

An Empirical Study on Plastic Issue in India

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Abstract: *Plastics have turned into a crucial resource for humankind. In spite of the fact that broad research and new innovations have prompted create of more up to date and more secure plastics, yet downsides and difficulties of plastics have never been settled and affect is on the ascent. A portion of the real mixes (vinyl chloride, dioxins, and plasticizers) are causative components of hormone-interruption, regenerative brokenness, bosom development and testicular growths. The hurtful impacts are likewise articulated in babies by means of moms amid pregnancy or youthful youngsters uncovered straightforwardly. Reusing is a standout amongst the most helpful and least demanding ways. More brilliant arranging, vitality effective ways, creating more quick witted plastics and research to build up specific parasites and microbes that hurry debasement of traditional plastics are a portion of the present period needs. (Landes) Source decrease (Reduce and Reuse) can happen by changing the outline, fabricate or lessened utilization of plastic items. The research paper is done in both doctrinal and non-doctrinal method. Biodegradable plastics are like regular plastics, with the extra nature of having the capacity to normally deteriorate and break into characteristic and safe side-effects. Bioplastics, nature inferred plastics, are gotten from organic sources, for example, sugar stick, cellulose and so forth and these either debase in outdoors or are made to compost utilizing parasites, microscopic organisms or chemicals. To finish up, it isn't the plastics to fault, however it is the abuse of plastics. The present time require is to search for biodegradable measures and compelling approaches and their usage. (Singh).*

Keywords: Plastics, environment, ecosystem, nature, non degradable, organic sources

I. INTRODUCTION

As the total populace keeps on developing, so does the measure of trash that individuals create. In a hurry ways of life require effectively expendable items, for example, pop jars or jugs of water, yet the collection of these items has prompted expanding measures of plastic contamination around the globe. As plastic is made out of major dangerous contaminations, it can possibly make extraordinary damage the earth as air, water and land contamination. Put essentially, plastic contamination is when plastic has assembled in a territory and has started to contrarily affect the indigenous habitat and make issues for plants, untamed life and even human populace. Regularly this incorporates executing vegetation and presenting threats to nearby creatures. Plastic is an amazingly valuable material, yet it is likewise produced using poisonous mixes known to cause sickness, and in light of the fact that it is intended for sturdiness, it isn't biodegradable. (Chapman) time you go for a shopping, bear in mind to convey a paper or material sack. Additionally, attem Nextpt to abstain from bringing plastic sacks at home and acquiring things with a lot of bundling. Along these lines you can help in contributing towards the earth through diminishing plastic contamination whose evil impacts are irreversible.

Plastics are utilized in light of the fact that these are simple and modest to make and they can keep going quite a while. Shockingly these exceptionally helpful characteristics make plastic an enormous contamination issue. Since the plastic is shoddy it gets disposed of effectively and its tirelessness in nature can do extraordinary mischief. (MacQuillan et al.) Urbanization has added to the plastic contamination in moved frame in urban areas.

Plastic tossed ashore can enter the waste lines and stifle them coming about into surges in neighborhoods urban communities as was knowledgeable about Mumbai, India in 1998. It was guaranteed in one of the projects on TV channel that eating plastic sacks results in death of 100 steers for each day in U.P. in India. (Morrison)

In stomach of one dead dairy animals, as much as 35 kg of plastic was found. Since plastic does not decay, and requires high vitality ultraviolet light to separate, the measure of plastic waste in our seas is steadily expanding. Over 90% of the articles found on the ocean shorelines contained plastic. The plastic refuse found on shorelines close urban territories has a tendency to begin from use ashore, for example, bundling material used to fold over different products. (Barron)

On remote provincial shorelines the junk has a tendency to have originated from boats, for example, angling hardware utilized in the angling business. This plastic can influence marine natural life in two essential courses: by catching animals, and by being eaten.

Turtles are especially seriously influenced by plastic contamination, and every one of the seven of the world's turtle species are as of now either imperiled or undermined for various reasons.(Druetz et al.) Turtles get entangled in angling nets, and numerous ocean turtles have been discovered dead with plastic packs in their stomachs. Turtles confuse coasting straightforward plastic sacks for jellyfish and eat them.

