

Use of New Media Communication among Youth to Address Plastic Pollution

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Abstract

Plastic pollution has become an inevitable issue in lower-middle-income countries like India. Every year, millions of tons of plastic waste are disposed of, which pollutes the air, water, and soil. Youth play a crucial role in creating a sustainable environment. Therefore, this study focused on gaining insights from the youth studying in public universities in Delhi. It aimed to understand the interrelationships between youth's involvement with new media and plastic pollution, with special reference to attitude and awareness. The study used an explanatory sequential research design and collected data from cross-sectional surveys and focus group discussions (FGDs). A mixed-method analysis was performed using SPSS for quantitative analysis and Nvivo for qualitative analysis. The study found that youth have a positive attitude towards conserving the environment from plastic pollution and consider new media, especially social media, an effective tool for disseminating environmental information. New media influences youth behaviour and opinion on climate change and environmental conservation.

Keywords: New media, youth, plastic pollution, climate change, environmental conservation

Introduction

Humans have relied on the Earth to fulfil their essential needs, such as food, shelter, and healthcare. In modern times, our consumption of resources has considerably increased, particularly with the rising demand for plastic items. These items pose a significant threat to our environment as they are the major contributors to non-biodegradable waste (Hasan, 2004). Our planet is experiencing climate change and environmental problems due to the overproduction and poor disposal of plastic items. This waste has become the third largest contributor to global waste (You et al., 2020), which affects the environment and human health (Chen et al., 2021).

There is a growing focus on sustainable development (Zahari, 2020), and the media raise awareness among communities (Sheikh & Serhan, 2022). The younger generation has access to more environmental information than ever before through new media channels. It is crucial to motivate and engage them in action that addresses environmental problems (Andersson et al., 2018). By working at the grassroots level, they can influence their peers and families to conserve the environment (Acharya, 2013; Zahari, 2020).

Background of the Study

Since the creation of plastic in 1907, its products have gained immense popularity across various industries (Singh et al., 2018). Over time, people have come to appreciate the exceptional qualities of plastic, including its lightweight nature, rust resistance, durability, and cost-effectiveness. As a result, plastic has become increasingly popular worldwide due to its versatility and convenience. However, despite its numerous benefits, plastic poses a severe threat to the environment (Senathirajah et al., 2021).

There are two primary reasons why plastic waste is a significant environmental issue. The first reason is that plastic is a non-biodegradable substance, making it impossible for microorganisms to break it down naturally. As a result, plastic items can take hundreds of years to decompose completely and release harmful chemicals into the environment. The second reason is that government authorities have limited control over unsustainable growth, unregulated usage, and improper disposal of plastic waste (Sandil, 2022). Improper disposal of plastic waste results in large piles of plastic in cities and other areas. These piles release harmful chemicals into the air, soil, and water, causing adverse environmental effects. Single-use plastics like thin polythene bags pose a significant problem as they clog drainage systems, leading to overflow and flooding (Paul et al., 2021).

Global Scenario

The problem of plastic pollution has become a grave environmental concern that affects the entire world and exacerbates climate change. The improper disposal of plastic products causes significant harm to both ecosystems and human health. Plastics release greenhouse gases that contribute to climate change throughout their life cycle (You et al. (2020); The Organization for Economic Cooperation and Development, 2023). It is alarming that since 1950, the Earth has produced a staggering 8.3 billion tons of plastic waste. Shockingly, 79% of this waste is either disposed of in landfills or left unattended, which causes environmental damage (Bansal et al. (2023); United Nations Environment Programme, 2021). The world produces 400 million

tons of plastic waste annually (Wakefield, 2022), which causes serious health risks to humans. Between 400 thousand and one million people perish annually due to illnesses and accidents from improper waste management equates to one death every 30 seconds (Calderwood, 2019).

Linkages with SDGs

The United Nations (UN) is actively engaged in several initiatives to address the issue of plastic pollution at a global level. These initiatives involve addressing the problem of single-use plastic items, microplastics and marine litter (United Nations, n.d.). In 2015, the UN introduced 17 Sustainable Development Goals (SDGs) to address global issues and promote sustainability. One of these goals, SDG 14, focuses on protecting marine resources and addressing the issue of plastics (Walker, 2021; *Goal 14 | Department of Economic and Social Affairs*, n.d.).

