

A study on Environment-friendly Lifestyle and other major factors influencing household recycling in India

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Abstract

Waste Management in India has always been a severe problem, and tackling this issue would require a social mindset towards adopting green practices. This study aims to understand the consumer mindset and awareness of recycling in India and explore factors that could influence India's recycling behavior. The data for this study has been obtained through a primary research – survey questionnaire. Correlation analysis and regression have been applied to understand the result of the questionnaire data. Promoting recycling amongst people takes into consideration many factors. The results suggest that recycling behavior is mostly influenced by factors, such as willingness to adopt environment-friendly behavior, awareness towards recycling, and providing incentives. This study aimed to explore recycling in India and study the major factors that can influence people to adopt recycling. It also explored a possible relationship between providing incentives and influencing recycling behavior. These findings will help to analyze and develop strategies to boost the recycling rate in India.

Keywords

Incentives; Recycling Behavior; Environment-friendly lifestyle; Regression; Household recycling

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1 Introduction

Waste generation in India holds the third position globally, and by 2050 the amount of waste generat-

ed will rise to 436 million tons annually. People have started to become conscious of this ever-increasing problem of waste by adopting reuse and recycling practices. Packaging material (mostly paper) has a recycling rate of only 27%, plastics 60%, and 20-25% for metals.

Domestic recycling majorly includes the recycling of household waste. Household waste can include both hazardous and non-hazardous types of waste. On the other hand, hazardous waste includes materials such as disposable batteries, paints, stains, which cannot be recycled. Most of this waste is disposed of in landfills with improper maintenance and care.

A survey conducted in 2013-14 by TERI suggested that around 90% of the respondents displayed a great deal of awareness and concern about the state of the environment. Around 50% of the respondents indicated a lack of willingness to segregate their wastes. Though more than 80% of the respondents were aware of increasing waste, very few of them recycled this waste. Around 43% of the respondents came from low-income families, 24% from middle income, and 33% from high-income localities.

The survey fails to study the consumer mindset of why respondents were not willing to segregate or adopt sustainable ways to handle this waste. Although the study gives a good insight into the statistical variation of respondents, understanding the end-user perspective towards this problem would help develop strategies towards promoting recycling behavior.

For a developing nation like India, the generation of waste is quite significant. On an annual basis, this can be in the region of 60-62 million tones [1]. With such ever-increasing numbers of solid waste, practices such as recycling have gained the upper hand in sustainable environmental management. India's recycling rate stands at a mere 30% compared to countries like Sweden, Germany, Austria, and South Korea.

Recycling reduces landfill waste and saves much energy compared to making new products from raw materials. Paper recycling saves about 60%, and plastic and glass recycling saves about 30-35% of the energy compared to making raw materials.

All the high-performing nations have two things in common - Key waste management policies to promote and mandate proper collection, segregation, and disposal and financial or behavioral incentives for private

partnerships and consumers to encourage recycling behavior.

This paper aims to understand the consumer mindset towards adopting recycling practices in India and further determine a relationship between providing economic incentives and promoting recycling behavior.

The conclusion of this research will help develop targeted incentive-based strategies or business models that will boost the recycling rate in India.

2 Literature review

Domestic waste forms a major part of the Municipal Solid Waste in India. Domestic recycling includes the recycling of household waste. In household waste, the most frequent recyclable materials are paper, plastics, and metal. Overall, the domestic recycling rate in India comes out to 30%.

The importance of community engagement to effectively execute any SWM policy in India is very well highlighted in Gupta, Mohan, Prasad [2]. The research states that attitudinal changes in people are very important to focus on when executing Solid Waste Management policies effectively.

A range of qualitative and quantitative studies have also been done to study and understand recycling behavior and the motivation towards adopting recycling practices.

One of these studies by [3] focused on some school students to understand their recycling behavior. Since youth forms a big part of India's population, the sample size for this research study makes sense. It gives a broader idea to understand the behavioral aspects of recycling. The study also suggests promoting recycling as a social trend and encouraging it through social influence (like celebrities). Although the survey did not discuss providing financial benefits or incentives to promote recycling, this factor can be linked to the current research.

Perception studies were carried out by [4] to explore the success factors related to recycling practice. The condition of transportation, the distance of collection bins, and education status were some of the success factors identified in the study. The research also suggests that enforcing tasks such as segregation, sorting, and proper disposal is impossible without specific rules and regulations and education with motivation to bring behavioral changes. Hence, providing incentives can be regarded as a motivation factor towards adopting recycling.