In one dead turtle found off Hawaii in the Pacific in excess of 1000 bits of plastic were found in its stomach. An ongoing US report presumed that in excess of 100000 marine warm blooded creatures pass on consistently on the planet's seas by eating or getting snared in plastic junk, and the position is intensifying around the world, 75 marine feathered creature species are known to eat plastic articles. This incorporates 36 species found off South Africa. (SanClements)

An ongoing investigation of blue petrel chicks on South Africa's remote Marine Island demonstrated that 90% of chicks analyzed had plastic in their stomachs obviously nourished to them coincidentally by their folks. South African seabirds are among the most exceedingly awful influenced on the planet. Plastics may stay in the stomach, blocking absorption and perhaps causing starvation.(Verlis et al.)

Here is the manner by which plastic contamination is affecting our condition and life on earth:

Plastic waste is entering the water bodies, for example, waterways, oceans and even seas and is dirtying our water definitely. This water is then provided at our places. Regardless of the amount we channel this water it can never return to its unadulterated shape and along these lines has negative repercussions on our wellbeing.

Substantial measure of plastic waste is dumped in landfills. Wind conveys plastic sacks and other little plastic particles starting with one place then onto the next in this manner affecting real region. Plastic particles discharge hurtful synthetic compounds that store in the dirt and demolish its quality. It impacts the development of the plants. Moreover, squander lying on the land breeds mosquitoes and different bugs that are bearers of different genuine ailments. (Derr) Plastic sacks and other plastic litter that goes into waterways and oceans are mixed up as sustenance by the marine animals who frequently swallow them and in the long run fall wiped out.

Creatures generally feed on sustenance tossed in the refuse. They eat plastic packs and different things alongside different things. Plastic sacks frequently stall out in their digestive tracts and stifle them to death. They are additionally a reason for some genuine diseases.(Andrady)

90% of the plastic things in our everyday lives are utilized once and after that throwed: basic need packs, saran wrap, expandable cutlery, straws, espresso mug covers. Observe how regularly you depend on these items and supplant them with reusable renditions. It just takes a couple of times of conveying your own packs to the store, flatware to the workplace, or travel mug to Starbucks before it moves toward becoming propensity.

Every year, near 20 billion plastic containers are hurled in the junk. Convey a reusable container in your pack, and you'll never be discovered turning to a Poland Spring or Evian again. In case you're anxious about the nature of your nearby faucet water, search for a model with an inherent channel. (John C. Norcross University of Scranton)

Those little plastic scrubbers found in such huge numbers of excellence items—facial cleans, toothpaste, body washes—may look innocuous, however their small size enables them to sneak past water-treatment plants. Lamentably, they likewise look simply like nourishment to some marine creatures. Settle on items with characteristic exfoliants, similar to oats or salt.

In addition to the fact that it is more advantageous, making your own suppers doesn't include takeout compartments or doggy packs. For those occasions when you do arrange in or eat out, tell the foundation you needn't bother with any plastic cutlery or, for some genuine additional credit, convey your own sustenance stockpiling holders to eateries for remains.

New toys and electronic contraptions, particularly, accompany a wide range of plastic bundling—from those disappointing hard-to-split shells to twisty ties. Hunt the racks of thrift stores, neighborhood carport deals, or online postings for things that are similarly as great when beforehand utilized. You'll spare yourself a couple of bucks, as well. (Smallin)

It appears glaringly evident, however we're not completing an incredible activity of it. For instance, under 14 percent of plastic bundling is reused. Confounded about what can and can't go in the receptacle? Look at the number on the base of the holder. Most drink and fluid cleaner containers will be (PET), or, in other words by most curbside reusing organizations. Holders checked (HDPE; ordinarily marginally heavier-obligation bottles for drain, juice, and clothing cleanser) and (PP; plastic cutlery, yogurt and margarine tubs, ketchup bottles) are additionally recyclable in a few regions. For the specifics on your region, look at Earth911.org's reusing catalog.

Inclination your chose authorities to pursue the lead of those in San Francisco, Chicago, and near 150 different urban areas and provinces by presenting or supporting enactment that would make plastic-pack utilize less alluring.

Single-serving yogurts, travel-estimate toiletries, little bundles of nuts—consider the item to-bundling proportion of things you tend to purchase frequently and select the greater compartment as opposed to purchasing a few littler ones after some

Put resources into a zippered texture pack and demand that your cleaned things be returned in it rather than sheathed in plastic. (And keeping in mind that you're grinding away, ensure you're frequenting a laundry that avoids the perc, a dangerous compound found in some cleaning solvents.) (Bloom)

In spite of the fact that we can have any kind of effect through our own propensities, companies clearly have a considerably greater impression. On the off chance that you trust an organization could be more quick witted about its bundling, make your voice heard. Compose a letter, send a tweet, or hit them where it truly harms: Give your cash to a more manageable contender. (Schramm). **The aim of the paper is to study destruction caused by plastics in society.**

OBJECTIVE

To study impact of plastics on society. To study impact of plastics on humans. To study how plastics damaged ocean ecosystem.

