

Sustainable Consumption Behavior among Youth and its Alignment with SDGs: A Study on Plastic Waste Reduction Practices in Ulhasnagar

Author: Anju Panjwani

Vedanta College

ABSTRACT:

Plastic waste has become one of the major environmental concerns in recent years due to growing use of single-use plastic products and ineffective waste management practices. Sustainable consumption must be encouraged in order to ensure environmental sustainability and reduce plastic pollution. Youth play an important role and have a significant influence on society's acceptance of sustainable practices and environmentally conscious behaviour. The present study aims to evaluate the level of awareness among youth towards sustainable consumption as well as their waste minimization techniques and plastic consumption behaviour.

The present study aims to analyse youth consumption behaviour and waste reduction strategies as well as measure their awareness of sustainable consumption and plastic waste issues. The main objective of the study is to understand how young people adopt eco-friendly habits like limiting on single-use plastics, shifting to reusable ones and disposing of garbage properly. The study is based on survey data obtained from college students to assess the knowledge, attitudes and behaviors related to plastic waste reduction. The findings of the study are likely to focus on the role that youth play in encouraging sustainable consumption and to provide meaningful information that educational institutions and policymakers may utilize to promote ecologically conscious choice and effective plastic waste management.

Keywords: Plastic Waste Reduction, Youth Behaviour, Sustainable Consumption, Environmental Awareness, Sustainable Development.

INTRODUCTION:

Plastic pollution has emerged as one of the most serious environmental issues of the present time. United Nations Environment Programme (UNEP) reports more than 400 million metric tonnes of plastic are produced world-wide every year, still less than 10 percent is recycled. A large portion of this waste at last ends up in rivers, landfills, oceans or is burned causing severe environmental and health problems. Plastic waste generation is increasing due to rapid urbanization, changing consumption patterns and growing dependence on single-use plastic products. The Central Pollution Control Board (CPCB, 2022) estimates that India generates nearly 3.5 million tonnes of plastic waste every year with urban areas contributing significantly to this rise.

Ulhasnagar, situated in the Thane district of Maharashtra, reflects many of these urban environmental challenges. The city has a dense population and active commercial markets where the plastic bags, packaging materials, bottles and disposable items are commonly used in daily life. Though the government has taken steps such as the Plastic Waste Management Rules and ban on certain single-use plastics, their implementation at the local level continue to remain inadequate.

Youth represents an essential group in transition to sustainability. They are at a stage where attitudes, habits and lifestyle choices are formulated actively. Youth can become the change makers in promoting environmentally responsible behaviour within their homes and communities. Despite growing environmental awareness among youth, there exist a gap between what individuals know and how they actually behave. Factors such as accessibility of alternatives, convenience, personal habits and social influences repeatedly affecting sustainable practices.

The current study focuses on the broader goals of sustainable development, particularly SDG 12 – Responsible Consumption and Production which emphasizes reducing waste generation through prevention, reuse and recycling practices.

Hence, the study aims to examine the level of environmental awareness among youth in Ulhasnagar and evaluate whether awareness significantly influence on their plastic waste reduction practices. Also to provide a local perspective on how to promote sustainable consumption behaviour among youth in a developing country.

REVIEW OF LITERATURE:

Karolina Ertmańska (2021) highlighted sustainable consumption awareness among young consumers in Poland and factors determining consumer behaviour. The study found that young consumers participate in eco-friendly behaviour such as reusing product packaging, purchasing ecological goods and local products produced in their own country. The aspects of sustainable development are not the primary criteria for purchase decision as price and quality remained important. The study also highlighted that when market forces are not sufficient, there is need for government intervention to support sustainable consumption practices.

Mehta, A., Sharma, M., Gupta, N. (2024) analyzed the determinants for sustainable consumption behaviour among youths. The variables such as ecological knowledge, behavioral control, response efficiency, perception of consequences and environmental sensitivity were analysed which influenced behavioral intentions significantly. The findings revealed that only behavioral control and perception of consequences were directly determining the sustainable consumption behaviour. The study further stated that it is an important step towards promoting sustainable consumption behaviour among young and provides framework for designing educational programs and marketing strategies to reduce plastic waste.

