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Creating Eco-consciousness in Children through Magazine Cartoons in India

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Abstract:

In the 21st century, science and technology have taken over, and social media and other ways to communicate determine and control how people feel and think. Even though we are at the pinnacle of development and innovation, problems with the environment are scary for the future of human life on Earth. Human progress and development are happening at the cost of harming the ecological balance, whose ill effects are visible on every part of the earth. Due to environmental degradation, the climate is changing drastically; as a result, unnatural and unpredictable phenomena are happening all over the globe. So, through a close analysis of Highlights Champak magazine cartoons related to environmental issues, this study tries to figure out how it creates a sense of consciousness among children regarding the environment. Through critical analysis of the relationship between cartoons and ecological problems, this study brings forth its effects on young minds in introducing a sense of digital eco-consciousness. As the digital world is part and parcel of human life nowadays, it is necessary to utilize it to spread eco-consciousness among children to save our beloved planet from extinction.

Keywords: social media, Environmental degradation, Virtual reality.

"Man is a child of his environment."

-Shinichi Suzuki

1. Introduction

The sociocultural, economic, and ecological landscapes have been substantially shaped by technology. Technology causes ecological and social problems and is the primary means of addressing ecological degradation, climate change, waste management and other global issues facing today's world. With the development of science and technology, human beings are getting so much information, which is quite helpful in creating a positive attitude. Technology plays a vital role in accumulating information and channeling it positively to save human beings from destruction. Like other issues, environmental degradation is a serious concern for humanity's ability to sustain its existence. Environmental degradation is the deterioration (producing degenerative harm) of the environment due to habitat invasion, species extinction, habitat exhaustion, ecological pollution, and the depletion of natural resources such as water, soil, and air. It is evident that environmental alteration is judged to be harmful and unpleasant. Environmental degradation has garnered global attention, prompting the implementation of necessary measures and laws to alleviate the situation.

As the population has grown over time, activities that use up resources and technologies that cause pollution have caused the economy to grow quickly. Environmental management and protection are generally used to combat this threat. Although different governments and apex bodies all over the globe are working hard and taking necessary action to minimize environmental pollution, it is not sufficient to control it. Technology can potentially be a key enabler in reducing pollution globally. The Internet of Things (IoT) and other ICT technologies might reduce greenhouse gas emissions by up to 15% by 2030, according to the Ericsson Mobility Report (Ericsson Mobility Report, 2022). Transportation, electrical networks, manufacturing, agriculture, and land usage are among the sectors where ICT can

have an impact. ICT also offers a practical way for cities and nations to lower their carbon footprints, as it is a sector with low carbon emissions, contributing less than 2% of global CO_2 emissions (Zijian, 2002).

It is well known that the digital world influenced all sects of people. But it affects more children as they are experiencing it for the first time or are at the beginning of the contact zone. As environmental problems mount every day all over the globe, people's consciousness regarding protecting and preserving it is not accelerating at that speed. The new generation can bridge this gap, and the digital world will pave the way. To achieve the desired end, we need to inculcate an eco-conscious attitude among the children, and the magazine can play a crucial role in delivering the message in the form of cartoons. So cartoons can perform a multipurpose operation to bring optimistic change in children's behaviors, which will help preserve and prevent ecological disturbance in the near future.

2. Methodology

The main objective of this study is to find out how magazine cartoons in India help to create a sense of eco-consciousness in children. To attain its objective, this study tries to find out the relationship between eco-consciousness and magazine cartoons. This study critically analyzes the cartoon images published in kids' magazines in India, like Highlights Champak, from 2000 to 2022. My study basically focuses on English kids' magazines only. This study aims to identify the correlation between the two variables mentioned earlier through thematic, graphical, and pictorial analysis.

