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GREEN ATTITUDE PROGRAMME AND ITS IMPACT ON YOUTHS' ATTITUDE ON GREEN ACTIVITIES AND APPRECIATION OF GREEN NATURE

Getrude C. Ah Gang[1], Januarius Gobilik[2], & Azizul Julirin[3]
[1]Faculty of Psychology and Social Work, University Malaysia Sabah (Malaysia)
[2]Faculty of Sustainable Agriculture, University Malaysia Sabah (Malaysia)
[3]Kundasang Aquafarm (Malaysia)

Abstract

One of the challenges faced by today's youth community is to ensure that the green nature heritage is preserved and sustained for the future generation. To create awareness among youths in preserving and nurturing green nature, a group of psychology students organised 'Green Attitude Programme'. It was based on the Green Attitude Module developed across the disciplines of social psychology, agronomy and entrepreneurship. The aim of the programme was to enhance the positive attitude in three aspects, namely, affective, cognitive, and psychomotor, of the participants on green activities and to assess the improvement of their green affinity in those aspects before and after they had completed the two-day Green Attitude Programme. The program had 15 participants, with an average age of 22.80 years (SD = 3.50). The study revealed significant positive improvements in participants' attitudes across three aspects related to green activities, as well as in their sense of connection to nature following the programme. The results give a glimpse of new idea that in enhancing green attitude effectively, there is a need to develop a multi-disciplinary green attitude programme. Although the Green Attitude Programme relied more on the Yale Model based on the social psychology approach, ideas from different disciplines, such as, agronomy and entrepreneurship can be suitably included. That inclusion can strengthen the quality and content of the Green Attitude Module in developing a positive attitude of the participants towards green activities and nature conservation. The effectiveness of the Green Attitude Module as a guide to run the Green Attitude Programme indicated that the module developed in this study can be used as one of the Green psychological interventions that can effectively change people to develop robust green attitude and better appreciation of nature.

Keywords: *Green attitude, affective, cognitive, psychomotor.*

1. Introduction

To protect and conserve the green ecosystem in this post-modernism is challenging. The complexity of the modern lifestyle hinders many people from refocusing their life to preserve the ecosystem albeit the natural resources have been used extensively and polluted to some extent. For instance, in Malaysia, the environment suffers from pollution of various forms and dimensions, from air pollution, water, noise to garbage pollution that seems to have no end, despite many education and environmental awareness campaigns in various forms, reading materials, print and social media are conducted by various agencies (Idrus, 2015). As the natural resources are being used and polluted in many ways, protecting the ecosystem is no longer a task of only a specific authority. It needs a collaborative work from various organizations to succeed. The society particularly the youths need to work together and take an active role to protect the environment, as they will benefit the most from it. The youths are the future generation who have to live and again sustain the future environment. In Malaysia, quite many places are prone to flood and other natural disasters even an earthquake. A few factors contributing to these natural disasters are climate change, deforestation, land degradation, and pollution. These factors are some of the environmental concerns that threaten the health of the planet, humans, and other living things on earth. The future generation will have to live with the adverse effects of those environmental threats (Abdul Rahman, 2020). Therefore, it is crucial to raise awareness and foster positive green attitudes among youth, encompassing their beliefs, emotions, and inclinations toward participating in green activities. As Abdul Rahman (2022) highlighted, this can be achieved by enhancing their knowledge, attitudes, and practices related to

ecosystem care. Cultivating positive green attitudes can lead to numerous beneficial outcomes. One of the benefits is providing a better health and psychological well-being to human. For example, low exposure to air pollutants, such as ozone and airborne particles, can lead to a good health and a happy life. Usmani et al. (2020) reported that there is a strong positive correlation between rate of exposure to air pollutants and increment in hospital admissions and mortality. It suggests that everyone has a role to play and is responsible to take care the ecosystem and connect better with or appreciate the nature. As addressed in the Sustainable Development Goals-15 (SDG-15: Life for land) pledge, global people are encouraged to work together in protecting, restoring, and sustaining the environment (United Nations, n.d.).

2. Green Attitude Module

Ahmad et al. (2012) who studied informal environmental education channels among Malaysian youths asserted that environmental education can be found via various sources, such as, from the youth's own experience, from the media such as television, or through travelling. The effectiveness of these channels, however, will take time, as it works only indirectly. In academic field, a widely known direct way of transferring knowledge is the Yale Model. Thus, in the present study, it is hypothesised that green attitude and appreciation of nature could also be enhanced by organizing a green attitude programme using the Yale Model that is based on the social psychological approach that also incorporates inputs from other fields, such as, agronomy and entrepreneurship. The proposed green attitude module consists of activities that focuses on the psychological aspects (attitude), environment (connection with nature), agronomy (planting and farming), and economy (marketing green product). The developed Green Attitude Module is used as guidance to conduct all structured activities, and it was designed in a collaboration between a social psychologist and agriculture entrepreneur. It is thought that a combination of ideas from psychological and agricultural perspectives will strengthen the effects of the developed Green Attitude module. The developed Green Attitude Module focuses on three elements of attitude, i.e., emotion, cognition, and behaviour. The module includes various sources and activities, such as, using green greetings, facilitating green discussion, sharing experiences, and participating in a green walk and self-reflection. The module is grounded in the theory proposed by Hovland et al. (1953), which focuses on the practical question: "Who says what, to whom, through which channel, and with what effects" (p. 37).