Hong et al. (2024) analyzed the determinants of green consumption behaviour among Chinese youth and also the moderating role of Eco-labelling and green self-identity. The study highlighted that attitude towards Eco-social benefits, green consumption and subjective norms influence green consumption intentions positively whereas, environmental concern and knowledge positively contributed towards shaping their attitudes. The study also highlighted green self-identity moderates the relation between green consumption intention and behaviour however Eco-labelling does not have a significant moderating effect. The researchers identified the importance of encouraging environmental concern and knowledge through education and awareness initiatives in order to encourage sustainable consumption habits among youth.

Raimondo et al. (2022) examined the factors determining millennials' intentions and behaviour regarding reduced plastic consumption using the theory of planned behaviour. The study found that attitudes, subjective norms with perceived behavioral control happening to be the strongest predictor. Moreover, past behaviour was found positively influence attitudes, intentions and actual behaviour while intention further influenced stated behaviour. The study concluded that these factors are important in promoting plastic reduction habits and help in developing strategies and incentives to promote sustainable consumption among millennials.

Zieseimer et al. (2021) analyzed factors encouraging young people to engage in anti-consumption behaviors in the sustainability framework. The study found that young people are mainly driven by financial factor such as saving money and reducing waste. Furthermore, sustainability play a minor role relatively. It was noted that young people would rather spend money on experiences than on physical goods. The researchers stated that anti-consumption practices can still support sustainable development even when the sustainability is not the top priority. They further emphasized the importance of education and awareness to motivate sustainable consumption habits among young people. pls give authentic and helpful suggestions.

RESEARCH GAP:

Existing studies broadly examined the environmental awareness level or plastic waste management separately, limited research has been conducted to examine the relationship between the two, especially the awareness actually changes the behaviour among youth. Additionally, no empirical study has examined specifically plastic waste reduction behaviour among youth in Ulhasnagar. The current study tries to fill this gap by analyzing whether environmental awareness actually leads to plastic waste reduction practices.

OBJECTIVES:

1. To examine the level of environmental awareness regarding plastic pollution among youth.
2. To analyse the plastic consumption behaviour of youth in their daily lives.
3. To examine the relationship between environmental awareness and plastic waste reduction practices among youth.

HYPOTHESIS:

H₀: Youth do not have significant awareness regarding environmental problems caused by plastic waste.

H₁: Youth have significant awareness regarding environmental problems caused by plastic waste.

H₀: Youth do not significantly engage in plastic waste reduction practices in their daily lives.

H₁: Youth significantly engage in plastic waste reduction practices in their daily lives.

H₀: Environmental awareness does not significantly influence plastic waste reduction practices among youth.

H₁: Environmental awareness significantly influences plastic waste reduction practices among youth.

RESEARCH METHODOLOGY:

The study is based on descriptive and analytical research design. Quantitative approach was used. Primary data was collected from 127 respondents through a structured questionnaire. A convenience sampling method was used for data collection. The questionnaire focused on awareness levels, consumption patterns and practices related to waste reduction. The survey targeted youth category whose sustainable practices are most likely to be influenced by accessibility of alternatives,

convenience, personal habits. The questionnaire consisted of closed-ended (Likert scale, multiple choice) for statistical analysis. Since the collected data is in categorical form so we have applied chi-square test.

Given the categorical nature of the data, particularly for variables such as awareness levels, consumption patterns and practices related to waste reduction, the chi-square test of independence was applied to test the third hypothesis. This statistical method helps determine whether there is a significant association between categorical variables such as level of awareness and waste reduction practices. The quantitative data was analysed and results were interpreted in the context of the study's objectives.