Indian Scenario

The excessive use of plastic in India has led to a significant environmental problem, resulting in environmental degradation. A report by NITI Aayog reveals that India generates 3.47 million tons of plastic waste annually (NITI Aayog, 2022). The Annual Report 2021 by the Central Pollution Control Board (CPCB) indicates that the National Capital of India generates around 345,000 tons of plastic waste per annum (Central Pollution Control Board, 2021).

How is the Government addressing this issue?

Regulatory measures have been introduced in India to address the issue of plastic pollution caused by single-use plastics as the country strives to achieve SDGs and fulfil its commitment (Sandil, 2022). In 2021, the Ministry of Environment, Forest and Climate Change of the Government of India introduced the Plastic Waste Management (PWM) Amendment Rules. These updated regulations prohibit single-use plastic (SUP) items with low usefulness and high potential for littering from July 1, 2022 (Press Information Bureau, Delhi, 2022). In February 2022, the government released guidelines for Extended Producer Responsibility (EPR) to encourage sustainable practices for managing plastic packaging waste, including non-single-use plastics. According to these EPRs, Producers, Importers, and Brand Owners (PIBO) must act responsibly towards the environment (NITI Aayog, 2022).

To combat plastic pollution, starting from September 30, 2021, the government has mandated a minimum thickness of 75 microns for plastic carry bags, which further increased to 120 microns with effect from December 31, 2022. In addition, the CPCB has banned several plastic items, including plastic sticks, earbuds, PVC banners, balloons with plastic sticks, candy

sticks, ice-cream sticks, cutlery items, decorative thermocol, and wrapping and packaging film around sweets and cigarettes, with effect from July 1, 2022 (Sandil, 2022).

Review of Literature

Plastic: Its Impacts and Alternatives

Research has shown that the plastic sector is growing and broadening its resources to expand production worldwide. The packaging industry has witnessed significant expansion because of the availability of low-cost plastics with appealing qualities, resulting in widespread usage in households and various industries (Soares et al., 2021). In their research, Soares et al. (2021) and Kumar et al. (2021) pointed toward plastic pollution, which has emerged as a pressing global environmental concern. Herberz et al. (2020) point out that while plastic is an integral part of our daily lives, the current rate of plastic production is unsustainable and could profoundly impact our way of life by 2030. Chen et al. (2021) caution that improper waste management and landfilling of plastic could lead to significant risks to both humans and wildlife.

The Food and Beverage industries are thoroughly analysed in the NITI Aayog report, which delves into sustainable environmental practices. The report emphasises the significance of utilising biodegradable alternatives and technologies to manage plastic waste effectively (NITI Aayog, 2022). According to a study by Paul et al. (2021), biodegradable plastics are a more sustainable choice than traditional plastics. They suggest that using biodegradable materials is necessary for achieving a sustainable world. Prata et al. (2019) emphasise the need for a comprehensive study on environmental plastic pollution. Their research highlights the pressing requirement of understanding the impact of plastic pollution on the environment and identifying effective strategies for mitigating its harmful effects.

Communication about Plastic Pollution and New Media

Communication plays a vital role in environmental decisions. Raising public awareness and encouraging practical steps towards reducing plastic waste is essential. Effective communication is a valuable tool in ensuring that people comprehend the consequences of their actions and the significance of responsible waste practices (Van Khuc et al., 2023). According to research by D.P. Singh and Mathur (2020), people living in urban areas are aware of the negative impact of plastic pollution. Still, they lack awareness of India's efforts to combat this issue. To address this, the study suggests various educational campaigns that target all members

of society, including those who cannot read or write. Soares et al. (2021) also emphasise the importance of environmental education, particularly for young people, in reducing plastic consumption and preventing littering.

