



**St.Xavier's College of Education (Autonomous)**  
*(Re-accredited (3<sup>rd</sup> Cycle) by NAAC at A Grade with CGPA: 3.67)*  
Palayamkottai, Tirunelveli, Tamil Nadu – 627 002.

## **Social Issues: Insights & Illuminations**

**\*Food Adulteration\***

**\*Ban of Plastics\***

**\*Happiness Index\***

**\*Online Shopping\***

**\*Use of Smart Phone\***

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### **From Desk of the Editors.....**

A quality Teacher Education Programme guarantees better teachers for the benefits of the generations to come. As a part of our integral formation of prospective teachers, the trainees are given a number of orientations, deliberations and practices on the issues of the society. Among them, the Social project is the unique feature, and one of the best practices of our college which enables the prospective teachers acquaint with new knowledge on society and its tendencies.

Seventh year in succession, our second year trainee teachers were assigned to interact with the common people on some social issues which influence them directly or indirectly. Take for an example a sound mind is possible in sound body. A healthy physique is the source of all mental energies. When the common people encounter the challenges of food adulteration, it becomes the problem of the upcoming generations. So we have chosen the first social issues as the Perception of common people on Food Adulteration. Likewise, Perceptions on Ban of Plastics, Happiness Index, Online Shopping and Excess of Smart phones were studied with the help of all the prospective teachers.

Keeping in mind all the issues chosen, the prospective teachers were divided into groups and discussions on issues were initiated with the help of the faculty members.

At the outset I thank all the student teachers who involved in the process of this social survey starting from preparation of tools, collection of data and analysis and interpretation of results. I thank whole heartedly Dr. A. Micahel J Leo, In-charge of Social Project, the professors and other senior teaches who guided the students in the right direction to bring out this social project as book with ISBN number

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# 1. PERCEPTION ON FOOD ADULTERATION

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## 1.1 INTRODUCTION

The history of Indian food tells us delightful, heavenly and delicate dishes. The Indian cuisine is closely related to the Indian history, each historical region developing a unique set of dishes, using diverse ingredients. However, a constant grave remains for all regions: that is the affinity for sweet desserts and spicy snacks. Besides being closely related to history, Indian cuisine is also strongly influenced by the Indian religion, Indian culture and traditions and the Indian people themselves. No other country has a wider selection of exotic dishes besides offering such a large variety of impulses for the taste buds.

It is to discuss, what Indian dishes and snacks have to offer, providing a history of Indian food and a few related legends alongside.

## 1.2 INDIAN FOOD CULTURE

The traditional food of India has been widely appreciated for its fabulous use of herbs and spices. Indian cuisine is known for its large assortment of dishes. The cooking style varies from region to region and is largely divided into South Indian & North Indian cuisine. India is quite famous for its diverse multi cuisine available in a large number of restaurants and hotel resorts, which is reminiscent of unity in diversity. The staple food in India includes wheat, rice and pulses with Chana (Bengal Gram) being the most important one. In modern times Indian palate has undergone a lot of change. In the last decade, as a result of globalization, a lot of Indians have travelled to different parts of the world and vice versa there has been a massive influx of people of different nationalities in India. This has resulted in Indianisation of various international cuisines. Nowadays, in big metro cities one can find specialized food joints of international cuisines.

Bengali cuisine is appreciated for its fabulous use of panchphoron, a term used to refer to the five essential spices, namely mustard, fenugreek seed, cumin seed, aniseed, and black cumin seed. The specialty of Bengali food lies in the perfect blend of sweet and spicy flavors.

Mughlai cuisine is one of the most popular cuisines, whose origin can be traced back to the times of Mughal Empire. Mughlai cuisine consists of the dishes that were prepared in the kitchens of the royal Mughal Emperors. Indian cuisine is predominantly influenced by the cooking style practiced during the Mughal era.

The cuisine of Punjab has an enormous variety of mouth-watering vegetarian as well as non-vegetarian dishes. The spice content ranges from minimal to pleasant to high. Punjabi food is usually relished by people of all communities. In Punjab, home cooking differs from the restaurant cooking style.

