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Harmonizing Lifestyle and Environment in the Digital Era: A Framework for Sustainable Living (LiFE)

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Abstract

A "sustainable lifestyle" is a cluster of habits and patterns of behavior embedded in a society and facilitated by institutions, norms and infrastructures that frame individual choice, in order to minimize the use of natural resources and generation of wastes, while supporting fairness and prosperity for all. India is a young country with 50% of its population below the age of 25. The choices of the youth and their Lifestyle indeed shapes the economy of any country. At this juncture when India aims to be in the league of developed countries by 2047, it's important to understand the mindset of the youth towards protecting the environment and promoting sustainable development especially in the digital era. The vision of LiFE is to live a lifestyle that is in tune with our planet and does not harm it. The purpose of the study was to understand the behavior of the youth towards Lifestyle for Environment (LiFE) particularly in domains of Energy consumption, water management, and buying sustainable products. A Self-reported questionnaire was prepared on LiFE and data was collected from 350 youths in central India. The data was analyzed using percentage. The results indicate that the youth values the environment and takes measures to reduce, reuse and recycle the consumptions.

Keywords: Lifestyle for Environment (LiFE), sustainable development, digital era

1. Introduction

In the contemporary age, the superseding of digital technology and sustainability has become a focal point in addressing environmental challenges.

The progress of society into the digital era and the impact of human lifestyles on the environment has become increasingly evident and this serves as a gateway into exploring the intricate relationship between Lifestyle choices and environmental sustainability encapsulated within the framework of lifestyle for Environment (LiFE).

The rapid advancement of digital technologies has ushered in a plethora of opportunities to transform various aspects of human life from communication and transportation to commerce, entertainment, digital innovations etc. thereby reshaping the social norms and behaviors. The steadfast digital transformation is also witnessing the escalated footprint of human activities, posing unprecedented threads to the planet's delicate ecosystems. The concept of LiFE has emerged as a holistic approach to foster sustainability by integrating individual lifestyle choices with environmental consideration and LiFE recognizes that sustainable living transcends mere adherence to eco-friendly practices as it encompasses a profound shift in mindset values and behaviors towards harmonizing human needs with planetary boundaries.

Individuals can become catalysts for a positive change. The digital realm offers a myriad of tools and platforms so as to empower individuals and their journey towards sustainable living ranging from sustainable consumption apps to online communities advocating for environment stewardship. LiFE recognizes that individual actions collectively wield immense power in shaping the path of ecological sustainability by adopting sustainable lifestyles characterized by mindful

consumption, waste reduction, energy conservation and eco-conscious decision making.

In 17 SDGs a plan for achieving a better future for all, requires efforts of all stakeholders starting with governments, businesses, civil societies and citizens. In 2015, India had also acknowledged 2030 as a critical important horizon for 17 SDGs. India, while already through a regulatory body (SEBI), has a not too old background of the evolution of non-financial reporting (NFR) by introducing the clause 49 and 2000 that has still now progressed as the Business Responsibility Reporting (BRR).

2. Literature Review

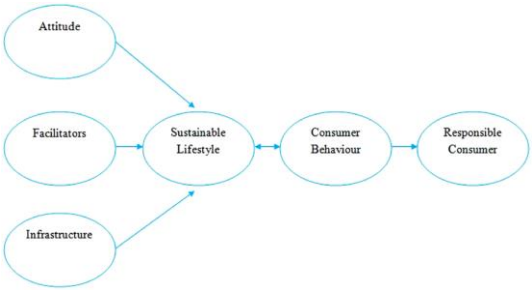
The study by (Dimitrova, et al, 2021) indicates the willingness of the youth to adapt to a sustainable lifestyle. The students generally recognized the need to address environmental issues, and 90.6% intended to change their lifestyle in this direction.

The study by (Kiss, 2024) on the transformation of sustainable lifestyle practices in eco clubs emphasized that the most important characteristics of the non-formal education are the community, autonomy of decision-making, knowledge sharing and experience-based format. From the students' point of view, these characteristics can contribute to their higher level of engagement with sustainability and additional changes in their lifestyle.