The media is essential in addressing environmental issues such as plastic pollution (Nagaraj & Upadhyaya, n.d.). Over the past three decades, it has made tremendous strides in educating, entertaining, informing, and influencing people worldwide (Pandey & Sharma, 2014). Media is a powerful tool for raising public awareness of environmental issues, particularly plastic pollution, and profoundly impacts public opinion about this problem (Neelima & Sharda, 2019). New media is an incredible blend of innovative technologies that have become integral to our daily lives. It has become a popular medium for young people to engage with digital devices, spending hours exploring and learning about different interests. Using digital tools, youth can broaden their knowledge and gain fresh insights into various issues, including environmental issues (Pandey & Sharma, 2014).

Objectives of the study

1. To explore university students' attitudes and awareness towards plastic pollution and waste management.
2. To investigate the impact of new media and its content on their attitude and awareness.

Hypotheses

H1: There is no gender difference in the level of awareness of plastic pollution among university students.

H2: New media is a preferred communication tool for university students to access environmental information.

Theoretical Framework

In 1980, Icek Ajzen proposed the theory of planned behaviour (TPB), which has helped us better understand the attitudes and awareness of university students towards plastic pollution and waste management. According to this theory, an individual's behaviour is influenced by their intentions, which are determined by three factors: attitude, subjective norms, and perceived behavioural control. These factors affect how university students perceive plastic waste management and the importance of conserving the environment (Phulwani et al., 2021; Rashid, 2021)

The Technology Acceptance Model (TAM) by Fred Davis in 1989 examined how young people adopt and use new media to access environmental information. According to this model, a person's willingness to use technology is mainly influenced by how useful and user-friendly they perceive it to be. In this study, perceived usefulness refers to whether young people believe that new media can help to increase awareness and change their attitudes towards plastic pollution (Dhume et al., 2012; Aliyu & Goyal, 2022).

Research Design and Method

We used an explanatory sequential research design to gather insights from youth studying in Delhi's central and state government universities. The focus was on the interrelationships between youth's involvement with new media and plastic pollution, with special reference to attitude and awareness. A mixed-method study was employed to obtain primary data for this research via survey and focus group discussions (FGDs). A cross-sectional survey was conducted using the questionnaire, which was designed using the 7-point Likert Scale.

Sampling Method

There are 18 central and state universities in Delhi that receive government funding. We used the Fishbowl draw probability sampling method to choose three universities out of 18. These three universities were Jamia Millia Islamia (JMI), Delhi University (DU), and Guru Gobind Singh Indraprastha University (GGSIPU). We used simple random probability sampling to select the respondents for the cross-sectional survey and FGDs. The total sample size of the survey was 345, whereas FGDs had 29 participants.

Data Collection and Analysis

The researcher explained the study's objectives to the respondents and took oral informed consent before conducting the survey. A pre-test was conducted on 25 respondents to identify any weaknesses and enhance the clarity of the questionnaire. The survey was distributed online through emails and social networks, and participation was voluntary. After receiving the data from the survey, SPSS version 25 was used for descriptive analysis, linear regression and chi-square test of association. Based on quantitative data analysis, FGDs were designed to get in-depth information from university students.

The FGDs were conducted in three groups, with two groups of 10 participants each and a third group of 9 participants (Craft et al., 2016). The discussions lasted between 30 to 60 minutes, with a total duration of 130 minutes. Participation was voluntary, and participants

provided written informed consent before being recorded (audio only). The researcher transcribed the recordings from Hindi and English language to English transcripts for data analysis. Nvivo version 14 was used to analyse the qualitative data. Clarke and Braun's (2013) six-step approach was used for thematic analysis of the qualitative data. The researcher followed these steps: immersed herself in the data, systematically coded it for recurring patterns and themes, reviewed the themes for accuracy and relevance, defined and named them clearly and concisely, and compiled the results in a comprehensive write-up. We used an inductive approach, which allowed for the emergence of new themes.

Findings

Youth attitude towards combating plastic pollution

In the survey, it was found that 64.3% of young respondents perceive plastic pollution as a global threat (mean = 6.34; standard deviation = 1.346). Interestingly, it was also found that 47% of the respondents feel the need to reduce plastic pollution at a personal level; this indicates a growing environmental consciousness among the youth (mean = 6.14; standard deviation = 1.242). However, only 11% of the participants strongly agreed to use recyclable items over plastic by spending more money on them (mean = 5.16; standard deviation = 1.357). These consistently high mean scores and low standard deviation show a strong agreement among the respondents towards acknowledging plastic pollution as a salient environmental issue, especially among the youth (refer to annexure Tables 1 & 2).