Although people are aware of recycling as a concept, not many people are willing to adopt recycling practices. Many factors restrict people from adopting recycling practices. Some of the major reasons include lack of knowledge of recycling stations' process or far distances from houses. A similar study was conducted in these lines by [5] in urban areas of China. The researchers concluded a high correlation between the participation rate and the distance of recycling stations for people who did not recycle. However, these factors were independent of each other in the case of people who already practiced recycling [6] focused on the importance of the informal sector and how they could contribute to the recycling process. The paper also focuses on how providing support to the informal sector can address some social issues and reduce costs for the formal sector, supported by presenting case studies of 4 different countries. The research presents two major challenges in building a modern and efficient waste management system.

The second important factor is increasing people's awareness and influencing their behavior to achieve positive results in the waste segregation process. The importance of incentivizing has been suggested in many research studies. [7] Highlights the importance of incentivizing through the household level study conducted in Bhopal, India. The study suggested that recognizing and incentivizing green practices by citizens can also help in achieving sustainable consumption. This observation agrees with [8] as they showed the importance of providing an incentive-based approach to households for recycling. It has also been mentioned that co-benefits of the environment are not given importance during the recycling process, and only negative externalities like costs are considered.

Some authors recommend that recycling is an altruistic behavior influenced by social and personal norms [9]. He further added that providing information on recycling regularly along with social interactions can substantially increase recycling behavior. There is no mention of the importance of financial benefits or incentives to promote recycling behavior. According to [10], perception of one's self-image and moral concerns can also increase recycling activities [11]. Suggested that social and legal norms are asserted through personal norms towards recycling. He also adds that policies should be determined to emphasize both moral obligations and economic benefits to facilitate household efforts.

The critical analysis of the survey data can be done using the methodology described in [12]. Since around 19.1% of the population is a part of the youth category in India, the sample population for the survey would be in that age group only. Initially, a descriptive analysis will be done, followed by regression analysis to determine the correlation between the variables.

3 Methodologies

3.1 Research hypotheses and model

Promoting recycling amongst people takes into consideration many factors. From past researches, it has been observed that people consider many factors as 'barriers' to their recycling behavior. Inspired by the work of [13], a framework has been developed to understand the major factors that can influence people to adopt recycling behavior. The independent factors can be divided into internal factors of motivation and external factors of motivation.

The factors are classified based on motivation from society and inner-self. External factors such as distance to recycling stations, social status and reputation, and societal pressure are society-generated or require physically going and performing work.

In contrast, internal factors, such as awareness, getting financial incentives, and adopting an environment-friendly lifestyle, are a perception of the mind & self and can be self-motivating factors. There is not much contribution to society towards these factors. Practicing recycling as a part of adopting an environment-friendly lifestyle may not necessarily be related to maintaining a social reputation in society. It might be an individual's perception of the way of living without getting motivated by external factors.

Although there might also be a link between the internal factors and the external factors, as in some cases, external factors may lead to internal factors and, further, adopting recycling. This possible relationship will be explored in the further sections.

Also, from the society and managerial perspective, one internal factor, i.e., financial incentives can be used as a major motivation to influence people to adopt recycling behavior, as highlighted in [14]. A relationship will also be determined between providing financial incentives and recycling behavior (if any) through correlation and regression analysis.

3.2 Scope of this study

For understanding and analyzing the objectives of this study, a survey research design was incorporated. All of the Indian states and cities were considered in the target population. India is one of the fastest-growing global economies and has achieved a recycling rate of 30%. However, of the 43 million tones of municipal solid waste collected in India annually, only 11.9 million are treated, and 31 million are sent to landfills. The Solid Waste Management Rules, 2016 highlight the importance of source segregation and recycling in households, transforming the waste management system in India.

3.3 Questionnaire design

The primary step in the survey for this study involved designing a questionnaire. This questionnaire comprised 12 questions, which were relevant to the factors taken into consideration and further analysis. The questionnaire was developed using Questioner, the online survey software. There are no defined sections in the questionnaire. However, the major parts of the survey were - Demographic factor-based questions and Likert scale-based questions. The detailed questionnaire is described in the Annexure. Before the data collection, a pre-testing was done with 70 respondents, and the survey data was evaluated. Thus, after testing the preliminary results, the final questionnaire was distributed to the respondents all over India.