3. Objectives

The aim of this study is to evaluate the effectiveness of the Green Attitude Programme in fostering positive attitudes toward green activities across three domains: affective, cognitive, and psychomotor. Additionally, the study examines changes in participants' attitudes toward green activities and their connection to nature before and after completing the two-day programme.

4. Methods

A two-day Green Attitude (GA) Programme was carried out where a social psychologist with a group of psychology students and an experienced entrepreneur in green farming worked together in delivering the content of the Green Attitude Module. The study was conducted using a quasi-experimental study design. Quasi-experimental design was used because the study was conducted in the field, that is, based on natural setting and it involved an intervention. It was based on one group pre-post study design (Campbell & Stanley, 1966). The survey was carried out before and after the participants completed a two-day programme. The two-day Green Attitude Programme was held in Mesilou village, Kundasang, Sabah. This village is situated near the highest mountain in Southeast Asia, one of Sabah's most renowned tourist attractions. It offers numerous recreational opportunities for tourists to explore and connect with nature, making it an ideal location for this study. A total of 31 participants took part in the green attitude program; however, only 15 were included in the final data analysis. Sixteen participants could not complete all activities due to other work commitments. The participants, aged 19 to 22 years, came from diverse educational backgrounds and represented various ethnicities, including Kadazandusun, Murut, Malay, Chinese, Iban, and Bugis.

To gather the data from each participant, a set of questionnaires that comprised of three sections was used. The first section measured participants' background, which consisted of five items, namely, ethnicity, age, gender, involvement in green activity and educational level. The second section measured participants' green attitude in the perspectives of emotion, cognition, and behaviour. The assessment scale was created around those three components, focusing on the attitude objects that are related to green factors. The specific item samples that represented the three attitude components were, for examples, for cognitive:

'I believe that the new farming technique can help to generate money'; affective: 'I like to plant using the modern farming technique (e.g., hydroponic or Aquaponic); and behaviour: 'I will motivate other people to plant together'. It was asserted that those three components are essential for forming the assessment scale for green attitude. The scale was also created by considering the activities that were suggested in the Green Attitude Module. A pilot study was carried out before the scale was used for the actual study to ensure that the scale can reliably and validly measure the green attitude. The scale response set was from 1 (strongly disagree) to 5 (strongly agree). The third section measured participants' connection to nature. This scale was adapted from the Connected to Nature Scale and the Environmental Attitude Scale by College and College (2004). The scale response was also based on the 5-point Likert Scale from 1 (strongly disagree) to 5 (strongly agree). The sample items were, for examples, 'I always follow current news about green programmes and campaigns running around my community', 'I will take good care of nature because it is a part of my life', and 'I like to go hiking or camping in green recreational areas'.

5. Results

There were 15 participants took part in this study with mean age with aged 22.80 (SD=3.50). Majority of them are males, 10 and 5 are females. The reliability values for 'attitude towards green activities' and 'Connectedness to nature' scales are acceptable for both pre- and post-studies (see Table 1).

Table 1. The Reliability Values for 'Attitude towards Green Activities' and 'Connectedness to Nature' For Pre- and Post-studies (N=15).

Variables	Number of items	Reliability values
Attitude towards green activities		
Before	12	.83
After	12	.62
Connectedness to nature		
Before	12	.77
After	12	.50

The Wilcoxon analysis revealed a significant improvement in participants' attitudes toward green activities before and after completing the two-day Green Attitude Programme (see Table 2). Additionally, there was a significant increase in participants' sense of connectedness to nature following their involvement in the programme (see Table 3).

Table 2. The Difference of Participants' Attitude Towards Green Activities Before and After Participants Involved in Green Attitude Programme (N=15).

Variable	Mean (SD)	Z score	Significant value
Attitude towards Green Nature			
Before	50.67 (6.39)	-2.95	.003
After	56.00 (3.22)		

Table 3. The Difference of Participants' Connectedness with Nature Before and After they Involved in Green Attitude Programme (N=15).

