteers feel well-being, the intention to continue to engage in environmental volunteer activities can be enhanced.

Based on the research that has been carried out, several further research recommendations are submitted. Among them is the study, which involved the participation of youths with different backgrounds. Examples of backgrounds that can be taken into account are employment status, income classification (B40, M40, T20), family background (engagement in environmental volunteer activities), and place of residence (urban or rural). Future studies are proposed to involve field studies in environmental volunteer activity programs through observation methods so that researchers better understand the constraints felt by environmental volunteers. In addition, future studies can use a longitudinal design that examines the impact of engagement in environmental volunteerism on youth development so that environmental volunteer programs align with youth needs. This can preserve the involvement of youths as environmental volunteers.

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