

Evaluating the Impact of ESG Awareness Programmes on Youth Attitudes and Intentions: Evidence from Kembara ESG

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Abstract

This study explores the impact of *Kembara ESG*, an ESG awareness program conducted at an orphanage for orphans and asnaf children. Participants completed a post-program survey that assessed their enjoyment, clarity, ESG knowledge gained, and intention to adopt sustainable behaviors. Results show high satisfaction, with 68.4% strongly agreeing that the program encouraged community care and 63.2% feeling more responsible for the environment. However, only 52.6% strongly agreed to adopt sustainable practices on a daily basis. The findings suggest ESG programs can effectively raise awareness among underserved youth but require follow-up efforts to reinforce long-term behavioral change.

Keyword: ESG, orphanages, Malaysia

Introduction

The global community is increasingly recognizing the importance of Environmental, Social, and Governance (ESG) principles in addressing complex sustainability challenges such as climate change, inequality, and institutional accountability. ESG literacy is now considered a key competency for 21st-century citizenship, particularly among younger generations who will inherit the consequences of current environmental and social decisions (Khan et al., 2021). UNESCO (2020) emphasizes the critical role of education in promoting sustainability through its Education for Sustainable Development (ESD) framework, which encourages integrating sustainability values across formal and informal learning environments.

Evidence suggests that youth-focused ESG education especially when delivered through experiential and participatory formats can significantly enhance engagement, knowledge retention, and pro-environmental behavior (Jensen & Schnack, 2021; Stokes et al., 2020). For instance, a study by Karampela et al. (2024) involving Greek university students found that participation in extracurricular sustainability-themed activities improved awareness and motivation toward the Sustainable Development Goals (SDGs). Similarly, Azraf et al. (2021) reported that students exposed to community-based sustainability projects exhibited

stronger emotional engagement and higher intent to adopt environmentally responsible behavior.

In developing countries, experiential ESG education is particularly impactful when tailored to underserved groups. According to Ghani et al. (2022), active learning methods such as problem-solving and games enhance critical thinking and environmental consciousness, especially among youth with limited access to formal resources. This is further supported by Khambari and Nordin (2020), who highlight the success of Youth Participatory Action Research (YPAR) in empowering Malaysian youth through localized sustainability efforts.

In Malaysia, several studies highlight promising levels of environmental awareness among youth. For example, Rahman et al. (2021) found that environmental attitudes among secondary school students in Kajang, Selangor were generally positive and correlated with their perceived knowledge levels. A nationwide survey by the Institute for Youth Research Malaysia (IYRES, 2022) further confirmed that 73% of Malaysian youth expressed willingness to engage in green activities if supported by structured guidance and peer encouragement. However, knowledge alone does not guarantee behavioral change, a gap remains between awareness and consistent sustainable practice (Ismail & Ariffin, 2023).

Despite Malaysia's growing ESG momentum, limited research exists on ESG education within informal or welfare settings, particularly involving orphans and asnaf children. These vulnerable groups often face barriers in accessing structured sustainability education, despite their heightened exposure to environmental and social risks. As emphasized by Mohd & Yusof (2023), targeted interventions in orphanages can play a transformative role in building life skills and ethical awareness among children from low-income backgrounds.

To address this gap, the *Kembara ESG* program was implemented at an orphanage, aiming to introduce ESG values through interactive, hands-on activities. This study assesses the impact of the program on participants' awareness, attitudes, and behavioral intentions using a post-program structured feedback survey. By focusing on an underrepresented group, this paper contributes to the discourse on informal ESG education and community-based learning in Malaysia.

Literature Review

ESG Education and Experiential Learning

Environmental, Social, and Governance (ESG) education is increasingly recognized as a critical component in cultivating sustainability competencies among youth (UNESCO, 2020). Experiential learning, rooted in Dewey's (1938) educational philosophy, emphasizes active participation and real-world relevance, leading to deeper cognitive and affective outcomes. A growing body of research supports the integration of experiential strategies in ESG pedagogy. Yu (2024) found that students engaged in reflective, case-based exercises on green patent policies exhibited improved critical reasoning and ESG comprehension. Douglas (2024) similarly noted that biodiversity-themed online experiential modules enhanced student attitudes and behavioral intentions toward environmental stewardship.