The cuisine of Rajasthan is primarily vegetarian and offers a fabulous variety of mouthwatering dishes. The spice content is quite high in comparison to other Indian cuisines, but the food is absolutely scrumptious. Rajasthanis use ghee for cooking most of the dishes. Rajasthani food is well known for its spicy curries and delicious sweets.

The cuisine of South India is known for its light, low calorie appetizing dishes. The traditional food of South India is mainly rice based. The cuisine is famous for its wonderful mixing of rice and Dhals to prepare yummy lip smacking Sambar, Dosas, Rasam, Vadas, Idlis and Uttapams.

### **1.2.1 Indian Appetizers and Snacks**

The Indian cuisine is as diverse as the Indian people and it has a large (and extremely rich) selection of appetizers, and snacks. Besides being extremely tasty and actually stimulating your appetite rather than diminishing it like some other cuisines' appetizers, these fast snacks are also quite low in fat, since they are based on a number of spices and herbs, such as ginger, cinnamon, garlic, cloves, asafetida, aniseed or coriander, rather than the fat appetizers you'll find mostly anywhere else in the world. Although most appetizers and snacks usually follow the same ingredients for each particular recipe, it should be noted that authentic Indian dishes can never be limited to a strict formula, since they differ from household to household.

### **1.2.2 Indian Sweets**

Indian cuisine is known throughout the entire world as a sweet cuisine and this tag doesn't come along without some extremely solid arguments. Actually, Indian sweets have not only made Indian food famous throughout history, but they have been acquired and accommodated to European and North American dishes, finding great success in fancy "Baltic" restaurants through-out England, France, the United States or Spain.

Indian dessert that blends with the Hindu culture is the Payasam. This dessert has been an essential dish throughout the history of India, being usually found at ceremonies, feasts and celebrations. In Southern India, ancient traditions tell that a wedding is not fully blessed if Payasam is not served at the wedding feast, this tradition being kept alive with each generation, still being practiced by newly wedded couples, mostly in the southern regions, from where the tradition started in the first place. The best and most popular Payasam dishes

are found in the temples of Guruvayoor and Ambalappuzha. Other important traditional Indian sweets and desserts, famous throughout the history of Indian food, include the following: Gulab Jamun (a popular Indian dessert made out of fried milk balls in sweet syrup).

### **1.3 SOUTH INDIAN FOOD**

In the southern India, the states make great use of spices, fishes and coconuts, as most of them have coastal kitchens. In the foods of Tamil Nadu use of tamarind is frequently made in order to impart sourness to the dishes. It simply distinguishes the Tamil Food from other cuisines. The cooking style of Andhra Pradesh is supposed to make excessive use of chilies, which is obviously to improve the taste of the dishes. In Kerala, some of the delicious dishes are the lamb stew and appams, Malabar fried prawns, Idlis, Dosas, fish molie and rice puttu. Another famous item of this region is the sweetened coconut milk.

### **1.4 TRADITIONAL FOOD OF TAMIL NADU**

Some of the common traditional delicacies in Tamil Nadu are mentioned below along with their region of origin

#### **1.4.1 Chettinadu**

Chettinadu cuisine is undoubtedly the most important culinary export of the state. It includes dishes made in Karaikudi and its surrounding villages. Chettinadu cuisine is popular because of its subtle use of spices that are ground fresh every time. Rice is a common base for most dishes; some of them include paal paniyaaram, idiyaapam etc. Contrary to popular opinion, meat and poultry based dishes are not a common occurrence in Chettinadu cuisine, but are still popular. Some of them include chicken fry, melagu perattal (pepper chicken) and the like. Some spices unique to this cuisine include kal paasi and maratti mooku.

#### **1.4.2 Nanjil Nadu**

Nanjil Nadu cuisine is famous for its abundant use of coconut oil and coconut. The food and the cooking style here is similar to that of Kerala, especially Southern Travancore. Nanjil Nadu refers to the district of Kanyakumari. This being a coastal area, fish is found in abundance and eaten almost on a daily basis. Some of the specialties of this area include avial, erriserry, ulundhanchoru, kappa (also called kelungu) and fish curry etc. Also, this is probably the only place in Tamil Nadu where beef is consumed.

#### **1.4.3 Kongu Nadu**

Dishes made in and around Coimbatore, Erode, Bhavani, etc. form the basis for Kongunadu cuisine. Coconut is widely used, but it is the use of turmeric that makes this

cuisine special. Traditional delicacies here are largely vegetarian. Some of the popular dishes here include oppittu, kambu koozhu, vazhai poo vadai, etc.