Variable	Mean (SD)	Z score	Significant value
Connectedness to Nature			
Before	50.60	-3.42	< .001
After	56.40		

6. Discussion

The study found that there is a significant difference on participants' attitude towards green activities before and after participants engaged in the two-day green attitude programme. Participants showed more positive attitude and each of the attitude components. This showed that participants manage to give attention and could understand the messages convey in each green activity. In each activity, the elements of attitude change in the Yale model such as source, messages, channel, target participants and the effects of the green activities were taken into consideration. This is to ensure that participants' attitude can be strengthen and showed positive effects. Although the green attitude programme only conducted in

two days, some activities were held at night such as gazing at the star and night green sharing. This provides more time for participants to engage and receive more persuasive green messages from the programme organizer. On the second day, participants engaged in a green walk and stop at the four stations to discuss their goals, future plan and strategies use to involve in prospective green project such as engaging in modern farming. After this activity, participants continued their activities with harvesting and packaging green product based on the order their received from the prospective buyers. These kinds of behaviour may also help to create positive attitude towards green activities. This can be explained with the self-perception theory (Bem, 1972) where participants tend to change their attitudes towards one attitude object when they have the opportunity to perform target behaviours. In other words, participants can identify their own attitudes, emotions, and other internal states partially by inferring them from observations of their own overt behaviour or the circumstances in which the behaviour occurs.

A variety of activities using diverse channels and creative approaches, all centered around a single attitude object—green attitudes—may help engage participants and encourage active involvement. Additionally, the combination of indoor activities (e.g., green talks, group discussions) and outdoor activities (e.g., stargazing, hiking), along with green product marketing, can evoke positive emotions and create lasting memories of the green messages conveyed through each activity. Uzun et al. (2019) stated that the experience of negative or positive emotions, may significantly impact not only people's experiences with the environment, but also their tendency to engage in pro-environmental behaviour. One way to change people's attitude towards nature is by exposing them with the nature through activities such as camping, star gazing, hiking, and gardening. In this study, participants showed greater connectedness to nature after they have completed the green activity programme. The participants nature experience might be accumulated by various green activities in the two-day programme and their past green experiences. In this study, majority of the participants have involved in green activities such as farming, gardening and other green programmes and campaigns based on their sharing and group discussions on green activities. The accumulation of green experiences can enhance participants connection to the nature. Connectedness to nature can be defined as a trait related to the feeling of emotional connection with the natural environment (Mayer & Frantz, 2004). In this study, connection to nature refers to participation in pro-environmental activities, including green greetings, green talks, green self-reflection, hiking, farming, harvesting green products, and planting plants. According to Soga and Gaston (2016), direct experiences with nature (e.g., picking plants or flowers) are linked to a greater willingness to conserve biodiversity. Additionally, even viewing images of natural scenes can evoke unique, humble emotions and improve mood. The impact may be even more profound if participants directly engage with nature—smelling, touching, and feeling the plants around them—while enjoying the sight of a variety of colorful flowers in a specific location. Past studies (e.g., Rosa et al., 2018; Bixler & Floyd, 1997) found that exposing or direct contact with nature during childhood can also influence the attitude towards environment and this may lead to pro-environmental actions. While, people living in urban environments, with little contact with natural areas tend to harbour negative attitudes toward nature. The assumption was that accumulated spontaneous exposure to natural areas over an extended period influenced attitudes in terms of creating a greater likelihood of expressing ecocentric attitudes. Positive outcomes derived from engaging in green activities may enhance participants' connection to nature. Robust evidence indicates that individuals who perceive themselves as more connected to the natural world, regardless of their actual exposure, tend to hold more positive attitudes towards the natural environment (Swami et al., 2024).

7. Conclusions

The Green Attitude Programme had positively changed the youths' attitude on green activities and appreciation of green nature. At the end of the programme, they showed a better affinity to have a green ecosystem, to appreciate a green nature, and to take part in green activities. Even so, it is not yet known whether this attitude change is permanent or temporary. The results also indicate a partial view of a new idea that to enhance a green attitude and connection to nature among youths effectively, they need to be involved in a multi-disciplinary green attitude programme. The Yale Model used to form the Green Attitude Module for the Green Attitude Programme in this study was originally based on the social psychology approach, but during this study, ideas from different disciplines, such as, agronomy and entrepreneurship were incorporated and found to fit well with the model. In fact, the inclusion has strengthened the content of the Green Attitude Module in developing a positive green attitude and connection to nature of the participants. It can be commented that the module and programme developed in this study can be used as one of the green psychological interventions that can effectively change people to develop a strong green attitude and better connection to nature. Future study is suggested to retest the module and programme in the same or different areas of Sabah to understand its impact consistency, to find out the longevity of its impacts, and to further improve the module. In addition, external factors such as the time duration, the

relationships between participants and the organizer, and other potential distractions affecting program implementation, as highlighted in past studies (e.g., Ah Gang et al., 2017; Cosmas et al., 2015) should also be considered.

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