The study by (Del Río Castro et al., 2021) suggested that there should be first-approach exploration of research and policy implications. The findings also aimed at reviving further research amid the SDGs and digitalization.

(Lubowiecki-Vikuk et al., 2021) focused on the determinants of a sustainable Lifestyle by (Akenji, 2014; Akenji and Chen, 2016) and proposed a theoretical framework as shown below for sustainable lifestyle.

Figure 1. A theoretical framework for a sustainable lifestyle.



3. Need for the study

The reviews reveal that there exists insufficient research on Indian Youth in Harmonizing Lifestyle and Environment in Digital era thereby substantiating the need for such a research. It can be further articulated as:

Rapid Technological Advancements

The ubiquity of digital devices and services has altered how the youth live ,work and interact with their environment.

Environmental Challenges

With environmental challenges like climate change, resource depletion and biodiversity loss, there is an urgent need to involve the youth who are a major part of the population to find innovative solutions.

Impact of Lifestyle Choices among youth

The individual and collective lifestyle choices of today's youth has undergone a drastic transformation and it is important to understand what their mindset in the areas of sustainability is.

Objectives of the study

1. To access sustainable practices of youth in household energy consumption
2. To evaluate sustainable water management practices in households by youth
3. To assess sustainable waste management practices at the household by youth.

4. Methodology

The research design encompassed both exploratory and descriptive elements, employing a mixed-method approach that integrated qualitative and quantitative methodologies. While the study primarily relied on quantitative methods to analyze and present its findings, qualitative techniques, such as interviews, were also utilized to gather insights from participants in workplace environments. The survey questionnaire employed a combination of open-ended and closed-ended questions to gather comprehensive insights from respondents. Closed-ended questions provided structured response options, facilitating quantitative analysis and enabling researchers to quantify trends and preferences efficiently. Conversely, open-ended questions encouraged participants to freely articulate their thoughts, experiences, and opinions, allowing for richer qualitative data. This dual approach ensured a balanced exploration of the topic, capturing both quantitative metrics and nuanced qualitative perspectives for a more thorough understanding of the subject matter.

The data was collected from 350 youths in central India in varied age groups, decision making capacity and household compositions basically from Graduates, Post graduates, Research scholars and professionals.

Age: The data was collected from individuals aged between 18 to 35 years, encompassing the young adult and early adult age groups. This demographic range is chosen to capture the segment of the population typically associated with adopting new technologies and shaping sustainable lifestyle choices.

Household Composition: Respondents are primarily selected from households where they either reside independently or have a significant role in decision-making regarding energy consumption and sustainable living practices. This includes individuals who are managing their own households, as well as those who play an active role in contributing to family decisions related to environmental sustainability.

Education Level: The study aims to include respondents with varied educational backgrounds, ranging from high school graduates to postgraduate students and working professionals. This diverse educational profile ensures a comprehensive understanding of sustainable living attitudes and behaviors across different levels of educational attainment.

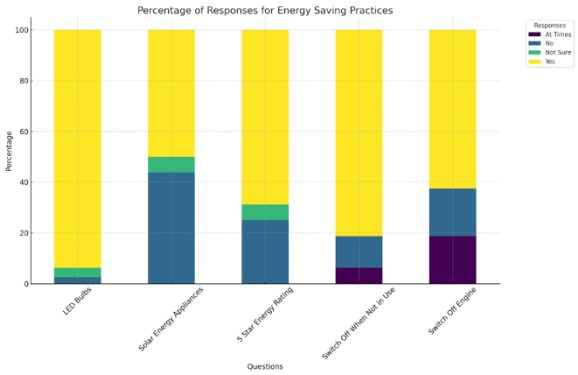
Occupational Status: Respondents encompass a spectrum of occupational statuses, including students, employed individuals, and those engaged in various forms of entrepreneurship or freelance work. This diversity reflects the different lifestyles, priorities, and decision-making capacities associated with various occupational roles.

