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A STUDY ON AWARENESS OF PREVENTION ON PLASTIC USAGE AMONG PUBLIC WITH REFERENCE TO SALEM

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ABSTRACT

Plastic is a cost-effective, durable and easy to manufacture material and its usefulness and convenience has resulted in its ever-increasing demand. The demand for plastics has also been filled by the rise of the 'use-and-throw' culture resulting in much of the plastics being designed to be disposed after just one use. These single-use plastics, mostly used as packaging material, account for a substantial chunk of the total plastics manufactured today. However, most plastic is nonbiodegradable and it takes up to a thousand years for certain types of plastics to decompose resulting in accumulation of plastic waste, much of it ending up in oceans, causing adverse consequences marine life. The scale of plastic pollution has become alarming with millions of tones of plastic waste existing in oceans today. Single-use plastics are the responsible much of this plastic waste and individual consumption behavior and habits must change to reduce their demand. Presently more than 120 states across the world have some form of regulation on the use of certain types of single-use plastic.

1. INTRODUCTION

It was this scale we weren't prepared for, and second to that, the sense of responsibility. We can across 'A Plastic Ocean 'the documentary created by plastic oceans foundations, one night after our daughter had gone to bed. Watching my partner, spike , as each new chapter on plastic pollution unfolded, was like watching someone suffer physical pain (this is a with an affinity with the sea, who sailed for months on a tiny boat, from Triade through the Azores, across the Atlantic to Portugal) . Watching how plastic is destroying our seas actually hurt him. And it hurt me too... But it necessary, as of the day of the documentary, out thinking changed. If we are power to damage, we can also repair. We can stop being consumers of plastic and look to buy from people who are concisions about packaging. We can also create opportunities to remove from the workplace – where dispensability, and therefore plastic waste, is paramount. Spike has how banned plastic site. He managers a dance and music studio, and together with principle, has formulated a new way of selling water, 100% eco – friendly and reusable. Over next few weeks they will introduce a GS2Gravity filter, with the glass bottles and recyclable a caps. These bottles can be bought, and refilled for free.

2. METHODOLOGY

Research methodology is a way of systematically solve research problem. Research methodology is understood as a source of the study how to research is done scientifically. The various steps adopted by a researcher in studying the research problem along with the logic. The project work entitled "A study on awareness of prevention of plastic usage among public".

2.1 Sample size

The sample size in the study is 80.

2.2 Statistical tools

- Simple percentage method
- Chi-square test

PERCENTAGE METHOD

This method is used to compare two or more series of data, to describe the relationship or the distribution of two or more series of data. Percentage analysis test is done to find out the percentage of the response of the response of the respondent. In this tool various percentage are identified in the analysis and they are presented by the way of Bar Diagrams to have better understanding of the Analysis. Simple percentage analysis is one of the basic statistical tools which is widely used in analysis and interpretation of primary data. It deals with the number of respondents response to a particular questions in percentage arrived from the total population selected for the study.

$$\text{Percentage} = \frac{\text{No. Of Respondents}}{\text{Total Respondents}} \times 100$$

CHI-SQUARE TEST

It is one of the simplest and widely used non-parametric test in statistical work. The quantity chi-square describes the magnitude of the discrepancy between theory and observation. A chi-square test is a statistical test used to compare observed results with expected results. The purpose of this test is to determine if a difference between observed data and expected data is due to chance, or if it is due to a relationship between the variables you are studying.

$$\text{Chi-square} = \frac{(O-E)^2}{E}$$

3.DATA ANALYSIS AND INTERPRETATION

1) GENDER OF THE RESPONDENTS

TABLE NO - 3.1

AGE WISE CLASSIFICATION OF THE RESPONDENTS

Sources: Primary data

AGE	NO OF RESPONDENTS	PERCENTAGE
20-30Years	39	49
30-40Years	21	26
40-50years	20	25
Total	80	**100%**

INTERPRETATION:

The above table indicates that out of 80 respondents 49% of the respondent age are 20- 30years, 26% of the respondent age are 30-40years, and 25% of the respondent age are 40-50 years.

Majority 49% of the respondent age are 20-30 years.