This study also aimed to gather qualitative data to understand youth's attitudes towards plastic pollution and waste management. During the FGDs, respondents shared about the plastic waste disposal techniques they adopted. One of the respondents shared that most of us throw plastic anywhere, which has very harmful effects on humans and the environment (Respondent 5, JMI). During the discussions on plastic waste disposal. Most of the respondents pointed towards the non-biodegradable nature of plastic. One of the respondents shared:

“The worst part I see about plastic pollution is that it is tough to get eradicated because if we throw it away or bury it in the ground and dig after years, you will find the plastic in the same form.” - Respondent 7 (JMI)

Awareness of the impact of plastic

Our survey revealed that most of the young respondents were not aware of the harmful effects of plastic on the environment and living organisms. Only 46.7% of the respondents were aware

of the negative impact of plastic pollution (mean = 6.20; standard deviation = 1.147). Similarly, only 46.7% of respondents were aware that plastic ingestion can cause the death of aquatic and terrestrial animals (mean = 6.24; standard deviation = 1.036). The percentage of respondents who knew about the harmful effects of plastic on human health, such as hormone-related cancer, infertility, obesity, diabetes, and dermatitis, was low. Only 35.9% of respondents knew that plastic breaks down into microplastics that can cause these health problems (mean = 5.89; standard deviation = 1.249) (refer to annexure Tables 1 & 2).

We also asked questions to determine their level of awareness about the packaging of the food items they use daily. The results showed that only 13.3% of the respondents knew that the packaging sector uses the largest amount of single-use plastic (mean = 5.10; standard deviation = 1.507). However, the consistently high mean scores and low standard deviation indicate a clear consensus among the respondents that plastic pollution is a significant issue (refer to Annexure Tables 1 & 2).

During the FGDs, it was observed that while the youth's awareness about environmental conservation is increasing, their day-to-day behaviours towards the disposal and excessive use of plastic remain a concern. One respondent shared:

“I don't see any change in behaviour, but there is a change in awareness. Maybe the reason is our nature that we act only on any specific trigger. It has to be a matter of utmost importance and urgency; otherwise, we don't act. It is something that shakes the societal conflicts as a whole.” - Respondent 6 (GGSIPU)

Unaware of recent regulations

From the survey and FGDs, we tried to understand the level of awareness among the youth regarding the recent environmental and plastic-related regulations in India. We asked them if they knew about any government or non-government initiatives aimed at reducing plastic waste in their city or if they were aware of any plastic waste disposal rules related to the single-use plastic ban.

The study revealed that most respondents were unaware of recent plastic-related campaigns, regulations, disposal methods, and bans. Only a few students who participated in the FGDs mentioned that they were aware of certain banned items, such as polyethene-made single-use polybags, straws, and juice packaging. Additionally, only a few respondents were familiar with the microns level in plastic items. During the discussions, one of the respondents

pointed out that plastic items emit harmful gases and have dangerous effects on animals, which is why the government has banned single-use plastic (Respondent 10, JMI). However, this respondent was utterly unaware of the recent regulations.

Examining New Media Literacy

We found that it is common for youth to use social media platforms to search for, share, and receive information. However, when it comes to environment-related information, the situation is different. During the FGDs, most respondents mentioned that they seldom come across pictures, audio, or video related to environmental issues. A respondent shared that he has not seen any campaign on social media related to environmental issues (Respondent 7, JMI). However, most were enthusiastic about using new media to raise awareness about environmental problems. One of the participants highlighted the crucial role that new media can play in spreading the word about environmental issues.

“I think new media is a platform to spread awareness on anything that’s heated; we can understand the problem. In our ways, we repost it or re-share it and send it to our friends so that they will be aware of it.” - Respondent 4 (DU)

Through new media platforms, some respondents were aware of cleanliness campaigns, such as the Swachh Bharat Mission and the Clean-up campaign (focuses on beach cleaning). One of the participants mentioned the Save Soil campaign led by the spiritual guru - Sadhguru (Respondent 7, GGSIPU).