3. Review of literature

Eco-consciousness is an environmentalist ideology that broadly encompasses all living and non-living beings under its consideration and argues that each has an environmentalist right

and needs to be protected from degradation. Environmental management is the "conservation of natural resources, protection of habitats and control of hazards" (Noble, 2021). In simple words, eco-consciousness refers to human awareness regarding the environment, its effects on human beings, and the causes of the loss of biodiversity due to pollution and environmental imbalance (Randall, 2013). Merriam-Webster defines it as being "marked by or showing concern for the environment." Eco-consciousness is the reflection of human concern and understanding of human beings regarding their duty to the environment (Ellen & James, 2013). The role of human beings on the earth is to protect and preserve it, which explains the human ethics regarding the environment (Donald, 2010). A minority stance among environmentalists, eco-centered environmental ethics holds that value in nature cannot be limited to what enhances human well-being (Thompson, 2001). Environmental well-being and human well-being are synonymous, whereas environmental well-being vastly determines human well-being. So, to sustain human well-being, it is considerably desired that humans haul quintessential measurements to harness the imbalance in the ecology. One important and effective way to teach people about the environment is through stories (Kirpal, 2020). In her study, Neha Kirpal (2020) described how Katha Lab School (KLS) plays an important role in alerting children in the slum cluster of Govindpuri in New Delhi regarding environmentalism through Katha's story pedagogy. Run, Ranga! Run! instills the knowledge of grassland and a fearless baby rhinoceros who needs accompanying. The Gift of Gold is a mythical story about a little girl who saves her village from drought; Sonam's Ladakh by Manish Lakhani tells the story of a nomadic girl and her animals, who count the animals as her closest friends and "better than boxes of money" (Kirpal, 2020). Environmental themes in popular narration impart "future scenarios and environmental transformations" through renowned communication media to address the issue to the masses (Christensen, Aberg, Lidström & Larsen, 2018, p. 1). In her study, Dr. Shobha Ramaswamy (2019) emphasizes how picture

books and children's literature in the form of pictures stimulate the young mind to think eco-critically. Cartoons play a significant role in socializing young children (Tatev Derzyan, 2019). Ambika Bhalla (2012) discusses the relationship between eco-consciousness and children's literature and argues that children's literature plays a vital role in forming eco-consciousness. Parveen Saini's (2018) study indicates that animated shows greatly affect children's concept and thought formation in early childhood. Khabib and Soliman (2015) find that "there is a strong impact of Cartoon Network on school-going kids, which can be seen in their lifestyle, dressing, aggressive and violent behavior, and their language" (p. 264). Moses Muiruri's (2021) analysis tries to figure out the effects of cartoons on language acquisition and finds that the effects of cartoons and language acquisition are strongly correlated. After the review of the literature, it is found that no research has been conducted until now to figure out how eco-consciousness and magazine cartoons are associated. So in this study, I will focus on how magazine cartoons can be used to create eco-consciousness in children.

4. Discussion and Analysis

There is a strong correlation between concept formation and magazines for children. Applying this correlation, the magazine can play a vital role in the formation of eco-consciousness in children through intelligible cartoons. We live in a world facing a severe threat in terms of environmental degradation, so at this juncture, it is our duty to provide a better and safer environment for future generations. Children are the main stakeholders of the upcoming new world, so it is our moral responsibility to make them aware of the surrounding environment and its inhabitants. India is the country of stories, mythology, and kathas. Like different modes of storytelling, magazine cartoons are also a mode of katha book, which facilitates diverse learning through the power of images and pictures. This unique way of storytelling addresses some of the prominent issues concerning ecology and climate change.

Photos, pictures, and images in cartoons also convey the message in the form of image narration, which is more effective as compared to storytelling and videos. The magazine cartoons are the prototype of the story, which visualizes the picture of narration to bring about behavioral changes in the children to attain a specific objective. Moreover, magazine cartoons are more effective and de facto than other narration forms, as they are brief, pointed, and visual.