CHART NO - 3.1

AGE WISE CLASSIFICATION OF THE RESPONDENTS

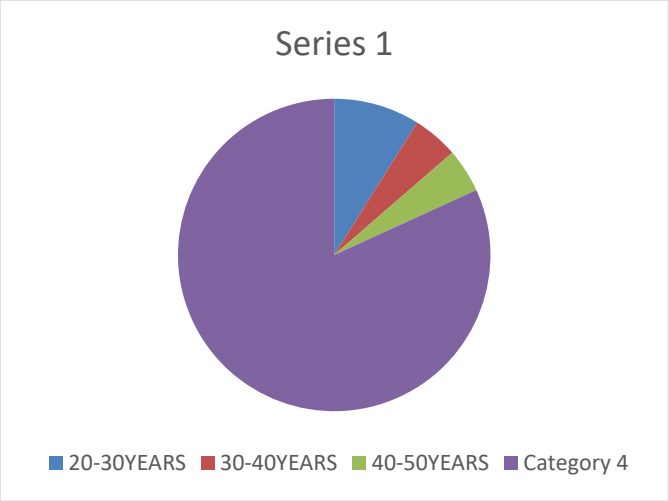

TABLE NO - 3.2

GENDER OF THE RESPONDENTS

GENDER	RESPONDENTS	PERCENTAGE
MALE	36	45
FEMALE	44	55
Total	**80**	**100%**

Source: Primary data

INTERPRETATION:

The above table shows that out of 80 respondents, 45%of the respondents are male and 55% of the respondents are female.

Majority 55% of the respondents are female.

CHART NO - 3.2

GENDER OF THE RESPONDENCE

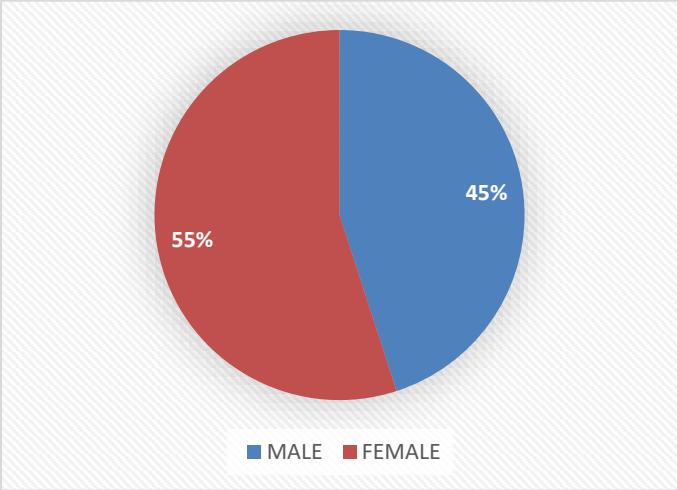

CHART NO - 3.3

OCCUPATION

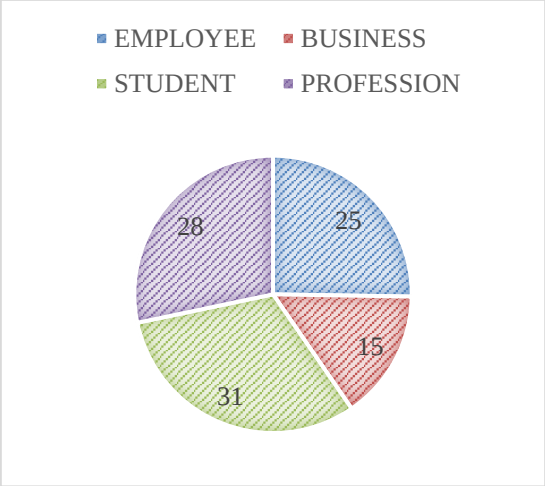

TABLE NO - 3.3

OCCUPATION OF THE RESPONDENCE

OCCUPATION	RESPONDENTS	PERCENTAGE
EMPLOYEE	20	25
BUSINESS	12	15
STUDENT	25	31
PROFESSIONAL	23	28
Total	**80**	**100%**

Source: Primary data

INTERPRETATION:

The above table indicate that out of 80 respondents 25% of the respondent occupation are employees, 15% of the respondent occupation are business. 31% of the respondent occupation are student and 28% of the respondent occupation are professionals.

Majority 31% of the respondent occupation are students.

TABLE NO - 3.4

EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

EDUCATION QUALIFICATION	RESPONDENTS	PERCENTAGE
UPTO 12th	44	41.9
GRADUATION	61	58.1
POST - GRADUATION	16	20
PROFESSIONAL DEGREE	12	15
OTHERS	9	11
Total	**80**	**100%**

Source: Primary data

INTERPRETATION

The above table denotes that out of 80 respondents 25% of the respondent educational qualification are up to 12th, 29% of the respondent educational qualification are Graduation, 15% of respondent educational qualification are Post Graduation, 11% of respondent educational qualification are professional degree, 9% of the respondent educational qualification are in other category.