II. REVIEW OF LITERATURE

The article economics.indiatimes reveals that business out of recycling high-value products.

The article omicsonline.org.com reveals that new technologies and products were found. Plastic are non-biodegradable and remain as waste in. A very small amount of total nature was preserved.

The article the Hindu.com reveals that India alone generates 4354 tonnes of plastic waste everyday.

The article down to earth.org.in written by Shreedhan Venkatesh and published on June 8 2018 reveals that great Pacific garbage patch. Plastic waste management rules. Plastic waste rules 2011.

The article researchgate.net reveals that maximum polypropylene, high density, polyvinyl chloride, polyester.

The article interim.org.com written by Ameen khan published on may30 2018 reveals that laws and their implementation. The unaddressed expression sustainability of plastic waste management.

The article daily pioneer.com written by Sapna Singh published on 13 October 2018 reveals that one billion plastic waste bottles are manufactured every minute. Plastic contains toxins which are toxic and disrupt hormone.

The article Bloomberg quint.com written by as an usmani published on April 22 2018 reveals that plastic widely used plastic material on the planet. There is no reliable information on plastic waste on world.

The article India mongabay.com written by Sahana ghosh published on April 16 2018 reveals that India has chosen as the global host of world, that focus on galvanising greater action against single-use plastic pollution.

The article the betterindia.com reveals that the problem of waste management should never reach rag picker's. It should be segregated as dry, wet and electronic waste at the source itself. The source, of course, is own homes and offices.

The article ecoideaz.com written by tam i Patel published on March 16 2018 reveals that rapid population growth, urbanization, and industrial growth have led to serve waste management problem in cities around the world.

The article research rabobank.com written by Saurav daspantnaik reveals plastic waste contributing significantly to the total municipal solid waste in India. A central pollution control board study in 2005 revealed approximately.

The article www.environmental-expert.com reveals that Plastic waste is recycled in India in an “unorganized” way. 60% of the plastic-waste collected and segregated gets recycled back into materials for further processing into consumer products, while the balance is left unutilized.

The article www.teriin.org reveals that While the petrochemical sector is regarded as the backbone of plastic production, it is also considered a yardstick for measuring global economic growth.

The article www.news18.com reveals that Surat produced a particularly high amount; 12.47 percent of its municipal solid waste (MSW) is plastic, while only 3.1 percent of Chandigarh's MSW is plastic.

The article cpcb.nic.in Plastic products have become an integral part in our daily life as a basic need. It produced on a massive scale worldwide and its production crosses the 150 million tonnes per year globally. In India approximately 8 Million tonnes plastic products are consumed every year (2008) which is expected to rise 12 million tones by 2012.

The article www.treehugger.com reveals that Although recycling can help reduce the amount of garbage that ends up in landfills, waterways and ecosystems, only a few types of plastics can be recycled by most municipal governments. The fraction that does get recycled still requires a lot of energy and water which just isn't a good proposition when it comes to single-use items.

- The article www.karmayog.org reveals that Municipal sources that include residential, markets, commercial establishments, hotels and hospitals.
Distribution and industry sector like food and chemical industries, packing films, etc.
Other sources include automotive wastes, agricultural wastes, industrial wastes construction debris etc.

The article fac.ksu.edu.sa reveals that

Even the cities with low economic growth have started producing more plastic waste due to:

- o plastic packaging,
- o plastic shopping bags,
- o PET bottles
- o and other goods/appliances using plastic as the major component.

The article jnnjhansi.com reveals that Plastics are good, Plastics litter is the problem. It is not commercially viable for the waste pickers. Litter picking needs a separate viability gap funding, and so is its recycling, which is not so profitable either. Though most of the waste management laws are plastic centric, this small pieces of metalized plastics and carry bags are the main contentious issue in most of the other waste streams, and more so in MSW. A solution is developed here by harnessing, informal sector, recycling network in a workable formal setup.

III. MATERIALS AND METHODS

This paper used both primary and secondary information which are collected from the general public through the simple random sampling method. The research paper is done in both doctrinal and non-doctrinal method. The questions related to the was also taken into account. The survey was limited to 1500 samples because of the time constraint. The primary sources of information are taken from the books and statutes and the secondary sources of information are taken from the articles of the journals, working papers, thesis and presentation papers. The dependent variable is are you aware that plastic materials can be made from organic materials and are you aware that plastics had damaged ocean ecosystem .The independent variable is gender, educational qualification, age, area. The analysis of the survey is done by using chi-square and frequency test.