Figure 1: Deforestation and forest consciousness

Source: Highlights Champak, published in 2010

Figures 1a and 1b illustrate the sad reality of deforestation through two contradictory messages portrayed in them. In Figure 1a, it depicts the green corridors management office and the cutting down of the tree. The images try to express the inner meaning that if we do not take the necessary action to control deforestation, it will endanger the lives of human beings. In Figure 1b, it depicts two worlds: one is the world of greenery and forest land, and the other is the world of dead land with the image of a skeleton, which illustrates lifelessness and barren land.
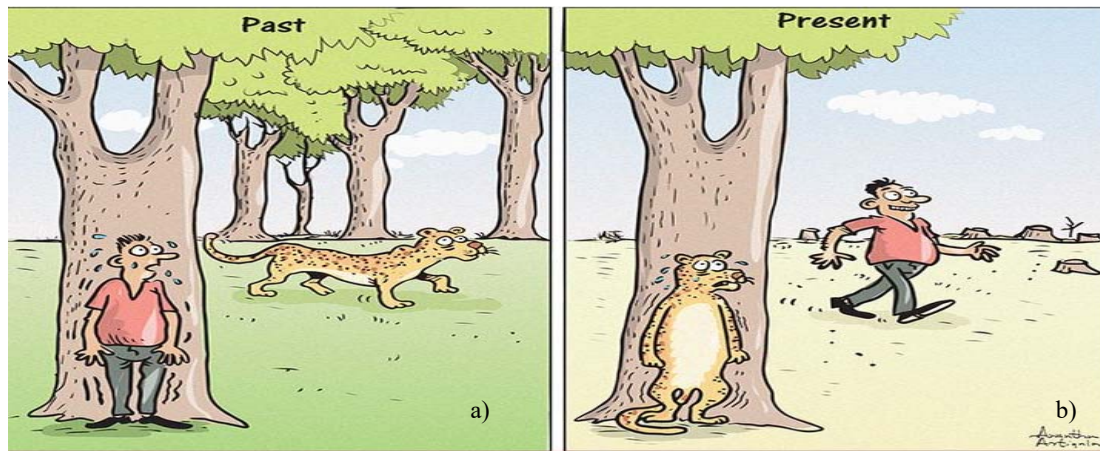
Figure 2: Deforestation and Animal Consciousness

Source: Highlights Champak, published in 2019

Similar to the previous one, figures 2a and 2b also convey a deep sense of despair and the uncertain future of wild animals in their natural world, which is depleting rapidly due to human activity. With the comparison between the past and present, the image demonstrates two emotions associated with wild animals and human beings. In figure 2a, the tiger is fearless because it has a safe place for roaming, while the human feels insecure about being attacked by wild animals, although they have no intention of harming him. But at present (figure 2b), the scenario is totally opposite; there is no forest land on which the wild animal can live, and it is feeling insecure about being extinct, while human beings feel happy destroying the inhabitation of the wild animals.

Figure 3: Industrialisation, Urbanisation and Eco-consciousness

Source: Highlights Champak, 2020

The ill effects of industrialization and climate change on the ecology and the earth have been clearly visualized in the images. In the race for progress and development, human beings are mercilessly harming the environment, ultimately affecting only human beings. Overexploitation of natural resources in the name of industrial development destroys the beauty of the earth. Figure 3a expresses a profound meaning of industrialization and globalization by depicting two different worlds. This anthropocentric attitude of human beings towards other animals and non-living species creates a negative attitude that assumes that whatever is present on earth is for the welfare of human beings and rejects the rights and perspectives of "others." Human greed and lust for development continuously encroach on non-human space, forcing them to become extinct. The same thing can also be observed in Figure 3b, where the reckless use of energy resources leads to an energy crisis.

"Exploitation" is the use of natural resources to grow the economy, which can harm environmental degradation. (Mittal & Gupta, 2015): When natural resources are used up, the environment can get worse, which can hurt the economic growth of the places where it happens.

As the extraction and processing of raw materials (such as in mining, steam power, and machinery) advanced significantly more than it had in preindustrial countries, the exploitation of natural resources began to take place on an industrial scale. The 20th century saw a sharp rise in energy usage. The production of fossil fuels, including oil, coal, and natural gas, sustains about 80% of the world's energy needs (Planas, 2012).