There are also many Tamil food habits that were based in medicine. For example, taste is classified into six groups, and foods are classified as hot or cold. This classification of hot or cold is integral when preparing food during times of illness or preparing meals at different times of the day. Usually, when an illness is caused by one classification, the cure for it is foods from the other classification. Weather also plays an important role in this, and time of day – for instance, you may have heard from your grandmother or mother not to eat items classified as “cold” for dinner.

When preparing a meal, it is also important to keep in mind the different tastes. It is quite common to create dishes of contrasting taste – a spicy meat kulambu is often paired with a vegetarian milk curry. There are many other little things that are important to cooking that is outlined in ancient Tamil literature and epigraphs ; for instance, when cooking, you shouldn't hold any grudges for this is believed to add distaste to the food. Oddly enough, Even some of the spices we use regularly, like turmeric, are used to clean meat and veggies as they are antiseptic.

Hospitality is a big part of Tamil culture. When someone visits your house, you should always offer food. Whatever you have, you should offer it to your guests. You may have noticed when you visit a Tamil person's house, you get offered so much food and tea. This is kindness and part of our culture. The traditional way of eating Tamil food is on a banana leaf, using your hands.

## **1.5 FOOD AS A MEDICINE**

There are many reasons why we should pay attention to what we eat. The processed, low-variety foods many of us consume regularly may be convenient and tasty, but they compromise our health. We especially need to pay attention to what we eat when we are sick so we can give our bodies the nutrients it needs to heal. And if you want to be even more deliberate in improving health—perhaps to address a chronic disease or condition—a **Functional Medicine** approach can yield great benefits. Overall, seeing your food as medicine helps you make better decisions about what (and how) to eat in order to make the best decisions for your own wellbeing.

## **1.6 IMPACT OF FOOD**



The food we eat gives our bodies the "information" and materials they need to function properly. If we don't get the right

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information, our metabolic processes suffer and our health declines. If we get too much food, or food that gives our bodies the wrong instructions, we can become overweight, undernourished, and at risk for the development of diseases and its conditions.

In short, what we eat is central to our health. Consider that in light of Webster's definition of medicine: "The science and art dealing with the maintenance of health and the prevention, alleviation, or cure of disease." Food acts as medicine--to maintain, prevent, and treat disease.

### 1.6.1 *Specific Functions of Foods*

*Let thy food be thy medicine and thy medicine be thy food.* - Hippocrates (460-377 BC). There is a growing realization that the effects of nutrition on health and disease cannot be understood without a profound understanding of how nutrients act at this molecular level (*Nature Reviews Genetics*, 2003).

The most comprehensive research ever undertaken (including more than 2,400 counties in China) about the relationship between diet and the risk of developing diseases is described in The China Study. The authors, T. Colin Campbell and Thomas M. Campbell, conclude: "If you want to be healthy, change your diet." The authors summarize their findings in *Eight Principles of Food and Health*, listed below. Besides breathing and sleeping, eating is life's most vital activity. We cannot sustain ourselves without eating. But we seem to have forgotten this, spending very few hours (or even minutes) gathering, preparing, and eating food.

Food gives us energy, and allows us to think, move, and prosper. But we are **no longer attentive to the impact of food on our functioning**. Our food preferences and choices are now influenced more by food companies, ad campaigns, and the notion that "faster is better." We don't always (or perhaps even often) pick foods based on what our bodies need for optimal wellness. Our busy lives and stress prevent us from taking the time to really nourish body and soul. We eat for convenience, not health.

## 1.7 FOOD ADULTERATION

Indian kitchens use a variety of ingredients in everyday life. Unfortunately, in recent years, the purity of these ingredients has become a matter of concern. A simple search on Google shows multiple news reports of adulteration in commonly consumed food items like spices, oil, milk, ghee, sugar and so on.



Long supply chains and grocery stores selling loose ingredients make it impossible to track where the food comes from or what sub-standard material is mixed in it. However, there is help at hand. There are some quick and easy-to-perform tests that can reveal the presence of common adulterants in your kitchen cabinet.