IV. ANALYSIS AND DISCUSSION

FREQUENCY TABLE

HYPOTHESIS

HO: There is significant relation between the gender and are you aware that plastic can be manufactured from organic materials and are you aware that plastic wastes had destroyed ocean ecosystem.

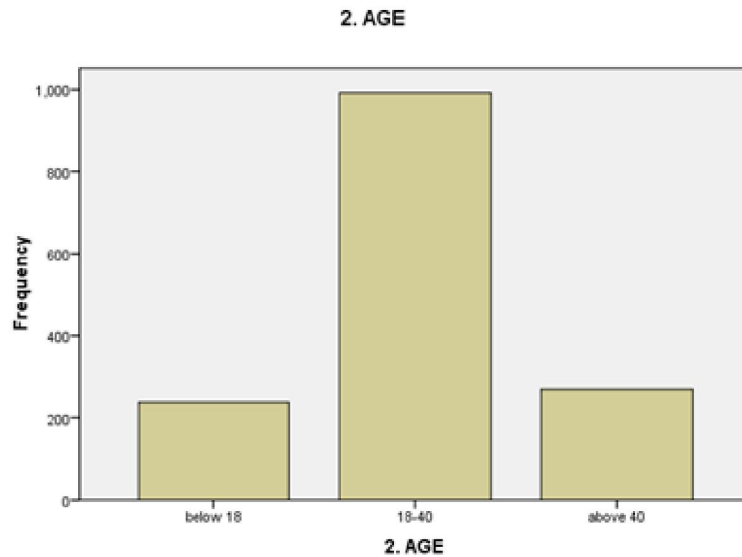
HA: There is no significant relation between the gender and are you aware that plastic can be manufactured from organic materials and are you aware that plastic wastes had destroyed ocean ecosystem.

Statistics

		2. AGE	3. GENDER	4. Education qualification	5. Occupation	6. Area	7. Marital status	8. Family status
N	Valid	1499	1499	1499	1499	1233	1499	1499
	Missing	0	0	0	0	266	0	0

The statistics data for Age is 1499, Gender is 1499, Educational qualification is 1499, Occupation is 1499, Area is 1233, Marital status is 1499, Family status is 1499.

Frequency Table

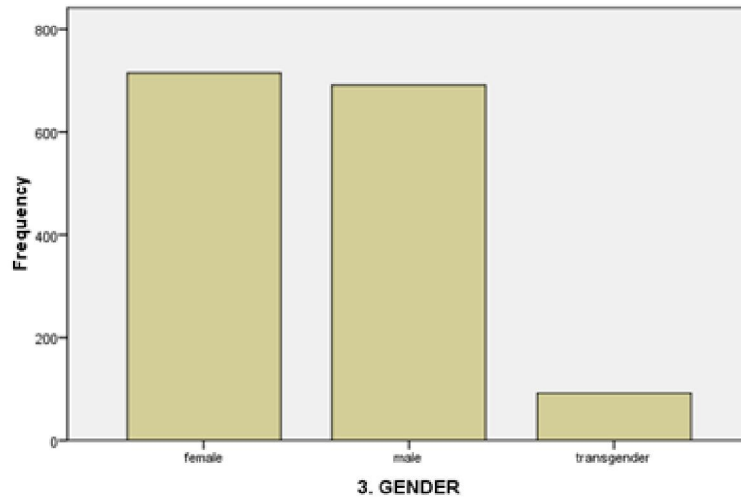


2. AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 18	238	15.9	15.9	15.9
	18-40	992	66.2	66.2	82.1
	above 40	269	17.9	17.9	100.0
	Total	1499	100.0	100.0	

From the above table it is understood that age group of below 18 people are with frequency of 238 and percent of 15.9 and valid percentage of 15.9 and cumulative percentage is 15.9. Age group of 18-40 people are with frequency of 992 and percent of 66.2 And valid percentage of 66.2 and cumulative percent is 82.1. Age group of above 40 people are with frequency of 269 and percent of 17.9 and valid percentage of 17.9 and cumulative percentage is 100.0.