The students who usually commute on the Delhi Metro shared their experience with Delhi Metro Backlit panels and Ambient Lit panels. They mentioned that they have received educational information on environmental conservation on these panels. Additionally, we received feedback from rural areas as one of the respondents shared that he had seen posters at Panchayat offices that promote saving the earth from plastic pollution (Respondent 2, JMI).

Gender differences in the level of awareness and preference

A linear regression model was performed to assess gender differences in the level of awareness. The R-value obtained from the results showed a minimal difference between the two groups regarding plastic release harmful chemicals into the environment and harm species, with an R-value of 0.078, which is below 0.4. Additionally, we found the p-value, which showed similar results with a value of 0.146, higher than the significance level of 0.05 (refer to annexure Table 3). Moreover, the R-value obtained from the linear regression showed the awareness level of

students regarding the question that plastics slowly break down into smaller fragments known as microplastics, which may cause severe health problems, with an R-value of 0.080, below 0.4. With this, we found a p-value, which also showed similar results with the value 0.138, higher than 0.05. Hence, the first hypothesis of this study was accepted (refer to annexure Table 4).

We also did the chi-square test of association to know the preferred communication tool for both genders to access environmental information. The significance value obtained from the chi-square test of association showed new media platforms are the most preferred platforms to express opinions on environmental issues, with a significance value of 0.164, which is more than 0.05. Additionally, a significance value of 0.072, which is more than 0.05, showed that new media attract the attention of youth by using creative techniques like memes, short videos or clips. Hence, the second hypothesis was accepted (refer to annexure Tables 5 & 6).

During the FGDs, we discovered differences between the survey results and the FGDs. The FGDs revealed that there is a gender gap when it comes to awareness of plastic pollution among university students. In particular, female respondents provided more insights than male respondents, especially regarding new media and its content related to the environment and plastic pollution. The respondents discussed how platforms like Instagram, Facebook, YouTube and WhatsApp can spread information to a large population, especially among young people. One of the respondents shared:

“I use Instagram and WhatsApp. New media has an immense role in spreading information regarding plastic pollution. If we physically contact someone, the information can not be spread to many people, and it’s not necessarily that information will remain in people’s minds. However, if we talk about new media, it has an immense role in informing about plastic pollution. As youth are more available on new media, they can access anything, anytime and anywhere.” - Respondent 9 (DU)

A female participant shared that exposure to environmental content on new media has influenced her behaviour, mentioning the negative impact of plastics on health.

“The environmental aspect influences me. Yes! It influences me about the impacts of plastics on health. As a result of new media content, we stop using plastic packaging products or items.” Respondent 10 (GGSIPU)

Effective engagement with media content

Our research found that new media platforms, such as YouTube, Facebook, Instagram, and Twitter, are effective mediums for obtaining information about plastic pollution and waste management. Young people consider social media an essential tool to access environmental information anytime and anywhere. They also spoke about print media and its influential power through its content. Some participants mentioned reading environment-related information in magazines such as Down to Earth and various newspapers. One of the participants compared news channels with social media sites and shared:

“Instagram and Twitter are more essential sources than news channels because when we scroll for two seconds, we’ll get diverse information from these platforms. But there will be only news about a single topic on a news channel. There is an elaboration of a single issue for one hour or two hours, for instance, what is happening in India and other countries.” - Respondent 2 (GGSIPU)

Respondents consider digital advertisements a cost-effective tool to inform and educate youth about plastic pollution and its environmental effects, making it an effective tool to influence their behaviour. A respondent shared that plastic-related advertisements have persuasive power to audiences. These are for the welfare of the society. It influences our opinion (Respondent 1, JMI).

Movies and documentaries are beneficial in influencing people's attitudes towards environmental conservation. Respondents specifically mentioned movies like Mission Mangal and documentaries on the Ghazipur landfill as particularly informative. They shared that these films have helped them become more aware of issues such as plastic pollution, waste management, and how waste can be utilised to create something useful. One of the respondents mentioned that such movies should be shown in colleges to help raise awareness about environmental issues.