5. Data Analysis

A questionnaire was administered among youths to understand their energy-saving practices. Some of the questions were on an interview method to understand the personal reasons as well depending on the respondent and the situation in which they are staying.

1. Sustainable practices of youth in household energy consumption

Figure 2. Sustainable practices of youth in household energy consumption



Analysis and Interpretation: The graph above provides a complete view on the response of the youth when enquired on the energy saving practices like using LED Bulbs, Solar energy Appliances, 5 star Energy Rating, Habit of switching off the power when not in use and switching off the Engine when not in use.

LED Bulbs Usage

A high adoption (over more than 90%) use of LED Bulb was observed which is a clear indication that there exists a high awareness level among the youth the usage of these bulbs helps in energy saving and this can be considered as part of the respondents energy -saving behavior. This is also a clear indicator that there is a strong preference among the youths for energy saving and energy-efficient lighting solutions. This response in fact aligns with the current eco-friendly behavior aiming reduction of energy consumption and supporting the efforts of growing sustainable.

Solar Energy Appliances

A moderate adoption rate of about 40% was observed on evaluating the responses towards use of solar energy appliances. Though this percentage indicates that there is a considerable interest in harnessing renewable energy, but at the same time there is roughly an equal proportion of respondents who do not use solar appliances. There could be a reason for lack of awareness among the youth in this regard or the lack of interest to come forward to practice these sustainable methods. However a small number of respondents are unsure, again an indicator that they could be either not interested or not much aware and this can be considered as a potential barrier towards adoption of such renewables. An informal personal interview with a few also revealed that there is also a high investment in the initial installation of these appliances, which the respondents presume that it does not give the returns for the value of money invested .This is where the government policies on such matters should be promoted to create awareness among communities so that citizens come forward and take active participation in the initiatives of the government.

Star Energy Rating Appliances

Over half of the participants use 5- star energy rating electrical appliances and this is an indicator that there is a predominance preference among the youth for high-efficiency devices. This further presumes the fact that there exists a consciousness among the youth to reduce the energy consumption and this relates their desire to reduce electricity bills and indirectly the environmental impacts.

Switching off the Power when Not in Use

As a response to this a majority of about 65% reported that they switch off the lights and other equipment when not in use demonstrating a strong energy conservation habit. Personal informal interviews also revealed that some of them practice this even in their workplace, however few never bothered as well, indicating an area which needs to be improved as part of public awareness and energy -saving behaviors.

Switching off the Vehicle Engine

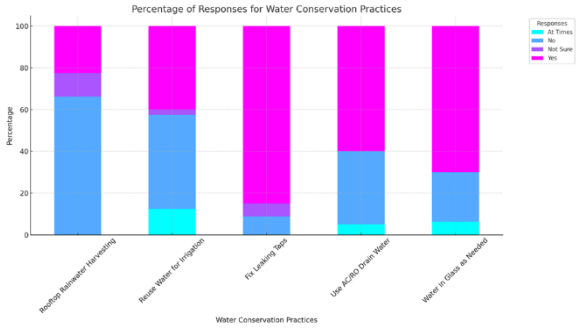
Half of the respondents switch off their vehicle engines at traffic lights and railway crossings and even while stopping to talk with friends and family. This indicates a mixed practice and paves way for improvement. When interviewed on a personal level, the response was to save the fuel for self. As a significant portion of the respondents are not regular in this practice, this also indicates a potential area which requires attention for increased awareness and adoption of this energy-saving behavior.

Overall, the graph illustrates a positive trend towards energy -saving practices among the respondents, with a high adoption to the use of LED bulbs and other energy-efficient appliances. At the same time there exists a noticeable room for improvement in the adoption of solar energy as resources and behavioral practices like switching off the engines when not in use. The survey brings to our notice that there is an intense need to enhance public awareness through education and public awareness programs to involve communities and encourage the adoption of renewables sources of energy. This would facilitate a wider adoption of these practices Overall, the figure reflects the consciousness of youth towards energy efficiency and sustainability, but it also

highlights areas where further efforts can be made to promote environmental control.