3.4 Sample characteristics and methodology

Following the objective and nature of the study, the Snowball Sampling technique was employed for data collection. Snowball sampling is a non-probability sampling technique where existing study subjects are asked to assist the researcher in identifying other potential subjects. Out of 389 questionnaires circulated, 320 were valid and complete, hence generating an effective response rate of 82.26%.

The demographic distribution of the 320 respondents is described in Table 1. Out of the 320 respondents, 57.81% belong to the 19-28 age groups, followed by 19.37% respondents from 29-38 age groups. The age distribution characteristic in this survey is in line with India's age demographics, 2020, which suggests that almost 34.3% of the population lies in the youth category (15-24 years). In terms of respondent background, almost 51.2% of the respondents belong to the currently working or self-employed background,

followed by students, who form 40.93% of the sample size. Almost 31.56% of the respondents fall under the category of INR 11-15 lakhs as their annual household income. Also, the distribution for the type of housing facility seems fairly even amongst - apartments/flats (37.18%), followed by row-houses (26.8%) and then independent bungalows/farmhouses (23.1%). The data is fairly distributed, as displayed in the demographic distribution.

Table 1

Classification of respondents (n=320) based on demographic factors

	N (Number)	Percentage
Age Group		
Below 18	4	1.25
19-28	185	57.8125
29-38	62	19.375
39-48	40	12.5
49-58	22	6.875
Above 58	7	2.1875
Household Income (INR)		
Less than five lakhs	39	12.1875
6-10 lakhs	47	14.6875
11-15 lakhs	101	31.5625
16-20 lakhs	94	29.375
More than 20 lakhs	39	12.1875
Background		
Student	131	40.9375
Currently Working/Self-Employed	164	51.25
Home-Maker	14	4.375
Retired	4	1.25
Others	7	2.1875
Housing Facility		
Apartments/Flats	119	37.1875
Independent Bungalows/ Farmhouses	74	23.125
Row-Houses	86	26.875
Penthouse	23	7.1875
Studio Apartments	14	4.375
Others	4	1.25
Total	320	100

4 Data analysis

SPSS Statistics 25.0 was used for performing the data analysis. Before testing the model, reliability analysis was carried out by calculating the Cronbach's alpha value for all factors.

Cronbach's alpha is an indicator of internal consistency and is used to assess the reliability of a set of

items. The Cronbach's alpha value calculated for all the eight factors in the analysis came out to be 0.717, which lies under the acceptable range of alpha values (0.7-0.8 – Acceptable). Therefore, the output of the questionnaire has good reliability, which has been corroborated by other authors [15].

There are eight variables, which have been considered for further statistical analysis. Providing financial incentives, distance to recycling stations, adopting environmentally-friendly lifestyles, social status & reputation, societal pressure, and frequency of recycling and awareness are considered predictor variables. In contrast, recycling behavior is considered the dependent variable. Further, correlation and regression tests have been performed to understand the relationships between variables.

4.1 Descriptive statistics

Table 2 represents the summated mean scores and standard deviations related to all the factors considered for further study and analysis. The specific parameters, along with their Likert scale options, are provided in Section 8.

Table 2

Descriptive Statistics of the factors under study (N=320)

	Mean Score	Standard Deviation
Awareness towards recycling	3.41	1
Getting Financial Incentives	3.43	1.05
Environment - Friendly lifestyle	4.18	0.87
Distance to Recycling stations	3.78	0.95
Social Status & Reputation in Society	3.08	1.06
Societal Pressure	2.8	1.13
Future participation in recycling	4.44	0.67
Recycling frequency	2.42	1.14

The table shows that the summated mean score for awareness towards recycling is 3.41, which suggests that people agree that a certain amount of awareness exists in society related to recycling. Talking about the other two internal factors considered under study, it is seen that the willingness to adopt environment-friendly behavior scores a high summation mean score (4.18) than getting financial incentives (3.43), which might also form as one of the major influencing factors towards practicing recycling. However, the relationship between these factors will be explored in the further sections. External factors such as social status & reputation, and societal pressure have low mean scores, suggesting that people are not concerned

about associating recycling with their reputation. Society does not play an integral role in influencing their recycling behavior. Although one of the external factors, i.e., distance to recycling stations, is scored 3.78, it is somewhere between moderately important and very important in influencing their recycling behavior. Other studies [16] also indicate a strong positive linkage between recycling approaches and physical distance to refuse or municipal dumpsites.