“Movies related to the environment are very convincing and helpful, and if they are displayed in colleges, then it makes people more aware.” – Respondent 7 (JMI)

Discussions

The results showed that the youth in Delhi perceive plastic pollution as a significant global environmental concern. They are conscious of the detrimental impact of plastic pollution on both humans and the environment. They also showed a positive attitude towards addressing plastic pollution as a worldwide concern and acknowledged it as a significant problem.

Respondents believe it's essential to reduce plastic pollution by personally using recyclable items instead of plastics, even if it means spending more money. They were aware that plastic is challenging to eliminate and can take a long time to decompose, eventually breaking into microplastics that pose serious health risks.

Almost half of the respondents were aware of the toxic chemicals released when burning plastics, and half of them knew that plastic ingestion can be fatal to aquatic and terrestrial animals. However, there is low awareness among youth that the packaging sector uses the largest amount of single-use plastic. Respondents revealed a change in their awareness level and attitude with new media content on environmental conservation. However, there is less effect on their behaviour, as they believe only a specific trigger, like watching a video or reading environment-related content, changes their behaviour for a smaller time period. It has been found that youth find documentaries and movies about environmental issues more effective in reducing plastic pollution and increasing their understanding of various environmental problems. Documentaries are extremely influential and used as a tool for advocating the issue of plastic waste. For some respondents, magazines like *Down to Earth* and newspapers are more authenticated ways to access information, and they feel a trigger to conserve the environment.

In this study, young respondents in Delhi found new media a significant tool to combat plastic pollution as they can access plastic and environmental-related information anytime and anywhere. New media makes youth aware on a larger scale within seconds, and they find it an accessible and impactful communication medium. They believe new media tools influence them from the health aspects as they encourage them to stop using plastic packaging products and other single-use plastic products. The study found that participants were unaware of recent regulations about the ban on certain plastic items. Although a few respondents were aware of prohibited materials, such as polyethene-made single-use bags, straws, and juice packaging. It was also found that the respondents had limited knowledge regarding communication initiatives by governmental and non-governmental organisations. However, a few participants were aware of the Swachh Bharat Mission's cleanliness campaign, the beach cleaning campaign, and the Save Soil campaign. These campaign initiatives create effective hashtags that go viral and increase youth engagement. Additionally, the study found from the FGDs that there were gender disparities in awareness levels as female participants were more aware of plastic pollution and conscious of the issue.

Youth find social media platforms like Instagram, Facebook, Twitter, and YouTube more accessible communication mediums as they get diverse information from these platforms. Environmental conservation-related advertisements have been found exclusively persuasive and can be shown on these social media platforms at a low cost. The findings of this study suggest advertising governmental and non-governmental campaigns and environmental conservation initiatives on social media platforms.

It is noteworthy that our results align with several previous studies. Notable among these are the works of D. P. Singh and Mathur (2020) and Oguge et al. (2021) found positive attitudes of youth in addressing the issue of plastic pollution. Oguge et al. (2021) also report that the youth expressed the desire to switch alternatives to plastics by paying extra for those alternatives. In the study of Males and Van Aelst (2020), it was found that documentaries sparked discussions on plastic pollution. They also report that documentaries can be used as a powerful tool against plastic pollution. Bhattacharya and Wadood (2019, in their thesis, report youth found new media easier to access information. Similarly, Teh et al. (2022) found social media to be an effective tool for gathering information related to the environment and plastic pollution. Yin Yin Law et al. (2020) found that females are more environmentally conscious and tend to adopt sustainable practices in their lives.

Conclusion

Youth support the idea of reducing their use of plastic products but believe that individuals, government bodies, and non-governmental organisations should share responsibility for managing plastic waste and promoting a healthy environment. Plastic pollution is a major global threat that requires attention and awareness from everyone, and the younger generation is especially concerned about its adverse effects. Many young people are willing to switch to plastic alternatives when offered financial subsidies. Additionally, the study found that new media platforms are the preferred communication tool for disseminating information about plastic pollution and environmental conservation among youth.