With the ability to transform any dish, spices are indispensable for every Indian kitchen. Distressingly, powdered spices available in the market are often contaminated with artificial colours and bulking agents (like chalk powder) that have serious health implications for consumers.

***Turmeric Powder: Adulterant:*** Metanil yellow, lead chromate, chalk powder

***Test:*** Take some turmeric powder in a transparent glass and add a few drops of water and concentrated hydrochloric acid to it. Next, shake it vigorously. A pink colour to the mixture indicates the presence of metanil yellow. If the mixture releases small bubbles, it indicates the presence of chalk powder.

***Red Chili Powder: Adulterant:*** Artificial colour, brick powder

***Test:*** Add a teaspoon of Chili powder to a glass of water and stir it. A swirl of bright red colour indicates the presence of artificial colour while the settling of gritty sediment at the bottom of glass indicates the presence of saw dust/brick powder.

***Coriander Powder: Adulterant:*** Husk

***Test:*** Add a teaspoon of cumin powder to a glass of water and stir. The husk will immediately start floating on the surface while the pure spice will settle at the bottom of the glass.

***Cumin Seeds/Powder: Adulterant:*** Grass seeds coloured with charcoal dust, saw dust, starch

***Test:*** Add a teaspoon of cumin powder to a glass of water and let it stay still for a few minutes. The adulterants will float on the surface while the pure spice will settle at the bottom of the glass. Cumin seeds, on the other hands, are often mixed with grass seeds coated with charcoal dust. Rub the cumin seeds vigorously with your palms. If your palms turn black, it indicates adulteration.

**Black Pepper: Adulterant:** Papaya seeds

**Test:** Add a few pepper corns to a bowl of alcohol. The papaya seeds will sink while the real corns will stay afloat.

**Mustard Seeds: Adulterant:** Argemone seeds

**Test:** Crush or press a few seeds and check them. Argemone seeds have a rough exterior and are white inside while mustard seeds have a smooth exterior and are yellow on the inside.

**Sugar - Adulterant:** Chalk powder

**Test:** Stir in a spoonful of the sugar in a glass of water for a few minutes. If the solution turns white and the residue settles at the bottom, it indicates the presence of chalk. A clear solution indicates purity.

**Milk/Khoya/Condensed Milk - Adulterant:** Starch, detergent

**Test:** Mix a small sample of the product with about 20 ml of water and bring to a boil. Cool to room temperature in a transparent glass and add a drop or two of iodine solution. A blue-coloured solution indicates the presence of starch.

Mix about 10 ml of a milk sample with an equal quantity of water and shake the mixture vigorously. Milk adulterated with detergent will form a dense lather while pure milk will have a thin layer of foam.

**Butter/Ghee - Adulterant:** Vanaspati, vegetable oil, starch

**Test:** Take a teaspoon of melted ghee/butter in the test tube or transparent bottle. Add a pinch of sugar, close the container and give it a vigorous shake. Let it stand for five minutes. If a red colour appears at the bottom of the vessel, then the sample contains vegetable oil.

Melt a small quantity of the ghee/butter. Pour it into a glass jar and place in the fridge till it solidifies. Presence of separate layers indicates the presence of other oils.

Add a few drops of iodine to two teaspoons of molten ghee. Appearance of purple colour indicates the presence of starch (like mashed potato).

**Mustard Oil - Adulterant:** Argemone oil

**Test:** Take a small amount of mustard oil in a transparent glass and add a few drops of nitric acid to it. Shake vigorously and heat the mixture for 2-3 minutes. The appearance of red colour indicates the presence of Argemone oil.

**Coconut Oil - Adulterant:** Other Oils

**Test:** Take a sample of the coconut oil in a glass jar or bowl and place it in the fridge for 30 minutes. If it's pure, the entire sample will solidify. If the sample is adulterated, the other oils will be seen as a separate layer.

**Dal/Besan - Adulterant:** Metanil Yellow



**Test:** Powder some dal with a pestle and mix a spoonful of it with lukewarm water. The same can be done for Besan. Add a few drops of hydrochloric acid to the mixture. If it turns pink or purple, it indicates the presence of Metanil yellow.