Subsoil minerals, such as precious metals, which are mostly employed in manufacturing industrial goods, are another non-renewable resource that people use. The destruction of forests in a terrestrial ecosystem and water pollution in an aquatic ecosystem are two examples of how intensive agriculture harms several facets of the natural environment.   The depletion of natural resources caused by the unsustainable mining of raw materials becomes a greater issue as the global population grows and the economy expands (McNicoll, 2007).
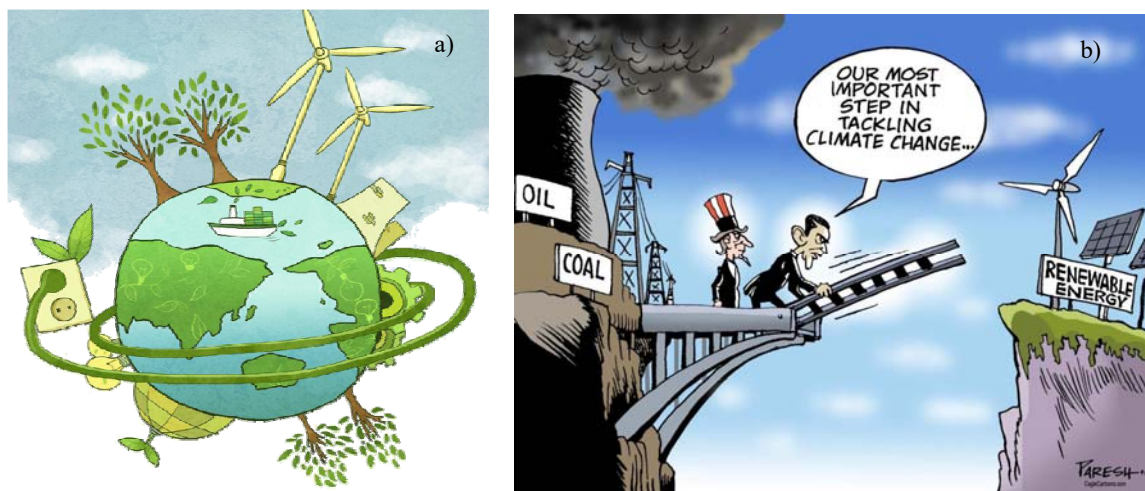

Figure 4: Energy Crisis and Eco-consciousness

Source: Highlights Champak, published in 2016

As far as energy consumption and its negative impact are concerned, we are moving towards the darkness as non-renewable energy resources are depleting. Figures 4a and 4b effectively

inculcate a sense of alertness and simultaneously acknowledge the young mind about the benefits and future of renewable resources. Through comparative analysis, this study tries to expound on how young minds are instilling positive vibes regarding ecology and its associate member, which supplies the food and energy to think about where they live and a motif of preserving the same. Figure 4a expresses the message of a happy and healthy world with sufficient greenery and people using renewable energy resources. In contrast, in Figure 4b, a sense of necessity and a hidden force compelling the people to shift towards renewable resources such as oil and coal energy seem to be running out.

Saving money on your electricity bill is just one benefit of energy conservation. According to the Organisation for Economic Co-operation and Development (OECD), energy-related emissions will rise by 70% by 2050 if current trends continue. Higher temperatures and an increase in the frequency of extreme weather events are only two examples of how this could hasten the harmful effects of climate change (Rogers, 2018).

Throughout the last few centuries, energy availability has changed the path of human history. Not only have new energy sources been discovered—first fossil fuels, then nuclear power, hydropower, and now various renewable technologies—but also the amount of energy we can generate and use (Ritchie, Roser, & Rosado, 2018).
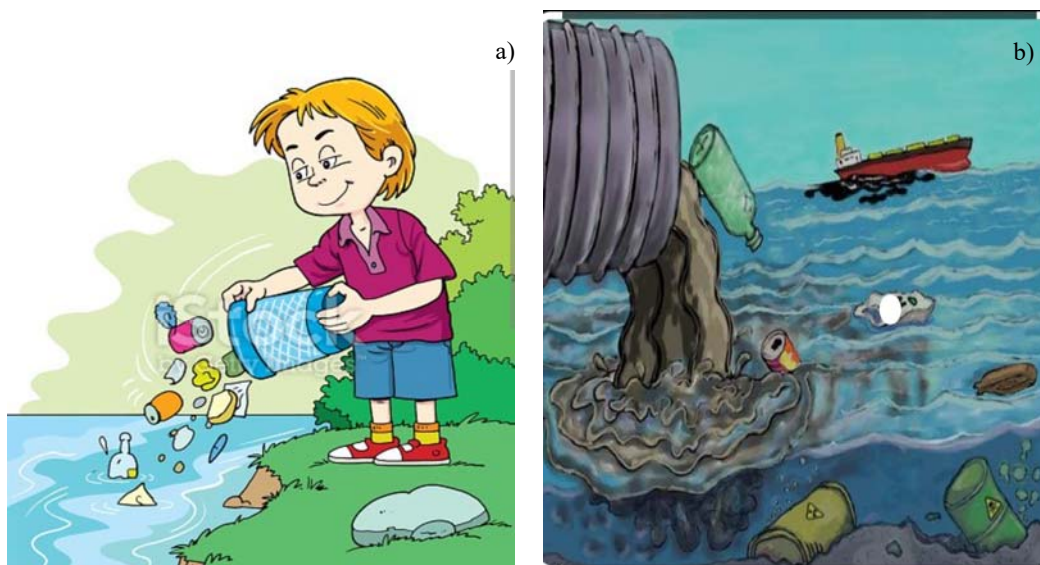
Figure 5: Water Pollution, Waste Management and Eco-consciousness