Recent studies reinforce these findings. Karampela et al. (2024) reported that extracurricular sustainability activities increased engagement with the Sustainable Development Goals

(SDGs), particularly when youth had autonomy in project execution. Bouhazzama et al. (2021) observed that field-based environmental programs facilitated not only environmental awareness but also emotional attachment to sustainability themes. As noted by Quigley and Chin (2025), experiential learning fosters holistic development when tied to action-based ESG principles, suggesting its relevance for youth-targeted programs in diverse socio-economic contexts.

Innovative Approaches in ESG Education

In response to the growing need for more engaging sustainability instruction, educators have turned to technology-enhanced pedagogies. Gamification, simulations, and virtual environments have been increasingly adopted to strengthen ESG learning outcomes. Zhang (2024) demonstrated that students exposed to gamified ESG instruction scored significantly higher in engagement, knowledge retention, and self-perceived responsibility than those in traditional lecture-based formats. Chong et al. (2025) introduced a virtual-reality (VR) escape room simulating ethical dilemmas in sustainability. Post-intervention analysis revealed statistically significant improvements in participants' ESG literacy, decision-making confidence, and behavioral intention.

These innovations are supported by Stokes et al. (2020), who emphasized the importance of emotional immersion in sustainability education. More recently, Yadav and Fong (2025) highlighted that integrating immersive technology into community-based ESG modules increased empathy and pro-environmental attitudes among high school students. These studies collectively support the integration of emotionally engaging strategies as catalysts for behavior change.

The Knowledge–Action Gap in Sustainability Education

While ESG awareness is essential, a well-documented knowledge–action gap persists, whereby individuals exhibit high awareness but fail to act sustainably (Blake, 1999). Colombo (2023) observed that despite increasing youth concern over climate change, behavioral intentions remained stagnant unless educational experiences were emotionally salient or contextually grounded. Douglas (2024) argued that repeated experiential engagement, not one-time exposure, is necessary to shift long-term behavior.

In the Malaysian context, Rahman et al. (2021) found that although student awareness of environmental issues was high, behavior change was contingent on peer influence and logistical support. Ismail and Ariffin (2023) emphasized that cognitive knowledge must be supported by emotional and normative drivers. Adding to this, Heng et al. (2024) found that ESG-related attitudes among urban youth were shaped more by storytelling and social modeling than by lectures, underscoring the need for socially anchored interventions.

Theoretical Framework: Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) by Ajzen (1991) remains one of the most cited frameworks for understanding pro-environmental behavior. TPB suggests that intention is determined by three factors: attitudes, subjective norms, and perceived behavioral control. In ESG education, TPB has proven effective in predicting youth behavioral outcomes. Phang and Ilham (2023) applied TPB to Malaysian undergraduates and found that subjective norms and perceived behavioral control were stronger predictors than attitudes alone.

Recent literature has attempted to expand the TPB framework. Luo and Kim (2025) incorporated biospheric values and found that environmental self-identity mediated the relationship between subjective norms and intention. Similarly, Mansor et al. (2024) emphasized the role of empowerment and agency in enhancing behavioral control perceptions among Malaysian adolescents. These studies suggest that TPB remains highly applicable when evaluating the behavioral impact of ESG education, especially in interventions that target marginalized youth.

ESG Learning in Informal and Underserved Contexts

Although ESG education has been extensively explored in formal educational settings, its implementation in informal and underserved environments such as orphanages, residential care centers, and low-income communities remains underexamined. Mohd and Yusof (2023) argued that welfare institutions present a unique platform for integrated character and sustainability education, especially when trust-based mentorship is embedded. In Malaysia, Khambari and Nordin (2020) demonstrated that Youth Participatory Action Research (YPAR) enabled marginalized youth to develop civic consciousness and problem-solving competencies aligned with sustainability values.

Ghani et al. (2022) reported improvements in critical thinking and environmental attitudes among rural students involved in hands-on ESG activities. However, recent national reports (IYRES, 2022; Rahman et al., 2021) warned that youth from low socio-economic backgrounds, especially in orphanages, often lack access to structured sustainability education. Ahmad and Leong (2025) further emphasized that these youth are less likely to participate in green initiatives due to limited access, exposure, and empowerment. This research responds to that gap by focusing on asnaf and orphaned children, populations disproportionately underrepresented in ESG discourse.