2. Sustainable water management practices in households by youth

Figure 3: Sustainable water management practices in households by youth



Analysis and interpretation: To understand the water conservation practices, the youth were questioned to respond on awareness and habits pertaining to roof top Rainwater Harvesting, reuse of water for irrigation, timely fixing up the problems of tap leakages, use of AC/RO drain water, water in glass as needed etc., and the graph thus generated with the obtained data illustrates the percentage in each of these mentioned areas.

Rooftop Rainwater Harvesting

The response predicts a very low adoption rate i.e. even less than 50%.Personal interviews also reveals the lack of interest or least botheration in this regard. Only about 18% of the respondents affirmed the use of Rainwater Harvesting. Though the Government of India offers subsidiaries for this, there is not much awareness of this among the youth .This a clear indication of potential lack of awareness, infrastructure or even the incentives to be received on implementing rainwater harvesting. Special awareness drives needs to be taken up to involve the communities so that they understand the importance and the benefits of harvesting rainwater. This can in a great manner reduce the dependence of municipal water supply system.

Reuse Water for Irrigation

Nearly 32% of the respondents reuse water for irrigating their kitchen garden and house plants indicating a moderate adoption with variability which is not a substantial part of the population. Proper and variety drainage systems need to be planned to collect the used water, so that it can be recycled and reused as per the possibility and the requirements.

Fixing Leaking Taps

This is a very common problem as far as every household is concerned and most of the time most of us are least bothered to solve these issues in the very beginning itself. The normal tendency understood was that when leakage reaches its maximum, a plumber is approached or the tap is replaced. However ,the responses obtained here has a high compliance with a majority of about 68% reporting that they fix the leakage problems of taps and flushes very promptly .This high compliance highlights a general awareness on addressing water leaks to conserve and prevent wastage.

Use of AC/RO Drain Water

Nearly half of the respondents used water drained from AC or RO water filters for secondary purposes but the majority of the respondents do not utilize this drained water and it is wasted. This is a clear indication of lack of awareness in using this drain water which could be otherwise used for at least gardening or washing. Greater opportunities needs to be created to promote awareness programs in these related areas.

Water Consumption Awareness

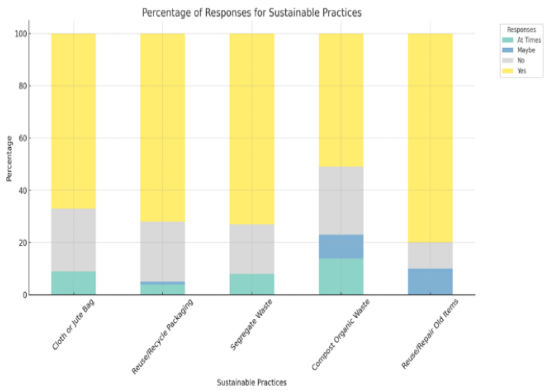
The response indicates that the majority of the respondents take water in a glass as per their requirement, reflecting a high level of consciousness regarding water consumption .But nevertheless, there are people who don't bother much on water consumption and thereby do not make any effort to avoid wastage of water.

The overall graph depicts a mixed level of engagement with water consumption practices. It was encouraging to observe that the majority of the respondents were very alert to replace their leak taps and flushes indicating a high level of consciousness in water consumption. The adoption of rooftop rainwater harvesting needs the attention of the policy makers and government. There exists a huge gap in understanding the benefits of rainwater harvesting .Also the incentive policy framed by the government is not much availed. Though there is a mixed level of engagement, it is also encouraging to observe that youths are taking interest in sustaining their environment.