**Tea - Adulterant:** Used/processed tea leaves that have been artificially coloured

**Test:** Sprinkle a teaspoon of tea powder on a moist blotting paper. If the colour of the blotting paper changes to something similar to yellow, orange or red, it indicates the presence of artificial colour in the tea powder. Pure tea leaves release colour only when they are added to hot water.

**Honey - Adulterant:** Glucose/sugar syrup, high fructose corn syrup

**Test:** Add a spoonful of honey to a glass of water. If the honey disperses instantly, it indicates the presence of glucose/sugar syrup. Pure honey is denser and will instead sink to the bottom instead of dissolving instantaneously.

Another test involves mixing a tablespoon of honey, a little water and about 2-3 drops of vinegar together. If the mixture results in foaming, it indicates possible adulteration in the honey.

## **1.8 PREVENTION OF FOOD ADULTERATION PROGRAMME**

The Ministry of Health and Family Welfare is responsible for ensuring safe food to the consumers. Keeping this in view, a legislation called "Prevention of Food Adulteration Act, 1954" was enacted. The objective envisaged in this legislation was to ensure pure and wholesome food to the consumers and also to prevent fraud or deception. The Act has been amended thrice in 1964, 1976 and in 1986 with the objective of plugging the loopholes and making the punishments more stringent and empowering Consumers and Voluntary Organizations to play a more effective role in its implementation.

The subject of the Prevention of Food Adulteration is in the concurrent list of the constitution. However, in general, the enforcement of the Act is done by the State/U.T Governments. The Central Government primarily plays an advisory role in its implementation besides carrying out various statutory functions/duties assigned to it under the various provisions of the Act.

The laws regulating the quality of food have been in force in the country since 1899. Until 1954, several States formulated their own food laws. But there was a considerable variance in the rules and specifications of the food, which interfered with inter-provincial



trade. The Central Advisory Board appointed by the Government of India in 1937 and the Food Adulteration Committee appointed in 1943, reviewed the subject of Food Adulteration and recommended for Central legislation. The Constitution of India provided the powers to Central Government for making such legislation as the subjects of Food and Drugs Adulteration are included in the concurrent list. The Government of India, therefore, enacted a Central Legislation called the Prevention of Food adulteration Act (PFA) in the year 1954 which came into effect from 15 June, 1955. The Act repealed all laws, existing at that time in States concerning food adulteration.

In India, a three-tier system is in vogue for ensuring food quality and food safety. They are:

- Government of India;
- State/UT Governments;
- Local Bodies.

The Prevention of Food Adulteration Act is a Central legislation. Rules and Standards framed under the Act are uniformly applicable throughout the country. Besides, framing of rules and standards, the following activities are undertaken by the Ministry of Health and Family Welfare.

- Keeping close liaison with State/local bodies for uniform implementation of food laws.
- Monitoring of activities of the States by collecting periodical reports on working of food laws, getting the reports of food poisoning cases and visiting the States from time to time.
- Arranging periodical training programme for Senior Officer/Inspector/Analysts.
- Creating consumer awareness about the programme by holding exhibitions/seminars/training programmes and publishing pamphlet'.
- Approving labels of Infant Milk Substitute and Infant food, so as to safeguard the health of infants.
- Coordinating with international bodies like ISO/FAO/WHO and Codex.
- Carrying out survey-cum-monitoring activities on food contaminants like colours.
- Giving administrative/financial/technical support to four Central Food Laboratories situated in Kolkata, Ghaziabad, Mysore and Pune and providing technical guidance to the food laboratories set up by the States/Local Bodies.
- Holding activities connected with National Monitoring Agency vested with powers to decide policy issues on food irradiation.
- Formulation of Manual on food analysis method.

The Ministry of Health and Family Welfare is designated as the National Codex Contact Point in India to examine and formulate India's views on the agenda for the various meeting of Codex Alimentations Commission, a joint venture of FAO/WHO dealing with International Food Standards and its subsidiary committees. The Ministry of Health and Family Welfare constituted a National Codex Committee (NCC) and an Assistant Director General (PFA) has been working as Liaison Officer for NCC. The NCC has further constituted 24 Shadow Committees corresponding to various Codex commodities committees for preparation and finalization of India's stand.