Research Gap and Study Contribution

Despite the growing interest in experiential and gamified ESG education, few studies have examined their efficacy within informal, welfare-based settings. This study addresses that gap by evaluating *Kembara ESG*, a structured experiential program conducted in an orphanage for orphans and asnaf children in Malaysia. The program design incorporates principles from the Theory of Planned Behavior and recent evidence on experiential and immersive pedagogies. It aims to strengthen ESG literacy, build emotional connections to sustainability, and stimulate behavioral intentions among a marginalized demographic.

By focusing on non-formal education contexts, the study contributes to a more inclusive understanding of how ESG values can be nurtured across socio-economic divides. It also offers policy-relevant insights for extending ESG initiatives to underserved communities, providing empirical justification for broader implementation in Malaysia's sustainability education roadmap.

Methodology

This study adopted a descriptive quantitative research design to assess the impact of an ESG awareness program, *Kembara ESG*, on youth perceptions and behavioral intentions. The target population comprised children and adolescents residing in an orphanage in Pahang, Malaysia, specifically orphans and asnaf (economically disadvantaged) individuals. A total of

19 participants completed the post-program survey. The gender distribution comprised 52.6% female and 47.4% male respondents, aged between 7 and 16 years. Ethical clearance and parental consent were obtained before data collection.

Program Context

Kembara ESG was conducted as a one-day experiential ESG learning intervention. The program utilized developmentally appropriate and interactive strategies to introduce ESG concepts in an engaging manner. Grounded in Ajzen's Theory of Planned Behavior, the activities aimed to strengthen affective engagement, teamwork, and behavioral intentions.

The program included the following activities:

- Morning Exercise: Stretching routines to energize participants and build rapport.
- ESG Heroes: Storytelling session using fictional ESG princesses (Bali, Purut, Kasturi, Manis) to promote emotional resonance.
- We & ESG: A facilitator-led session explaining ESG principles with visual examples.
- ESG Puzzle: Group-based puzzle-solving to reinforce ESG messages.
- ESG Wall: Participants displayed personal reflections on ESG commitments.
- ESG Sekuwik Games: Scavenger hunt focusing on ESG-related items.
- ESG Tic Tac Toe: A strategy game integrating ESG symbolism.
- Assemble the Knot: Team challenge requiring collaboration and creativity.

Collectively, these activities were designed not only to introduce ESG principles in an accessible manner but also to foster a sense of community, responsibility, and fun among participants in a safe and supportive environment.

Instruments

The data collection tool consisted of a six-item structured questionnaire aligned with the program's learning goals. Each item corresponded to key constructs such as enjoyment, clarity, knowledge gain, environmental responsibility, social altruism, and behavioral intention. Responses were recorded using a five-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. The instrument was reviewed by two ESG educators and underwent a pre-test for clarity and validity among a demographically similar control group. The questionnaire was designed in simplified Malay language to ensure accessibility.

Results and Discussion

The findings presented in this section are based on post-program feedback collected using a structured Likert-scale questionnaire designed to evaluate affective, cognitive, and behavioral outcomes among participants of the *Kembara ESG* program. Table 1 summarizes the participants' responses to six key items aligned with the program's objectives.

Table 1

Summary of Key Findings

Survey Item	Strongly Agree (%)	Agree (%)	Disagree (%)
I enjoyed participating in this program	57.9	31.6	10.5
The activities were easy to understand and enjoyable	36.8	63.2	0.0
I learned new knowledge about ESG and its importance	57.9	42.1	0.0
I feel more responsible for caring for the environment	63.2	36.8	0.0
This program encourages me to help others and my community	68.4	31.6	0.0
I will try to practice sustainable habits in my daily life	52.6	26.3	21.1

Affective Engagement and Program Enjoyment

High levels of affective engagement were recorded, as 89.5% of participants reported positive emotional responses (“Strongly Agree” or “Agree”) to the statement “I enjoyed participating in this program.” This is further reinforced by the unanimous agreement (100%) that “The activities were easy to understand and enjoyable.” These results indicate the program’s success in creating a psychologically safe, enjoyable, and inclusive learning environment, which is essential for promoting ESG engagement among young participants.