In addition, more research on the use of new media and immersive technology in addressing environmental issues among the younger generation is needed. New media helps to raise awareness and change the attitude of youth towards combating plastic pollution. Youth are the future generation, and they have the potential to influence the public against creating plastic waste. The findings of the study aid in creating effective communication strategies using

new media and designing future initiatives involving young people in sustainable actions to address plastic pollution.

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Annexure

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Plastic pollution has become a global threat	345	1	7	6.34	1.346	1.811
Reducing plastic pollution is very important to me personally	345	1	7	6.14	1.242	1.543
If you have the option to use recyclable things (paper or plant-based), you will adopt it even by spending more money on it	345	1	7	5.16	1.357	1.842
Plastics release harmful chemicals into the environment and harm species.	345	1	7	6.20	1.147	1.316
Ingestion of plastic leads to the death of aquatic and terrestrial animals; it also travels up the food chain, which affects human health.	345	1	7	6.24	1.036	1.074

Plastics slowly break down into smaller fragments known as microplastics, which may cause severe health problems (like hormone-related cancers, infertility and chronic diseases like obesity, diabetes and dermatitis).	345	1	7	5.89	1.249	1.561
Packaging sector (products that sell quickly at relatively low cost) uses the largest share of single-use plastic (SUP)	345	1	7	5.10	1.507	2.272

Table 2: Frequency Table

Attitude and Awareness	Plastic pollution has become a global threat	Reducing plastic pollution is very important to me personally	If you have the option to use recyclable things (paper or plant-based), you will adopt it even by spending more money on it	Plastics release harmful chemicals into the environment and harm species.	Ingestion of plastic leads to the death of aquatic and terrestrial animals; it also travels up the food chain, which affects human health.	Plastics slowly break down into smaller fragments, known as microplastics, which may cause severe health problems.	Packaging sector uses the largest share of single-use plastic (SUP)
Strongly Disagree	3.8%	2.3%	1.2%	1.7%	0.6%	0.6%	1.4%
Disagree	1.4%	1.4%	5.2%	0.9%	2.0%	2.9%	8.7%
Somewhat Disagree	0.3%	1.2%	7.5%	2.3%	0.9%	3.5%	5.8%
Neither Agree or Disagree	1.2%	2.9%	8.7%	1.2%	1.4%	3.5%	11.3%
Somewhat Agree	2.9%	5.8%	28.7%	5.5%	5.8%	14.8%	21.2%

Agree	26.1%	39.4%	37.7%	41.7%	42.6%	38.8%	38.3%
Strongly Agree	64.3%	47.0%	11.0%	46.7%	46.7%	35.9%	13.3%

Table 3: Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.078 ^a	.006	.003	1.145

a. Predictors: (Constant), Gender

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.787	1	2.787	2.125	.146 ^b
	Residual	449.810	343	1.311		
	Total	452.597	344			

a. Dependent Variable: Plastics release harmful chemicals into the environment and harm species.

b. Predictors: (Constant), Gender

Table 4: Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.080 ^a	.006	.003	1.247

a. Predictors: (Constant), Gender

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.432	1	3.432	2.206	.138 ^b

Residual	533.600	343	1.556		
Total	537.032	344			

a. Dependent Variable: Plastics slowly break down into smaller fragments known as microplastics, which may cause severe health problems (like hormone-related cancers, infertility and chronic diseases like obesity, diabetes and dermatitis).

b. Predictors: (Constant), Gender

Table 5: Chi-Square Tests

Which new media platform would you prefer to express your opinion?

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.506 ^a	4	.164
Likelihood Ratio	6.603	4	.158
Linear-by-Linear Association	1.534	1	.215
N of Valid Cases	342		

Table 6: Chi-Square Tests

Have you ever asked yourself the following question while reading a media text? [What types of creative techniques, like memes, short videos/clips, etc, are used to attract your attention?]

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.265 ^a	2	.072
Likelihood Ratio	5.324	2	.070
Linear-by-Linear Association	4.563	1	.033
N of Valid Cases	345		