Mean scores were also calculated for frequency of participation in recycling, which came out to 2.42, which suggests that the maximum of the respondents participate in recycling from once every month to once in six months, which result is consistent with India's recycling rate, which stands at 30%, suggesting that recycling is not practiced very frequently in India. Finally, the agreement of respondents to participate in future recycling is recorded at 4.44, which is comparatively high and falls between the likely to the very likely range. From the mean scores, we see that people are more inclined towards adopting an environmentally friendly lifestyle. In turn, their motivation to participate in recycling increases.

4.2 Public awareness on recyclable materials

Awareness about the type of recyclable materials was also studied in the questionnaire survey. The responses to this question used a multiple-choice format.

When asked to choose the recyclable materials that the respondents were aware of, 24.54% chose Glass and Plastics, followed by Newspapers, magazines, and

cardboards (24.38%), as shown in Figure 1. Metals, mostly including tin, aluminum, and steel cans, were a close third option selected by respondents in their awareness towards recyclable materials. This result agrees with India's recycling rates of specific materials like plastics, with a recycling rate of 60%. The paper has 27%, and metals have 20-25%. Although computers and batteries, and other electronic items majorly fall under the recyclable category, the awareness regarding this is low; hence only 13.68% selected this as a type of recyclable material.

Two of the non-recyclable or less-recyclable materials were also introduced in the options. Almost 15% of the respondents selected these options, implying a low awareness rate regarding this. Styrofoam is very difficult to recycle because of its density and contamination. Since it is often contaminated with food or drinks, it becomes very difficult to clean and process it. Since recycling this, it ends up using more energy than saving. It is advisable to reuse (if not contaminated with food or water), burn, or preprocess it to other cost-effective products. Bubble wraps can be recycled with other plastic films like plastic bags. However, it is not very common in household recycling. Although people prefer to reuse or upcycle the bubble wraps and transform them into new products, awareness related to recycling bubble wraps is very low in India is shown in Figure 2.

Similarly, takeaway coffee cups are very difficult to recycle due to single-use plastic and a fine polyethylene film. Due to this, recycling becomes expensive