3. GENDER

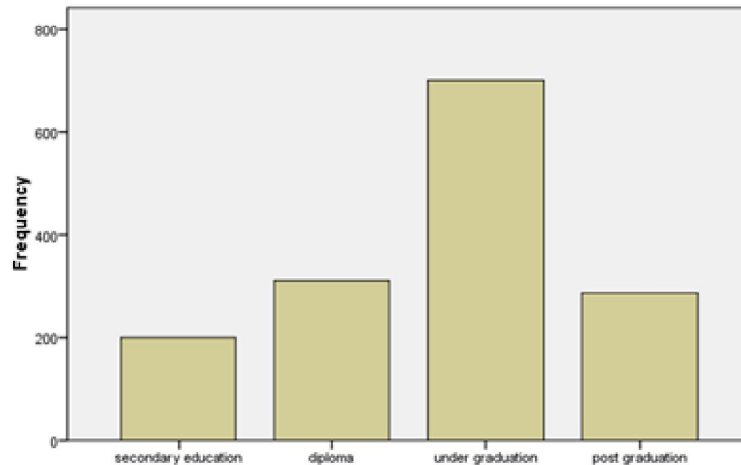


3. GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	female	715	47.7	47.7	47.7
	male	692	46.2	46.2	93.9
	transgender	92	6.1	6.1	100.0
	Total	1499	100.0	100.0	

From the above table it is clear that the Gender group of Male are with frequency 692 out of 1499 and percent 46.2 out of 100 and valid percent 46.2 out of 100 and cumulative percent 93.9. The Gender group of Female are with frequency 715 out of 1499 and percent 47.7 out of 100 and valid percent 47.7 out of 100 and cumulative percent 47.7. The Gender group of Transgender with frequency 92 out of 1499 and percent 6.1 out of 100 and valid percent 6.1 out of 100 and cumulative percent 100.0.

4. Education qualification



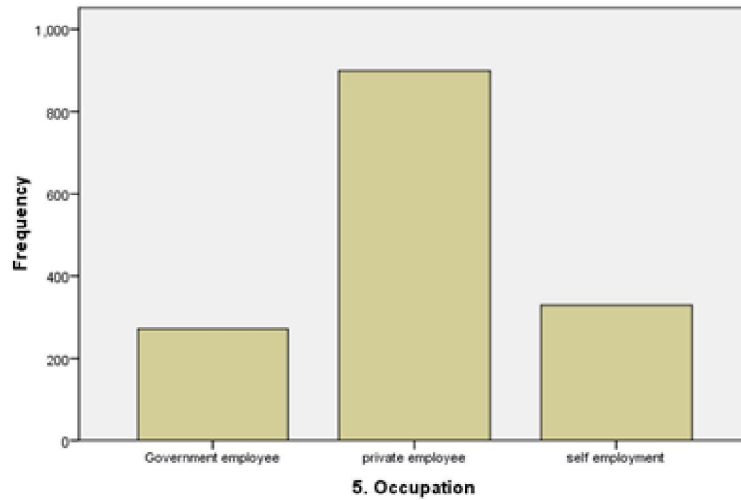
4. Education qualification

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	secondary education	200	13.3	13.3	13.3
	diploma	311	20.7	20.7	34.1
	under graduation	701	46.8	46.8	80.9
	post graduation	287	19.1	19.1	100.0
	Total	1499	100.0	100.0	

From the above table it is understood that the people of qualifications, secondary education are of frequency 200 out of 1499 and percent of 13.3 out of 100 and valid percentage of 13.3 out of 100 and cumulative percent of 13.3. The people of qualification diploma are of frequency 311 out of 1499 and percent of 20.7 out of 100 and valid percentage of 20.7 out of 100 and cumulative percent of 34.1. The people of qualification under graduation are of frequency 701 out of 1499 and percent of 46.8 out of 100 and valid percentage of 46.8 out of 100 and cumulative percent of 80.9. The people of post graduation qualification are of frequency 287 out of 900 and percent of 19.1 out of 100 and valid percentage of 19.1 out of 100 and cumulative percent of 100.0.

5. Occupation

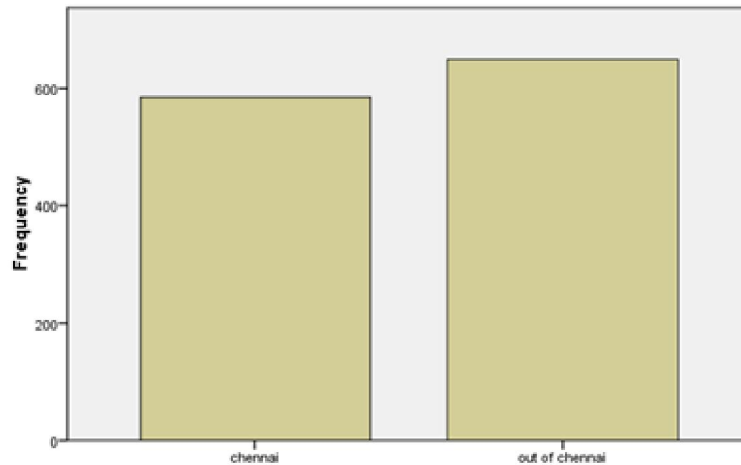


5. Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government employee	271	18.1	18.1	18.1
	private employee	899	60.0	60.0	78.1
	self employment	329	21.9	21.9	100.0
	Total	1499	100.0	100.0	