### **1.9 ROLE OF STATE/UT GOVERNMENTS**

Enforcement of the food laws primarily rests with the State/UTs. There are 28 States and 7 Union Territories in the country. The implementation of the Act in most of the States is under the administrative control of the Directorate of Health Services, whereas, in a few States, the implementation is being combined with Drugs Administration under the Joint Food and Drug Administration. The implementation has been left to the administrative setup of the States, but it has been stressed on the States that whatever the structure be, there should be a whole-time Senior Officer duly qualified and experienced in Food Science, Food Technology, Food Analysis with other supporting officers and inspectors. State Governments are also empowered to make rules laying down details of licensing conditions of food, the establishments of food industries and prescribing license fees.

The provisions under PFA Rules have been amended nearly 360 times and standards of around 250 articles of food which are of mass consumption have been prescribed. While making amendments, standards formulated by Codex/technological development in the food industry sector/dietary habits/nutritional status of our population, social/cultural practices are taken into consideration.

By and large, in most of the States, implementation in corporation/municipal area rests with the Local Bodies which employ their own food inspectors. Licensing of food industries/establishments is also left to them.

There are 72 food laboratories in the country at District/Regional or State level in addition to four Central Food Laboratories set-up by the Central Government. Almost every State has got one or more laboratory depending upon its need. About 12 of these laboratories are under the administrative control of the local bodies whereas the remaining ones are under the administrative control of the State Government.

## **1.10 SIGNIFICANCE OF THE STUDY**

Food is essential for sustenance of life. Adulteration of food cheats the consumer and can pose serious risk to health in some cases. Since food adulteration is a huge concern in all parts of the globe, there is voluminous literature on various aspects of food adulteration including its detection. In fact, methodological procedures of food adulteration detection have been reviewed extensively. This survey makes an attempt to find the perception of Tirunelveli People on the food preferences, customs and practices of taking food.

## **1.11 STATEMENT OF THE PROBLEM**

Perception of Tirunelveli People on Food Adulteration

## **1.12 OBJECTIVES OF THE STUDY**

- a. To find out the level of perception of Tirunelveli People on Food Adulteration
- b. To find out the level of Perception of Tirunelveli People on Food Adulteration with respect to demographic variables such as Gender, age, qualification, occupation and place.

## **1.13 METHOD USED FOR THE STUDY**

The investigators adopted the survey method to find out the Perception of Tirunelveli People on Food Adulteration

## **1.14 POPULATION AND SAMPLE FOR THE STUDY**

The population for the present study consisted of the common people in Tirunelveli city. The investigators have used simple random sampling technique for selecting the sample from the population. The sample consists of 803 people in and around Tirunelveli city.

## **1.15 TOOL USED FOR THE PRESENT STUDY**

By keeping various objectives of the study in mind, the following tool was used by the professor and their team for collecting the data.

1. Personal data form.
2. Perception on Food Adulteration Questionnaire was developed and validated by Thomas Alexander, Michael J Leo and their team (2019).

The questionnaire contains 20 items and each item has two choices namely 'Yes' and 'No'. The scoring of the questionnaire is '1' for 'Yes' and '0' for 'No'. The questionnaire is annexed at the end of this chapter.

## **1.1 6 ANALYSIS OF DATA**

**Question 1: I used to take the readymade packed foods**

**Table 1(a)**

### Response of Total Sample

No		Yes	
Count	Percentage	Count	Percentage
395	49.2	408	50.8

It is observed from the above table that 50.8 % of the respondents stated that they used to take the readymade packed foods.

**Table 1 (b)**

### Response of Sample with respect to Demographic Variables

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	142	41.4	201	<b>58.6</b>
	Female	253	55.0	207	45.0
Age	18 to 30	152	42.0	210	<b>58.0</b>
	31 to 45	28	68.3	13	31.7
	46 to 60	155	51.7	145	48.3
	Above 60	60	60.0	40	40.0
Educational Qualification	School Education	206	57.9	150	42.1
	College	56	47.1	63	52.9
	Professional	133	40.5	195	<b>59.5</b>
Occupation	Govt employee	46	47.9	50	52.1
	Aided/ govt. Funded	43	35.5	78	<b>64.5</b>
	Home Maker	167	55.5	134	44.5
	Coolie	41	48.8	43	51.2
	Farmer	25	50.0	25	50.0
	Business	73	48.3	78	51.7
Native	Rural	73	47.1	82	<b>52.9</b>
	Urban	322	49.7	326	50.3

It is observed from the above table that **58.6 %** of male and **45.0 %** of female respondents stated that they used to take the readymade packed foods.