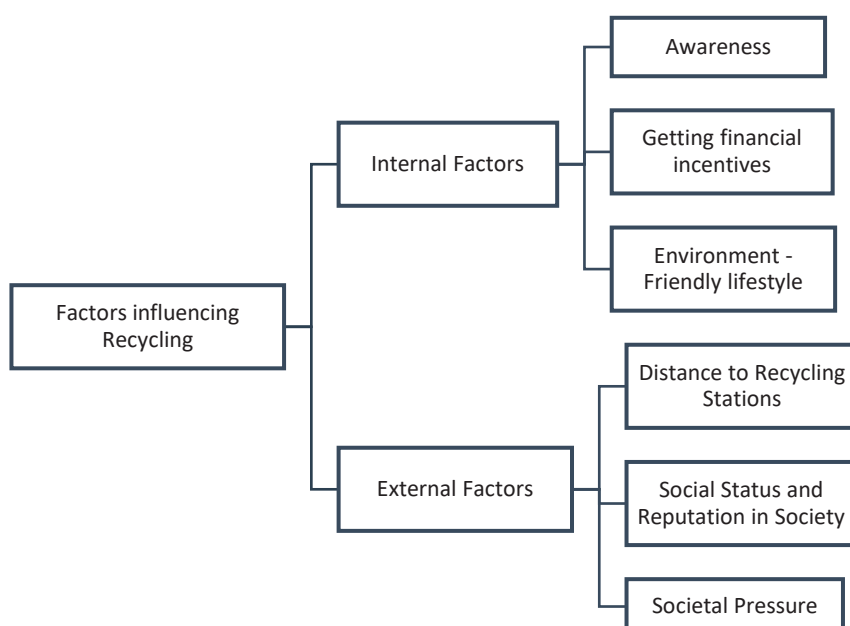


Fig. 1. The proposed framework

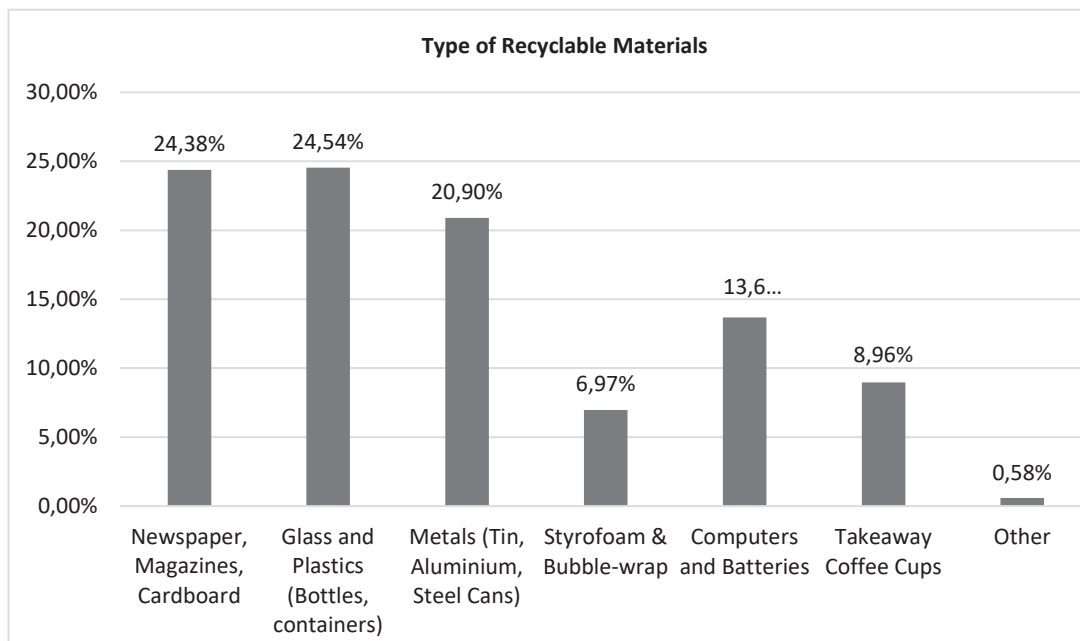


Fig.2. Classification of the types of recyclable materials

and difficult because the materials need to be separated. Hence, coffee cups are mostly used as disposable items and cannot be classified as recyclable materials.

0.58% of respondents selected the 'others' option and put down carton packaging, hazardous material, rubber, kitchen and garden waste, E-waste, industrial wastes, clothes in the list of recyclable materials.

4.3 Correlation results

Tables 3, Table 4 and Table 5 display the correlations between demographics and constructs. Table 3 presents a correlation analysis between the different demographic variables under study, mainly age, household income, background, and housing facility. A maximum correlation exists between age and background, i.e., 0.553. Household income is significantly correlated with age and background. A negative correlation of 0.036, although statistically significant, exists between housing facility type and household income also. The correlation results are highly significant, with a confidence interval of 99%.

Table 3
Correlations between demographic variables

	Household Income	Background	Housing Facility
Age	.192**	.553**	0.037
Household Income		.184**	-0.036
Background			0.041

Note: **Correlation is significant at the 0.01 level (2-tailed).

Table 4 represents the correlation between the demographic factors and predictor variables under study. As indicated in the table, the maximum correlation exists between housing facilities and recycling awareness. Also, it can be noted that household income and frequency are significantly correlated to other factors.

Table 5 shows a list of correlations amongst the various independent factors (constructs) under study. The table shows that the maximum correlation exists between social status & reputation and societal pressure, both external factors. Since both these factors are originated from society, they display maximum correlation.

All the six independent factors – Incentives, Distance, Environmental-friendly lifestyle, Social Status, Societal Pressure, Awareness, and Frequency are significantly correlated to the one dependent factor – Recycling behavior. Societal pressure seems to have the weakest influence on Recycling Behavior, which implies that society does not play an integral role in influencing their recycling behavior. People will practice recycling irrespective of peer pressure or society compliance pressure.

Adopting an environment-friendly lifestyle shows a maximum correlation factor to recycling behavior, indicating that people practice recycling as a part of their efforts to display green behavior or adapt to a sustainable lifestyle. According to the results, providing incentives to increase recycling behavior, al-

Table 4

Correlations between predictor and demographic variables

	Age	Household Income	Background	Housing Facility
Incentives	0.028	.163**	0.084	.241**
Distance	-0.013	.143*	0.011	.142*
Environmentalfriendly lifestyle	0.040	-0.087	0.036	0.101
Social Status	0.087	0.001	0.081	.161**
Pressure	0.051	0.017	0.044	.187**
Awareness	0.034	.113*	-0.013	.245**
Recycling Behavior	0.057	.163**	0.048	0.002
Frequency	.115*	.145**	.125*	0.094