From the table it is understood that the people of occupation, the frequency of Government employee is 271 out 1499 and percent is 18.1 out of 100 and valid percent is 18.1 out of 100 and cumulative percent is 18.1. The frequency of Private employee is 899 out of 1499 and percent is 60.0 out of 100 and valid percent is 60.0 out of 100 and cumulative percent is 78.1. The frequency of Self employee is 329 and percent is 21.9 out of 100 and valid percent is 21.9 out of 100 and cumulative percent is 100.0.

6. Area

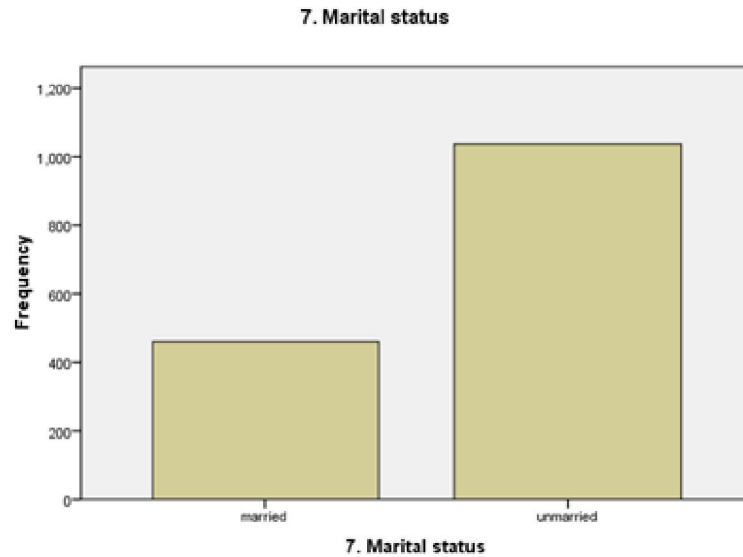


6. Area

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	chennai	584	39.0	47.4	47.4
	out of chennai	649	43.3	52.6	100.0
	Total	1233	82.3	100.0	
Missing	System	266	17.7		
Total		1499	100.0		

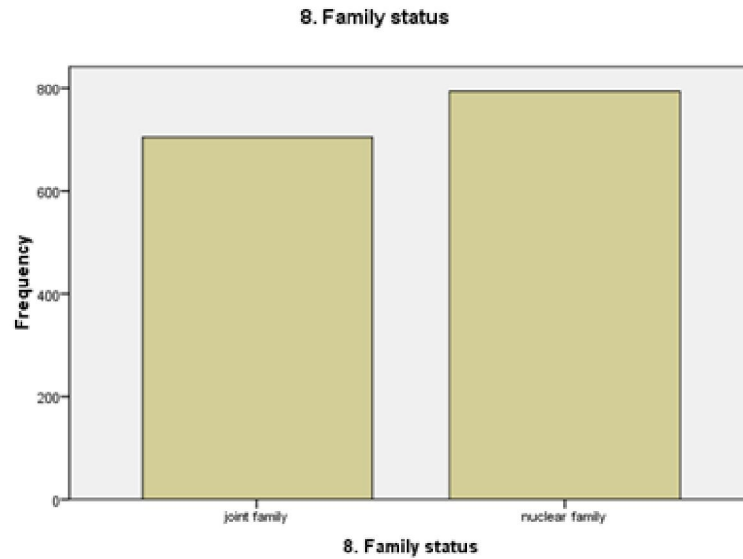
From the people it is understood that people from area, the frequency of chennai people is 584 out 1499 and percent is 39.0 out of 100 and valid percent is 47.4 out of 100 and cumulative percent is 47.4. The frequency of people out of chennai is 649 out of 1499 and percent is 43.3 out of 100 and valid percent is 52.6 out of 100 and cumulative percent is 100.0. The missing system are of frequency 266 and percent 17.7.



7. Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	461	30.8	30.8	30.8
	unmarried	1038	69.2	69.2	100.0
	Total	1499	100.0	100.0	

From the table it is understood that people marital status, the frequency of married people is 461 out of 1499 and percent is 30.8 out of 100 and valid percent is 30.8 out 100 and cumulative status is 30.8. The frequency of unmarried people is 1038 out of 1499 and percent is 69.2 out of 100 and valid percent is 69.2 out of 100 and cumulative percent is 100.0.



8. Family status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	joint family	705	47.0	47.0	47.0
	nuclear family	794	53.0	53.0	100.0
	Total	1499	100.0	100.0	

From the table it is understood that people family status, the frequency of joint family is 705 out of 1499 and percent is 47.0 out of 100 and valid percent is 47.0 out 100 and cumulative status is 47.0. The frequency of nuclear family is 794 out of 1499 and percent is 53.0 out of 100 and valid percent is 53.0 out of 100 and cumulative percent is 100.0.

3. GENDER * 72. Are you aware that Plastics can be manufactured from Organic Materials

Crosstab

Count						
		72. Are you aware that Plastics can be manufactured from Organic Materials				
		unaware	neutral	aware	strongly aware	Total
3. GENDER	Male	87	254	236	138	715
	female	68	229	222	173	692
	transgender	17	39	18	18	92
	Total	172	522	476	329	1499

From the above table it is clear that male among 715 87 are unaware that plastics can be made from organic materials and 254 had said neutral and 236 had replied that they are aware that plastics can be made from organic matter and 138 are strongly aware that plastics are made from organic matter. Female among 692,68 are unaware that plastics can be made from organic materials and 229 had said neutral and 222 had replied that they are aware that plastics can be made from organic matter and 173 are strongly aware that plastics are made from organic matter. Trans gender among 92, 17 are unaware that plastics can be made from organic materials and 39 had said neutral and 18 had replied that they are aware that plastics can be made from organic matter and 18 are strongly aware that plastics are made from organic matter.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.219 ^a	6	.006
Likelihood Ratio	18.252	6	.006
Linear-by-Linear Association	.283	1	.594
N of Valid Cases	1499		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.56.

From the above table it is clear that null hypothesis is proved and null hypothesis is rejected.

3. GENDER * 70. Are you aware that Plastic wastes has destroyed Eco-system

Crosstab

Count						
		70. Are you aware that Plastic wastes has destroyed Eco-system				
		unaware	neutral	aware	strongly aware	Total
3. GENDER	Male	125	269	226	95	715
	female	92	295	239	66	692
	transgender	24	32	27	9	92
	Total	241	596	492	170	1499

From the above table it is clear that male among 715, 125 are unaware that plastic waste had destroyed ocean ecosystem and 296 had replied neutral and 226 had said aware and 95 had said that they are strongly aware. Female among 692, 92 are unaware that plastic waste had destroyed ocean ecosystem and 295 had replied neutral and 239 had said aware and 66 had said that they are strongly aware. Transgender among 92, 24 are unaware that plastic waste had destroyed ocean ecosystem and 32 had replied neutral and 27 had said aware and 9 had said that they are strongly aware.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.621 ^a	6	.005
Likelihood Ratio	17.901	6	.006
Linear-by-Linear Association	1.376	1	.241
N of Valid Cases	1499		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.43.

From the above table it is clear that null hypothesis is proved and null hypothesis is rejected.

V. CONCLUSION AND SUGGESTIONS

Plastic sacks influence numerous individuals, the purchasers as well as influences the earth and creatures. We are influenced by plastic sacks since we as a whole discard them mistakenly and in light of the fact that we are unconscious of the outcomes of utilizing plastic packs. Research demonstrates that "It takes 500-1,000 years for plastic to debase" this implies the plastic we utilize isn't generally leaving at any point in the near future.(Zehner) The measure of plastic packs we utilize is imperative in light of the fact that once we discard the plastic sacks they will simply heap up and make contamination, or, in other words the earth since how we discard the plastic packs isn't generally going to help because of the measure of time it takes for them to break down. Something critical to know is that "50 percent of the plastic we utilize, we utilize just once and discard" this ought to be thought about in light of the fact that the plastic packs are simply being utilized once then discarded, this adds to the contamination being made.(Lau and Varma) This is the manner by which we are influenced by the utilization of plastic packs. The ecological impacts of plastic sacks are critical in light of the fact that they influence the earth ,as well as influences people. The ecological impacts because of plastic packs are contamination, litter, loss of asset, and pacific junk vortex.Plastic sacks are to a great degree destructive to the earth since we utilize them in huge amounts. (Jaeger and Rubin)This is imperative since plastic sacks are utilized worldwide and are for the most part utilized once then are tossed out and in light of this we are simply hurting ourselves by proceeding to utilize plastic packs. Ecological and human expenses are connected in light of the fact that they both contrarily affect us from multiple points of view.(Rozzi et al.) "In the course of the most recent 10 years we have delivered more plastic than amid the entire of the most recent century." This bit of proof is essential since it has a few implications. The main significance is identified with the natural effect, we are utilizing the assets which is being utilized for something that isn't vital. What I mean by this is we are spending oil to make these plastic packs which truly isn't something we "require". The human effect is that we are dirtying our condition since we discard the plastic sacks inaccurately. (Geertz)