It is observed from the above table that **58.0 %** of the respondents having age between 18 to 30 stated that they used to take the readymade packed foods.

It is observed from the above table that **59.5%** of respondents having professional educational qualification stated that they used to take the readymade packed foods.

It is observed from the above table that **64.5%** of respondents working in government funded organisations stated that they used to take the readymade packed foods.

It is observed from the above table that **52.9%** of rural respondents stated that they used to take the readymade packed foods.

**Question 2: I visit the fast food shops regularly**

**Table 2 (a)**

**Response of Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
530	<b>66.0</b>	273	34.0

It is observed from the above table that 66% of the respondents stated that they don't visit the fast food shops regularly.

**Table 2 (b)**

**Response of Sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	191	55.7	152	44.3
	Female	339	73.7	121	26.3
Age	18 to 30	209	57.7	153	42.3
	31 to 45	33	80.5	8	19.5
	46 to 60	207	69.0	93	31.0
	Above 60	81	81.0	19	19.0
Educational Qualification	School Education	260	73.0	96	27.0
	College	70	58.8	49	41.2
	Professional	200	61.0	128	39.0
Occupation	Govt employee	62	64.6	34	35.4
	Aided/ govt. Funded	70	57.9	51	42.1
	Home Maker	233	77.4	68	22.6
	Coolie	53	63.1	31	36.9
	Farmer	24	48.0	26	52.0
	Business	88	58.3	63	41.7
Native	Rural	92	59.4	63	40.6
	Urban	438	67.6	210	32.4

It is observed from the above table that **55.7%** of male and **73.7%** of female respondents stated that they don't visit the fast food shops regularly.

It is observed from the above table that **81.0%** of the respondents having age above 60 stated that they don't visit the fast food shops regularly.

It is observed from the above table that **77.4%** of home makers stated that they don't visit the fast food shops regularly.

It is observed from the above table that **67.6%** of urban respondents stated that they don't visit the fast food shops regularly.

**Question 3: I found food with adulteration**

**Table 3 (a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
330	41.1	473	<b>58.9</b>

It is observed from the above table that 58.9% of the respondents stated that they found the food with adulteration.

**Table 3 (b)**

**Response of Sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	137	39.9	206	<b>60.1</b>
	Female	193	42.0	267	<b>58.0</b>
Age	18 to 30	122	33.7	240	<b>66.3</b>
	31 to 45	25	61.0	16	39.0
	46 to 60	130	43.3	170	56.7
	Above 60	53	53.0	47	47.0
Educational Qualification	School Education	171	48.0	185	52.0
	College	47	39.5	72	60.5
	Professional	112	34.1	216	<b>65.9</b>
Occupation	Govt employee	32	33.3	64	<b>66.7</b>
	Aided/ govt. Funded	41	33.9	80	66.1
	Home Maker	143	47.5	158	52.5
	Coolie	31	36.9	53	63.1
	Farmer	13	26.0	37	74.0
	Business	70	46.4	81	53.6
Native	Rural	52	33.5	103	<b>66.5</b>
	Urban	278	42.9	370	57.1

It is observed from the above table that **60.1%** of male and **58.0%** of female respondents stated that they found the food adulterations.

It is observed from the above table that **66.3%** of the respondents having age between 18 to 30 stated that they found the food adulteration.

It is observed from the above table that **65.9%** of respondents having professional educational qualification stated that they found the food adulterations.

It is observed from the above table that **66.7%** of government employees stated that they found the food adulterations.

It is observed from the above table that **66.5%** of rural respondents stated that they found the food adulterations.

**Question 4: I know the consumer rights and court regulations**

**Table 4(a)**

**Response of Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
390	48.6	413	<b>51.4</b>

It is observed from the above table that **51.4%** of the respondents stated that they know the consumer rights and court regulations.