Note:** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 5

Correlations between predictor variables

	Distance	Environmen- tally friendly lifestyle	Social Status	Societal Pressure	Awareness	Recycling Behavior	Frequency
Incentives	.243**	.209**	.326**	.385**	.323**	.198**	.155**
Distance		.294**	.200**	.290**	.175**	.241**	.192**
Environmentally friendly lifestyle			.205**	.209**	.156**	.416**	.281**
Social Status				.506**	.229**	.184**	.121*
Societal Pressure					.295**	.166**	.165**
Awareness						.267**	.210**
Recycling Behavior							.249**

Note: ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

though many researchers have talked about it, does not strongly correlate with recycling behavior. The correlation established between incentives and recycling behavior is only 19.8%, which is comparatively higher than social status and societal pressure but lesser than other influencing factors, implying that incentives in exchange for recycling waste do not matter to the people. People will continue recycling, regardless of whether incentives are provided or not. However, since this correlation value is not a very small number, there seems to be a small but significant correlation between the two. Hence, some managerial recommendations can be made on this.

4.4 Regression results

For regression analysis, standard regression was used (Enter regression). This regression method is used because we are dealing with a small set of predictor variables and the dependency of each variable on the predictor variable needs to be studied.

As indicated by the regression results, the environmentally friendly lifestyle is the variable that explains 25.0% of the variance in the model. Awareness contributes to 11.1% of the variance in the model. From the output, we can imply that Correlation and regression results are consistent with each other.

From the above result, a regression equation can be developed to predict the indicators in the model:

Recycling behavior = 2.518 + 0.022 (incentives) + 0.062 (distance) + 0.250 (environmentally friendly lifestyle) + 0.036 (social status) – 0.021 (societal pressure) + 0.111 (awareness) + 0.059 (frequency)

This regression equation can calculate the quantitative value of recycling behavior if needed, as shown in Table 6. Also, from the equation, it can be observed that an environmentally friendly lifestyle has the maximum coefficient value, implying that if an environmentally friendly lifestyle increases by 1 unit, then the recycling behavior will increase by 0.250.

Table 6

Regression of predictor variables

	B	Std. Error
(Intercept)	2.518	0.207
Providing incentives	0.022	0.036
Distance to recycling stations	0.062	0.038
Environment-friendly lifestyle	0.250	0.042
Social status & Reputation	0.036	0.037
Societal Pressure	-0.021	0.036
Awareness towards recycling	0.111	0.036
Frequency of recycling	0.059	0.031

5 Findings and discussions

The importance of recycling has been highlighted for the past several years. Looking at the amount of waste being generated in India; recycling can prove to be one of the most suitable ways of dealing with this problem. Although people in India are becoming more and more aware of buying and using certain green products, the post-use and disposal phases still utilize traditional methods like landfill disposal or incineration.

This study aimed to explore recycling in India and study the major factors that can influence people to adopt recycling. It also explored a possible relationship between providing incentives and influencing recycling behavior. A quantitative relationship between incentives and recycling behavior has never been studied in the Indian context. The study conducted by [14] does not talk about the quantitative relationship between incentives and recycling behavior. The study just mentions the fact that incentivizing can lead to sustainable consumption. Hence, this study aimed to cover all these objectives. The data for this study was obtained through primary research analysis with the help of a survey questionnaire. Descriptive statistics results showed that people are very much influenced by environment-friendly behavior. Hence, their inclination towards practicing recycling in the future increases. From all the statistical analysis carried out, it comes out that three predictor variables – Environment-friendly behavior, awareness towards recycling, and frequency of recycling – play a very important role in influencing the mindset of people towards practicing recycling. These results are confirmed further in the correlation and regression tests.

Analysis of awareness towards recycling factor reveals that there is not much awareness regarding re-

cycling in India, implying that the rate of recycling might increase if the awareness increases. This study is in line with the previous study by [4], which suggested that awareness and knowledge related to proper waste management are very important to bring behavioral changes. The current study also relates to the research carried out by [17], which suggested that the perceived social norm to recycle translated into behavior only awareness is high [11]. Revealed the same in their findings that recycling efforts and existing collection systems can only be improved by increasing awareness and motivating people to adopt an environment-friendly lifestyle,

As shown in the results, the correlation between providing incentives and recycling behavior is 19.8%, which is comparatively low than the other factors (Environment-friendly behavior, awareness towards recycling, and frequency of recycling). This result shows that although not to a huge extent, incentives certainly play a role in influencing people to adopt waste management as a culture [18]. Previous studies [19] have shown that consumers conserve to save money in economic self-interest motivation.

