

# Review of: "Impact of Environmental Education on the Knowledge and Attitude of University of Benin Students towards Waste Segregation"

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Potential competing interests: No potential competing interests to declare.

**Review the study** Impact of Environmental Education on the Knowledge and Attitude of University of Benin Students towards Waste Segregation

**The study titled:** „*Impact of Environmental Education on the Knowledge and Attitude of University of Benin Students towards Waste Segregation*” aimed to assess the impact of environmental education on the knowledge and attitudes of University of Benin students regarding waste segregation. It included an experimental group (with environmental education) and a control group (Human Kinetics). Several research questions were posed, and hypotheses regarding differences in knowledge and attitudes between the groups were formulated. The Theory of Planned Behaviour (TPB) served as the theoretical framework for understanding and analysing the results.

**Methodology:** The study was an experimental design using a test. The sample included 200 respondents from two course areas. The research tool was a structured questionnaire, and the collected data underwent statistical analysis.

**Results:** The analysis of the study results indicates significant differences in the level of knowledge and attitudes regarding waste segregation between the experimental group (environmental education) and the control group (Human Kinetics). The presented data in Tables 2, 4, and 5 appear comprehensive, but attention should be given to several issues. Level of Knowledge: Results in Table 2 show that the experimental group achieved a higher average knowledge score (17.78) compared to the control group (12.21). The t-test confirms the statistical significance of this difference. Rejecting the null hypothesis suggests that environmental education influenced the knowledge level of waste segregation. However, these data are presented as percentages in Table 2, which may aid in better understanding the knowledge distribution in both groups.

**Attitudes:** The analysis of attitudes towards waste segregation (Tables 4 and 5) indicates that the experimental group exhibits a more favourable attitude towards segregation than the control group. Percentage values for different aspects of attitudes confirm that participants in environmental education show greater willingness to actively engage in waste segregation. Similar to the knowledge level, these differences were confirmed by the t-test.

**Table Structure:** Percentage values in Tables 4 and 5 are presented in categorical form (SA, A, D, SD), facilitating understanding of respondents' agreement or disagreement. This aids in result interpretation and may provide additional insights into attitude dynamics among study participants. The t-test analysis confirms that there are significant differences in both knowledge and attitudes between the experimental and control groups. Rejecting null hypotheses suggests that environmental education has an impact on both knowledge and attitudes related to waste segregation.

**Recommended Improvements:** To enhance clarity and precision in the analysis, additional information about the characteristics of the study groups, such as age, gender, or university tenure, may be useful. Additionally, the interpretation of results could be facilitated with additional statistics, such as correlation coefficients between knowledge level and attitudes within each group. In conclusion, the study provides robust evidence that environmental education positively influences the knowledge and attitudes of students regarding waste segregation. This indicates the effectiveness of educational programs in shaping environmental awareness and pro-environmental attitudes. However, a thorough assessment of the study would require a more comprehensive methodological analysis and consideration of potential study limitations.

**Discussion on Findings:** 1. Knowledge about Waste Segregation: Study conclusions suggest a significant difference in the level of knowledge about waste segregation between the experimental group (students of environmental education) and the control group (Human Kinetics). The fact that most environmental education students demonstrated high knowledge while Human Kinetics students had moderate knowledge confirms the effectiveness of educational programs in shaping ecological awareness. However, it is essential to consider potential differences in experiences and teaching programs in various academic environments.

**Attitudes towards Waste Segregation:** Results suggest that students of environmental education exhibit more favourable attitudes towards waste segregation compared to Human Kinetics students. The impact of environmental education on attitudes toward waste segregation aligns with literature emphasizing the role of education in shaping pro-environmental attitudes). The recommendation to increase awareness programs is justified, especially since the response of the control group was less uniform than in the experimental group. Additional information on why some students disagree with the benefits of waste segregation could provide a more detailed understanding of this difference in attitudes. Implications for Environmental Education: The statement that environmental education influences knowledge and attitudes towards waste segregation confirms its significant role in shaping pro-environmental behaviours. Incorporating environmental education as a key element of academic teaching programs in higher education institutions can contribute to increased awareness and engagement of students in environmental issues.

**Recommendations:** The proposed recommendations for including environmental education in the curriculum, increasing social awareness programs, providing facilities for demonstrations, and offering motivational incentives are practical and sensible. Implementation of these suggestions can contribute to the effectiveness of waste management-related activities.

**Final Remarks:** The discussion thoroughly summarizes the study results, combining them with scientific literature and indicating practical implications for environmental education. The recommendations are specific and can serve as a starting point for developing further action strategies.

**Review Summary:** The analysis is comprehensive and provides a thorough understanding of the study results. Inclusion of scientific literature and comparison of results with other studies adds credibility to the analysis. The recommendations are practical and may have a significant impact on the development of environmental education activities.