3. Sustainable waste management practices at the household by youth.

The respondents when responded to various sustainable practices like the habit of using cloth or Jute bag, Reuse/Recycle Packaging, Segregate waste, Compost Organic Waste, Reuse/Repair of Old items etc., showed a diverse response.

Figure 4: Sustainable waste management practices at the household by youth.



Cloth or Jute Bag Use

Approximately 67% of the respondents use cloth /jute bags to carry their purchases which was a majority adoption. This highly signifies that the tendency to use plastic bags has reduced which is a positive behavior towards sustainability. However a small percentage sometimes only uses this sustainable alternatives which can be identified and the real cause can be dealt with.

Reuse /Recycle Packaging

This response showed the highest engagement among the practices with 70% the respondents were observed in reuse or recycling of polythene bags and other packaging materials and this is a clear indication that there exists a strong awareness in actions related to reduction in waste.

Waste Segregation

A large portion of the respondents, almost 73% segregate dry and wet waste which is an important aspect for any waste management system. The strong compliance in this case may be because there have been a lot of awareness programs and the efforts of the municipality that has created a habit among the citizens to adopt proper waste management systems. However the less adopted areas needs to be focused and addressed.

Composting Organic Waste

About half of the respondents compost their organic waste to make green manure , which is a moderate adoption .Since a notable percentage is not engaging in such ecofriendly activities reflects possible challenges of space constraints or perceived inconvenience. It could also be possible that there is not much awareness of creating compost in the right way.

Reuse /Repair of Old Items

This response was a highly practiced one, with 80% of them agreeing to the reuse/repair of old items.

The responses depict a commendable level of engagement as per sustainable practices among participants especially in the process of recycling, packaging and reusing, repairing old items. The practices of composting organic waste and using sustainable bags was majorly adopted which indicates further potential growth in adoption rates. The data reflects a very encouraging fact that makes us reflect that the community is mindful of the

environment impact and actively participates in actions that contribute to sustainability. Nonetheless, there is always a space to improve certain practices like increasing the awareness, infrastructure support and community initiative to further foster a sustainable lifestyle.

6. Discussion and Conclusions

The analysis of responses on energy conservation, water conservation and sustainable practices reveals that the community, especially the youth, is committed to sustaining the environment which is commendable. This showcases a significant adoption of energy-efficient appliances, recycling and water saving measures. The practice of using LED bulbs and promptly fixing up the leaks needs to be widely embraced. The use of solar energy and the adoption of rooftop water harvesting is a clear indicator of growth towards sustainability. Areas with solar energy appliance adoption, rooftop rainwater harvesting, and composting indicate room for improvement. The findings highlight both the progress made and the potential areas for enhancing community education policy support and infrastructure development to further encourage sustainable living. Overall the community's proactive engagement in various sustainability practices provides a hopeful outlook for environment growth suggesting that with continued effort and support greater strides in conservation and sustainability can be achieved

7. Future Directions

To further advance our understanding and implementation of sustainability practices, future studies should focus on identifying barriers to adopting certain sustainable behaviors evaluating the effectiveness of educational and policy effectiveness of educational and policy interventions in fostering behavioral change and exploring the impact of technology innovations in making sustainability practices more accessible. Comparative analysis across different demographics and settings can uncover valuable insights into customizing sustainability initiative to fit various contexts. Additionally economic analysis could quantify the benefits of Sustainable practices strengthening the case for their wider adoption. This research efforts would provide a Holistic understanding of the multifaceted approaches to promoting sustainability, guiding more target and effective strategies to achieve environmental conservation and sustainability goals on a broader scale.

Realizing the vision of LiFE requires concerted efforts from various stakeholders including government, businesses, academia and civil society. Policy makers play a pivotal role in implementing regulations and incentives that incentivize sustainable practices while businesses must embrace corporate social responsibility and adopt sustainable business models likewise educational institutions have a responsibility to cultivate environmental literacy and empower future generations with the knowledge and skills to navigate the complexities of sustainability in the digital age.

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