These affective findings by Karampela et al. (2024), who found that enjoyable sustainability programs significantly improved youth motivation. Furthermore, within the Theory of Planned Behavior (Ajzen, 1991), positive affect contributes to the *attitude toward the behavior* construct, which influences intention. When ESG content is delivered through storytelling and games, as in *Kembara ESG*, it can shape positive attitudes that serve as a foundation for long-term engagement (Luo & Kim, 2025).

Knowledge Gain and ESG Awareness

The item “I learned new knowledge about ESG and its importance” received full agreement, with 57.9% “Strongly Agreeing” and 42.1% “Agreeing.” This validates the program’s cognitive impact and supports literature emphasizing the value of experiential learning in ESG education. For example, Yu (2024) highlighted that students exposed to active, reflective ESG instruction demonstrated significant knowledge gains compared to traditional approaches. In addition, 100% of participants agreed (63.2% “Strongly Agree”, 36.8% “Agree”) that they felt “more responsible to care for the environment” after the program. This suggests a meaningful internalization of environmental responsibility, resonating with the perceived behavioral control component of the Theory of Planned Behavior. When young individuals connect personally with ESG topics in a supportive context, their self-perceived agency to act sustainably tends to increase (Phang & Ilham, 2023; Ismail & Ariffin, 2023).

Social Responsibility and Intention to Act

A strong pro-social response was observed in the item “This program encourages me to help others and my community,” with 100% agreement and the highest rate (68.4%) of “Strongly Agree.” This suggests that the social dimension of ESG was particularly well communicated

and internalized, possibly due to contextual activities such as the ESG Sekuwik and the ESG Wall, which emphasized community and collective responsibility. Similar effects were found by Khambari and Nordin (2020) in marginalized youth settings using participatory models.

However, mixed responses were recorded for the final item: “I will try to practice sustainable habits in my daily life.” While 78.9% expressed intention (“Strongly Agree” or “Agree”), 21.1% disagreed, revealing a potential *knowledge–action gap* (Blake, 1999; Colombo, 2023). This discrepancy may reflect the participants’ limited perceived behavioral control, influenced by socio-economic barriers typical in welfare settings (Cheung & Chan, 2000; Rahman et al., 2021).

This gap underlines the need for sustained exposure and reinforcement mechanisms to convert awareness into habitual behavior, a challenge commonly documented in sustainability education (Douglas, 2024). According to the extended TPB framework, affective triggers, social norms, and accessible environments must be aligned to enable long-term behavior change (Yuriev et al., 2020).

Conclusion

This study offers important insights into the potential of short-term, experiential ESG interventions in informal settings such as welfare homes. The findings demonstrate that the *Kembara ESG* program effectively fostered ESG awareness, strengthened environmental and social responsibility, and created a positive affective learning experience for children and adolescents. Grounded in the Theory of Planned Behavior, the program succeeded in influencing participants’ attitudes and social norms related to sustainability. However, the modest levels of agreement on the intention to engage in sustainable practices highlight the enduring challenge of bridging the knowledge–action gap, particularly in under-resourced contexts where behavioral control is constrained.

Nonetheless, several limitations must be acknowledged. The small sample size, localized setting, and reliance on self-reported post-program data limit the external validity and depth of the findings. The use of a single-point Likert-scale instrument, while suitable for young participants, may not have captured the full complexity of behavior change processes. Furthermore, the lack of a pre-test or delayed follow-up restricts the ability to assess longitudinal impact. Future studies should adopt mixed-method and longitudinal designs, include control groups, and consider triangulating self-reports with observational or parental feedback to improve data robustness.

Looking forward, ESG education for underserved youth should move beyond one-off interventions and adopt a sustained, scaffolded approach. Embedding ESG literacy within ongoing welfare or school programming, supported by hands-on community initiatives and mentorship, may improve long-term behavior change. Policymakers and NGOs should collaborate to formally recognize informal ESG learning under national sustainability agendas, such as Malaysia’s ESG Impact-Driven Agenda 2030 and the Twelfth Malaysia Plan. Expanding outreach to marginalized populations not only bridges equity gaps in sustainability education but also cultivates a generation of socially conscious and environmentally responsible citizens.

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