One more important finding that came out in this study was that although people are aware of recycling, they are not fully aware of the type of materials that can be recycled. Further, correlation and regression results prove that environment-friendly behavior is a major influencing factor in adopting recycling. External factors, such as social status & reputation, and societal pressure, had statistically significant effects but not internal factors.

6 Theoretical and managerial implications

The study reveals that the frequency of recycling in Indian society is very low, compared with not so high awareness levels, which can also be concluded from the revelation that people are not aware of recyclable materials. There is a high probability that due to less awareness amongst people related to recycling and recyclable materials, waste segregation at the source will intensify. Hence, there is a need for increased knowledge and awareness related to recycling. Although incentives can also play an important role in increasing recycling, incentivizing society is not very significant, according to the study. Currently, India has achieved a recycling rate of 30%, which can be significantly improved in the future. From the predictor variables in this study, where the only factors that the government

and companies can work on are awareness, incentives, and distance to recycling stations.

Providing incentives to people to recycle the waste is an area where future research can be done. Countries like Germany, Sweden, South Korea, etc., have achieved a high recycling rate. Sweden has adopted a recycling model. The citizens get incentives or discount vouchers or sometimes cash in return for the amount of waste they recycle. This model has helped the country achieve a 99% recycling rate. Other than this, Sweden has also focused on implementing a cohesive national recycling policy and introducing the importance of recycling from a very young age. Although these steps are not new, citizens of countries like Sweden have taken recycling and waste generation into their own hands and effectively executed it. A similar model can be implemented in India if the cash or discount incentives system is taken into consideration.

7 Conclusion - future research

The study is an initial attempt at understanding the factors influencing the recycling of household waste. More focus is given on understanding the relationship between incentives and recycling behavior. Although many studies have been done in understanding the influencing factors towards adopting recycling behavior, none of them focus on the importance of incentives. So, the in-depth knowledge on the type of incentives or the rate of incentives/ amount of kg recycled is some of the factors beyond the scope of this study [18].

Also, some other demographic and geographic factors are not taken into consideration while performing the statistical analysis. As emphasized in [12], factors such as age, educational background, location, type of housing, etc., can determine people's propensity to recycle waste. Moreover, this study incorporates the Snowball Sampling technique, which gives a more generalized idea about India's landscape. A more detailed understanding could have been obtained by increasing the population elements from more dispersed locations across India; a similar methodology was used [5]. It may be mentioned here that the present data sample may not be a true reflection of the entire population. Future research can focus on developing a broader model that integrates all the factors needed to understand better the type of incentives that will work for Indian society.

8 Questionnaire instrument

Statements	Type of Variable	Coding
People in India are very much aware of recycling.	Predictor Variable	1 - Strongly Disagree 2 - Disagree 3 - Neutral 4 - Agree 5 - Strongly Agree
Indicate your frequency of participation in recycling	Predictor Variable	1 - I do not recycle 2 - Once every six months 3 - Once a month 4 - Once every 15 days 5 - 2-3 days a week
Getting Financial Incentives	Predictor Variable	1 - Not at all Important 2 - Slightly important 3 - Moderately important 4 - Very Important 5 - Extremely Important
Distance to Recycling Stations	Predictor Variable	1 - Not at all Important 2 - Slightly important 3 - Moderately important 4 - Very Important 5 - Extremely Important
Environment-friendly lifestyle	Predictor Variable	1 - Not at all Important 2 - Slightly important 3 - Moderately important 4 - Very Important 5 - Extremely Important
Social-status and Reputation in Society	Predictor Variable	1 - Not at all Important 2 - Slightly important 3 - Moderately important 4 - Very Important 5 - Extremely Important
Societal Pressure	Predictor Variable	1 - Not at all Important 2 - Slightly important 3 - Moderately important 4 - Very Important 5 - Extremely Important
I will participate in recycling my household waste in the future.	Dependent Variable	1 - Very unlikely 2 - Unlikely 3 - Neutral 4 - Likely 5 - Very likely

Conflict of interest

None declared.

Author contributions

The authors read the ICMJE criteria for authorship and approved the final manuscript.

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