Majority 29% of the respondent's educational qualification are graduation.

CHART NO - 3.4

EDUCATION QUALIFICATION

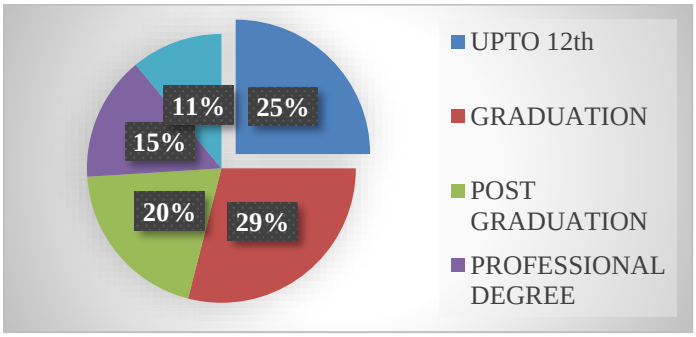

TABLE NO -3.5

ANNUAL INCOME BY THE FAMILY

ANNUAL INCOME LEVEL (IN REST)	RESPONDENTS	PERCENTAGE
LESS THAN Rs. 1 LAKHS	30	37
Rs. 2 LAKHS	15	19
Rs. 3 LAKHS	20	25
Rs. 3-5 LAKHS	15	29
Total	**80**	**100%**

Source: Primary data

INTERPRETATION

The above table shows 37% of respondent are income are less than Rs.1 Lakhs, 15% of respondent income are Rs. 2 Lakhs, 20% of respondent income are Rs. 3 Lakhs and remaining 15% of respondents income are Rs. 3-5 Lakhs.

Majority 37% of respondent's income are less than Rs. 1 Lakhs.

CHART NO - 3.5

ANNUAL INCOME OF THE FAMILY

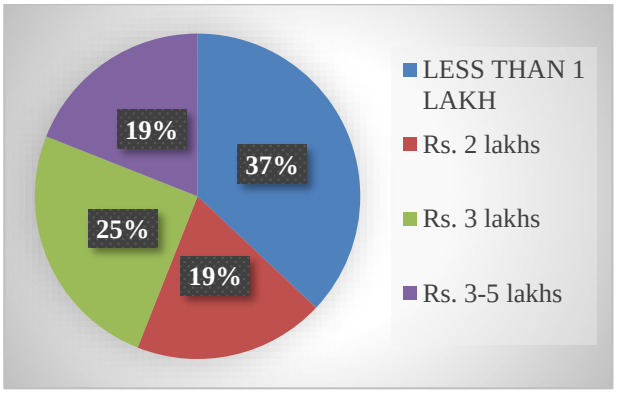

TABLE NO - 3.6

USING PLASTIC PRODUCTS

USING PLASTIC PRODUCTS	RESPONDENTS	PERCENTAGE
YES	78	98
NO	2	2
Total	**80**	**100%**

Source: Primary data

INTERPRETATION

The above table shows that using plastic products 78% of the respondents are said using plastics products 2%of the respondents are said not using plastic products.

Majority 78% of the respondents are said using plastic products.