DATA ANALYSIS & INTERPRETATION

Observed Frequency

Gender	Awareness programs	Government regulations	Use of eco-friendly alternatives	Recycling initiatives	Total
Male	37	50	26	3	116
Female	5	3	2	0	10
Total	42	53	28	3	126

Expected Frequency

Gender	Awareness programs	Government regulations	Use of eco-friendly alternatives	Recycling initiatives
Male	38.667	48.794	25.778	2.762
Female	3.333	4.206	2.222	0.238

Computing the chi-square static using formula $\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$

Chi square value $\chi^2_{calculated} = \sum \frac{(O_i - E_i)^2}{E_i} = 1.5636$

Sample size	127
Chi square value	1.5636
Degrees of freedom	3
P value	0.6677
Chi square Table value	7.815
$\chi^2(calculated) < \chi^2(tabular\ value)$	We fail to reject Null hypothesis

Since the chi-square calculated value is less than chi-square tabular value so we fail to reject the null hypothesis. So, there is no significant relationship between formal education and awareness of the circular economy among individuals.

FINDINGS:

1. The findings shows that most of the youth is aware of environmental problems caused by plastic waste and understand the importance of sustainable practices also.

2. Though the awareness is high there is widespread use of single use plastic products continuously.
3. The findings also indicates that there is a gap between awareness and actual behaviour.
4. Convenience, personal habits, accessibility of alternatives influence the youth behaviour more than awareness alone.
5. Findings also shows that there is no significant relationship between awareness and plastic waste reduction practices.

RECOMMENDATIONS:

1. The awareness programmes should not only emphasize on providing information but also on promoting practical behavioral change among the youth.
2. Educational institutions can play a crucial role by organizing plastic-free campaigns, awareness activities on campus, sustainability drives.
3. Alternatives like reusable bags and bottles should be made more affordable so that youth can adopt them conveniently in their daily lives.
4. Continuous involvement through campaigns, drives, workshops and community participation can help in developing sustainable habits among youth.
5. Government authorities and local bodies should strengthen the implementation of plastic waste management policies and promote responsible consumption at community level.

CONCLUSION:

1. The current study examined the level of environmental awareness, plastic consumption behaviour and the plastic waste reduction practices and also to evaluate the association between the environmental awareness and plastic waste reduction practices among youth in Ulhasnagar.
2. Awareness is required but not sufficient for sustainable consumption behaviour. Just by knowing about plastic pollution does not automatically encourage youth to change their daily habits.
3. The gap between knowledge and behaviour change towards plastic consumption necessitates holistic approach to promote sustainable behaviour among youth.
4. People may already understand the plastic waste problem, however, changing awareness into everyday habits is challenge in real life. There is need of coordinated efforts of educational institutions, policy makers and community groups to work in a practical way.
5. Closing this gap is essential not just environmentally but for India's commitment towards Sustainable Development Goals.

REFERENCES:

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
2. Central Pollution Control Board [CPCB]. (2022). Annual Report on Plastic Waste Management in India. Ministry of Environment, Forest and Climate Change, Government of India.
3. Hong, Y., Al Mamun, A., Masukujjaman, M. *et al.* Sustainable consumption practices among Chinese youth. *Humanit Soc Sci Commun* **11**, 1058 (2024). <https://doi.org/10.1057/s41599-024-03582-5>

4. Karolina Ertmanska (2021). Sustainable Consumption Among Youth Consumers, *European Research Studies Journal* Volume XXIV Special Issue 2 - Part 1, 203-219. DOI: 10.35808/ersj/2423
5. Mehta, A., Sharma, M., Gupta, N. (2024). Determinants Responsible For Sustainable Consumption Behavior Among Youths. *SocioEconomic Challenges*, 8(1), 240-252. [https://doi.org/10.61093/sec.8\(1\).240-252.2024](https://doi.org/10.61093/sec.8(1).240-252.2024)
6. Raimondo, M., Hamam, M., D'Amico, M., & Caracciolo, F. (2022). Plastic-free behavior of millennials: An application of the theory of planned behavior on drinking choices. *Waste Management*, 138, 253-261.
7. Ziesemer, F., Hüttel, A., & Balderjahn, I. (2021). Young people as drivers or inhibitors of the sustainability movement: The case of anti-consumption. *Journal of Consumer Policy*, 44(3), 427-453.