REFERENCES

- [1]. Andrady, Anthony L. "Persistence of Plastic Litter in the Oceans." *Marine Anthropogenic Litter*, 2015, pp. 57–72.
- [2]. Barron, Jon. *Lessons from the Miracle Doctors: A Step-by-Step Guide to Optimum Health and Relief from Catastrophic Illness: Easyread Large Bold Edition*. ReadHowYouWant.com, 2009.
- [3]. Bloom, Howard. *The Lucifer Principle: A Scientific Expedition into the Forces of History*. Open Road + Grove/Atlantic, 2013.
- [4]. Chapman, Deborah V. *Water Quality Assessments: A Guide to the Use of Biota, Sediments and Water in Environmental Monitoring, Second Edition*. CRC Press, 1996.
- [5]. Cox, Richard J. *Vandals in the Stacks?: A Response to Nicholson Baker's Assault on Libraries*. Praeger Pub Text, 2002.
- [6]. Derr, Mark. *Some Kind of Paradise: A Chronicle of Man and the Land in Florida*. 1998.
- [7]. Druetz, Thomas, et al. "Utilization of Community Health Workers for Malaria Treatment: Results from a Three-Year Panel Study in the Districts of Kaya and Zorgho, Burkina Faso." *Malaria Journal*, vol. 14, Feb. 2015, p. 71.
- [8]. Geertz, Clifford. *The Interpretation of Cultures*. Hachette UK, 2017.
- [9]. Jaeger, R. J., and R. J. Rubin. "CONTAMINATION OF BLOOD STORED IN PLASTIC PACKS." *The Lancet*, vol. 296, no. 7664, 1970, p. 151.
- [10]. John C. Norcross University of Scranton. *Psychotherapy Relationships That Work : Therapist Contributions and Responsiveness to Patients: Therapist Contributions and Responsiveness to Patients*. Oxford University Press, USA, 2002.
- [11]. Landes, David S. *The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present*. Cambridge University Press, 2003.
- [12]. Lau, Y. S., and S. K. Varma. "Pre-Operative Planning of Free Flaps - Will We Burn the Bridge We Are about to Cross?" *Journal of Plastic, Reconstructive & Aesthetic Surgery: JPRAS*, vol. 63, no. 4, 2010, p. e424.

- [13]. MacQuillan, A., et al. "Taking a Leech to Blood: But Can You Make Him Drink?" *British Journal of Plastic Surgery*, vol. 55, no. 6, 2002, pp. 540–41.
- [14]. Morrison, S. *The Literature of Waste: Material Eco-poetics and Ethical Matter*. Springer, 2015.
- [15]. Rozzi, Ricardo, et al. *Earth Stewardship: Linking Ecology and Ethics in Theory and Practice*. Springer, 2015.
- [16]. SanClements, Michael. *Plastic Purge: How to Use Less Plastic, Eat Better, Keep Toxins Out of Your Body, and Help Save the Sea Turtles!* St. Martin's Griffin, 2014.
- [17]. Schramm, Katharina. "'You Have Your Own History. Keep Your Hands off Ours!' On Being Rejected in the Field*." *Social Anthropology*, vol. 13, no. 2, 2007, pp. 171–83.
- [18]. Singh, Ram Lakhan. *Principles and Applications of Environmental Biotechnology for a Sustainable Future*. Springer, 2016.
- [19]. Smallin, Donna. *The One-Minute Organizer A to Z Storage Solutions: 500 Tips for Storing Every Item in Your Home*. Storey Publishing, 2008.
- [20]. Verlis, Krista M., et al. "Seabirds and Plastics Don't Mix: Examining the Differences in Marine Plastic Ingestion in Wedge-Tailed Shearwater Chicks at near-Shore and Offshore Locations." *Marine Pollution Bulletin*, vol. 135, 2018, pp. 852–61.
- [21]. Zehner, Ozzie. *Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism*. U of Nebraska Press, 2012.