CHART NO - 3.6

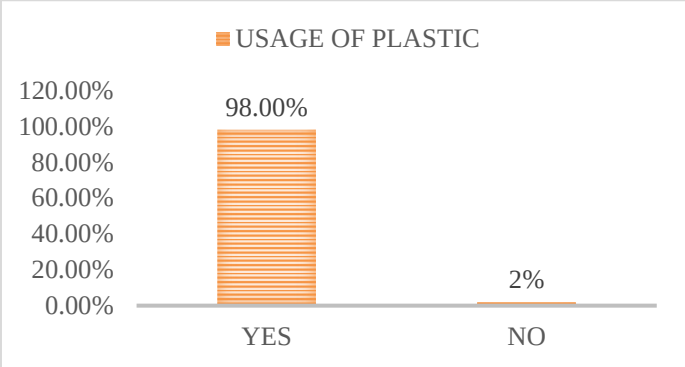

CHART NO - 3.7

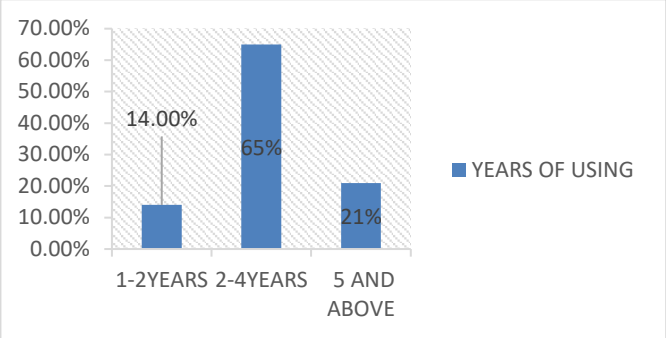

TABLE NO - 3.7

YEARS YOU ARE USING PLASTIC PRODUCTS

YEARS OF USING	RESPONDENTS	PERCENTAGE
1-2 YEARS	11	14
2-4 YEARS	52	65
5 AND ABOVE	11	21
Total	**80**	**100%**

Source: Primary data

INTERPRETATION

The above table shows that out of 80 respondents 14% of the respondents are using plastics products 1-2 years, 65% of the respondent are using plastic products 2-4 years and remaining 21% of the respondent are using plastic products 5 and above years.

Majority 65% of the respondent are using plastic products 2-4 year

TABLE NO - 3.8

TYPES OF PLASTIC ARE YOU USED

TYPES OF PLASTIC USED	RESPONDENTS	PERCENTAGE
CARRY BAGS	20	25
PLASTIC FURNITURE ITEMS	29	36
KITCHEN APPLIANCES	31	39
Total	**80**	**100%**

Source: Primary data

INTERPRETATION

From the above table, shows that 25% of the respondent are carry bags plastics used, 36% of the respondents are plastics furniture items used, 39% of the respondents are kitchen appliances plastic use.

Majority 39% of the respondents are kitchen appliances used.

CHART NO - 3.8

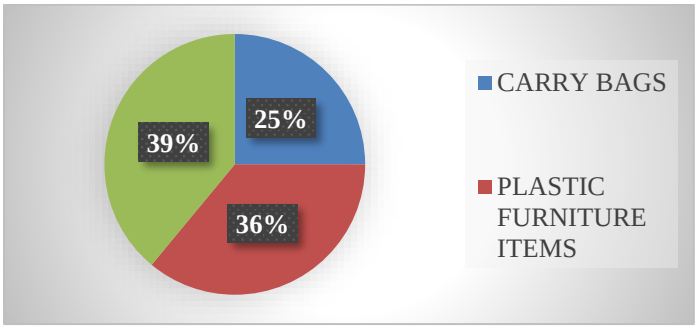

CHART NO - 3.9

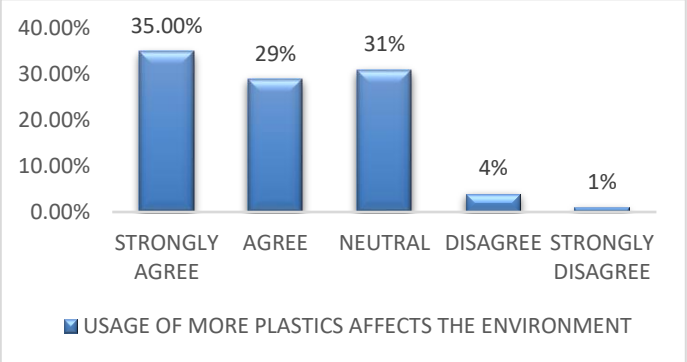

TABLE NO - 3.9

AGREE THAT YOU USED MORE PLASTICS AFFECT THE ENVIRONMENT

USED MORE PLASTICS AFFECTS THE ENVIRONMENT	RESPONDENTS	PERCENTAGE
STRONGLY AGREE	28	35
AGREE	23	29
NEUTRAL	25	31
DISAGREE	3	4
STRONGLY DISAGREE	1	1
Total	**80**	**100%**

Source: Primary data

INTERPRETATION

From the above table indicates that the 35% of the respondents are strongly agree in used more plastic affects the environment, 29% of the respondents are agree in used more plastics affect the environment, 31% of the respondents are neutral in used more plastics affect the environment, 4% of the respondents are disagree and remaining 1% of the respondent are strongly disagree.

Majority 35% of the respondents are strongly disagree in used more plastics affect the environment

TABLE NO - 3.10

DISPOSAL OF PLASTICS

Source: Primary data

DISPOSAL OF PLASTIC	RESPONDENTS	PERCENTAGE
THROW AWAY	59	74
REUSE THEM	13	16
RECYCLE	08	10
Total	**80**	**100%**

INTERPRETATION

The above table indicates out of 80 respondents 74% of respondents throw away the plastic bags after use , 16% of respondents reuse the plastic bags and 8% of respondents recycle the plastic bags after usage.