Source: Highlights Champak, published in 2018

Water pollution and water management are severe problems in the modern world. Every source of water is getting polluted due to Anthropocene activity. Oil spills and plastic dumping in the bodies of water are the primary sources of water pollution. These two figures (figures 5a & 5b) convey two pictures of water pollution. The first image reflects the domestic sources of pollution, and the second image symbolizes the industrial and urban sources of water pollution. Besides these two sources, it also depicts another source of water pollution: oil spills. Oil spotting greatly affects marine biodiversity. Oil spills result in significant financial and environmental repercussions. Oil on ocean surfaces harms many types of aquatic life because it prevents enough sunlight from accessing the surface and lowers the concentration of dissolved oxygen. Crude oil destroys the insulating and waterproofing qualities of feathers and fur, which increases the risk of hypothermia in oil-coated birds and marine mammals. Moreover, ingested oil may be hazardous to the afflicted animals, and damage to their habitat and reproduction rate may hinder the long-term recovery of animal populations from the immediate harm brought on by the spill. Moreover,

significant plant damage can result; mangroves and saltwater marshes are two important coastal ecosystems that regularly experience oil damage (Britannica, 2022).

Here, Figures 5a and 5b reciprocate a deep sense of water pollution, waste management and eco-consciousness in the children through cartoons. We can not imagine human life without water. Water is the basic necessity for the survival of the living beings on the planet. All of us know that we have limited water resources on the earth, which will be exhausted after a certain period of time. However, knowing this human being is polluting the water in the name of progress and development. We must urgently educate the future generation about the environment in addition to providing them with a wonderful education and a fulfilling life. Children should learn this lesson early on about how their behavior can affect one of our most valuable resources, water. Children must learn about water pollution, which is a must.

Conclusion

We are living in a world that is getting worse every day due to human activity. All over the globe, different governments and organizations are working hard to control environmental pollution. But these efforts and initiatives seem fruitless as the deterioration accelerates continuously. We need to think differently to minimize corrosion. We need to bring about changes in the attitudes of human beings towards nature so that a sense of belongingness arises automatically. So to attain the desired changes in the behavior of human beings, our target should be children. According to John Locke, at the time of birth, a child's mind is a blank slate, which he termed "tabula rasa," and it forms concepts and ideologies by coming into contact with nature and fellow human beings through experience. Formal education is insufficient to make children responsible citizens of the world; we need to inculcate a sense of eco-consciousness and an eco-friendly attitude into them. Using the theory of John Locke and the help of informal educational tools like a magazine can play a significant role in

creating eco-consciousness in children. It is evident from the analysis that magazine cartoons play a major role in helping children understand the complex concept of ecological imbalance in a fun and humorous way, which leaves a lasting impression on their attitudes towards ecology and its management.

The need to educate youngsters about the current situation, protection, and preservation of the environment is greater than ever. Children's magazines that focus on the environment can improve environmental literacy. Children's magazine is entertaining, enlightening, imaginative, and hilarious. An excellent technique for promoting environmental literacy is a cartoon in the form of a picture book. They give notions that are thought to be extinct in textbooks new life. They also tell stories and provide words and visuals to help the kids think about problems and circumstances. Children's literature becomes a potent tool for influencing young brains through narrative and images. Cartoons with colorful humor are among the most enjoyable books for kids. The child's first reading material in symbolic storytelling includes pictures and figures. Even before the youngster starts reading independently, the books can be read to him. The youngster is interested and desires to read independently to enjoy the stories, so the books plant the seeds of a reading habit in the child.

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