Majority 74% of respondents throw away the plastic bags after usage.

CHART NO - 3.10

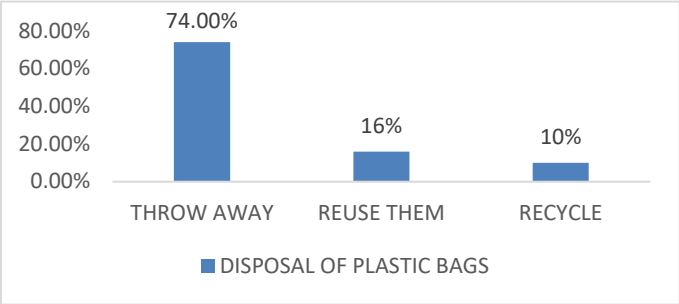

TABLE NO - 3.11

RELATIONSHIP BETWEEN CONSUMPTION OF PLASTIC AND BAN OF PLASTIC BY TAMILNADU GOVERNMENT

Source: Primary Data

NULL HYPOTHESIS

H_0: There is no significance relationship between consumption of plastic and ban of plastic by Tamilnadu government.

ALTERNATIVE HYPOTHESIS

H_1: There is a significance relationship between the consumption of plastic and ban of plastic by Tamilnadu government

LEVEL OF SIGNIFICANCE

The level of significance is 5%

TABLE NO - 3.12

CHI SQUARE TEST

PARTICULARS	STRONGLY AWARE	AWARE	NEUTRAL	NOT AWARE	TOTAL
LESS THAN 20	21	4	4	0	**29**
20-50	35	3	4	0	**42**
50 AND ABOVE	4	3	2	0	**9**
TOTAL	**60**	**10**	**10**	**0**	**80**

SOURCES: Primary data

PARTICULARS	O	E	$(O-E)^2$	$(O-E)^2/E$
R_1C_1	21	21.75	0.562	0.026
R_1C_2	4	3.625	0.141	0.039
R_1C_3	4	3.625	0.141	0.039
R_1C_4	0	0	0	0
R_2C_1	35	31.5	12.25	0.389
R_2C_2	3	5.25	5.062	0.964
R_2C_3	4	5.25	1.562	0.297
R_2C_4	0	0	0	0
R_3C_1	4	6.75	7.562	1.120

R_3C_2	3	1.125	3.515	3.124
R_3C_3	2	1.125	0.766	0.681
R_4C_4	0	0	0	0
CALCULATED VALUE				**6.679**

Degree of freedom : (r-1)(c-1) = (3-1)(4-1)= 6

Level of significance : 5%

Table value : 12.592

Calculated value : 6.679

RESULT:

Since the calculated value is less the table value. So, we accept the null hypothesis. There is no relationship between consumption of plastic and ban of plastic by Tamilnadu

Government.

4.1FINDINGS

- Most of the respondents are in the age group of 20-30 years
- 55% of the respondents are female
- Majority of the respondents are students
- 29% of the respondents complete their graduation
- Majority of the respondents income is less than Rs- 1 lakhs
- 69% of the respondents are unmarried
- Most of the respondents are using plastic products
- 65% of the respondents are using plastic products for 2-4 years
- Majority of the respondents are using plastic products to carry their kitchen appliances
- 35% of the respondents are strongly agree that usage of plastics affect that environment
- Most of the respondents throw away the plastic after using
- Majority of the respondents are consuming less than 20 plastic bags per week
- 81% of the respondents are strongly agree that our Tamilnadu Government ban plastics in
- our state.
- Majority of the respondents know that usage of plastic will cause cancer
- 36% of the respondents opine that they were strongly agree with the steps taken by
- government towards ban of plastic bags

4.2 SUGGESTIONS

- Use stainless steel forks, spoons and knives instead of plastic ones.
- Stop using plastic straws.
- Bring our own shopping nets or cotton bags when going out for shopping.
- In offices, avoid using tea and coffee cups made up of plastic
- Instead of drinking water out of plastic bottles, we should own a flask or a water bottle

4.3 CONCLUSION

The present study entitled, "**A study on awareness of prevention on plastic usage among public"** Youth led organization prove effective in raising awareness of the dangers of plastics to environment by offering local community engagement workshops, organizing beach clean-ups, promoting plastic – free products, lobbying with local and national governments, and speaking at public events and in schools.

5. REFERENCES

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