**Table 4 (b)**

**Response of Sample with respect to Demographic Variables**

<b>Demographic Variables</b>		<b>No</b>		<b>Yes</b>	
		<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
<b>Sex</b>	<b>Male</b>	168	49.0	175	<b>51.0</b>
	<b>Female</b>	222	48.3	238	<b>51.7</b>
<b>Age</b>	<b>18 to 30</b>	165	45.6	197	54.4
	<b>31 to 45</b>	14	34.1	27	<b>65.9</b>
	<b>46 to 60</b>	161	53.7	139	46.3
	<b>Above 60</b>	50	50.0	50	50.0
<b>Educational Qualification</b>	<b>School Education</b>	206	57.9	150	42.1
	<b>College</b>	43	36.1	76	<b>63.9</b>
	<b>Professional</b>	141	43.0	187	57.0
<b>Occupation</b>	<b>Govt employee</b>	29	30.2	67	<b>69.8</b>



	<b>Aided/ gov. Funded</b>	55	45.5	66	54.5
	<b>Home Maker</b>	164	54.5	137	45.5
	<b>Coolie</b>	53	63.1	31	36.9
	<b>Farmer</b>	23	46.0	27	54.0
	<b>Business</b>	66	43.7	85	56.3
<b>Native</b>	<b>Rural</b>	83	<b>53.5</b>	72	46.5
	<b>Urban</b>	307	47.4	341	52.6

It is observed from the above table that **51.0%** of male and **51.7%** of female respondents stated that they know the consumer rights and court regulations.

It is observed from the above table that **65.9%** of the respondents having age between 31 to 45 stated that they know the consumer rights and court regulations.

It is observed from the above table that **63.9%** of respondents having college educational qualification stated that they know the consumer rights and court regulations.

It is observed from the above table that **69.8%** of government employees stated that they know the consumer rights and court regulations.

It is observed from the above table that **53.5%** of rural respondents stated that they do not know the consumer rights and court regulations.

#### **Question 5: Preventing Food Adulteration is Possible**

**Table 5(a)**

**Response of Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
384	47.8	418	<b>52.1</b>

It is observed from the above table that **52.1%** of the respondents stated that preventing food adulteration is possible.

**Table 5 (b)**

**Response of Sample with respect to Demographic Variables**

<b>Demographic Variables</b>		<b>No</b>		<b>Yes</b>	
		<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
<b>Sex</b>	<b>Male</b>	147	42.9	195	<b>56.9</b>
	<b>Female</b>	237	51.5	223	<b>48.5</b>

	<b>Professional</b>	155	47.3	173	<b>52.7</b>
<b>Occupation</b>	<b>Govt employee</b>	43	44.8	53	55.2
	<b>Govt. Funded</b>	56	46.3	64	52.9
	<b>Home Maker</b>	155	<b>51.5</b>	146	48.5
	<b>Coolie</b>	37	44.0	47	56.0
	<b>Farmer</b>	21	42.0	29	<b>58.0</b>
	<b>Business</b>	72	47.7	79	52.3
<b>Native</b>	<b>Rural</b>	78	50.3	77	49.7
	<b>Urban</b>	306	47.2	341	<b>52.6</b>

It is observed from the above table that **56.9%** of male and **48.5%** female respondents stated that preventing food adulteration is possible.

It is observed from the above table that **58.0%** farmers stated that preventing food adulteration is possible. But **51.5%** home makers stated that preventing food adulteration is not possible.

It is observed from the above table that **52.6%** urban respondents stated that preventing food adulteration is possible.

#### **Question 6: Adding Agenomoto in the Fast Food is not a mistake**

**Table 6**

##### **Response of Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
605	<b>75.3</b>	198	24.7

It is observed from the above table that **75.3 %** of the respondents accepted that adding Agenomoto in the fast food is a mistake.

#### **Question 7: I check the Expiry Date When I Buy Food and Grocery Items**

**Table 7(a)**

##### **Response of Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
172	21.4	631	<b>78.6</b>

It is observed from the above table that **78.6%** of the respondents stated that they check the expiry date when they buy food and grocery items.

**Table 7(b)**

**Response of Sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Native	Rural	50	32	105	68
	Urban	132	20.4	516	79.6

It is observed from the above table that **32%** of respondents stated that they check the expiry date when they buy food and grocery items.

**Question 8: In the High Priced Hotels, the Food Adulteration is not possible**

**Table 8**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
546	<b>68.0</b>	257	32.0

It is observed from the above table that **68.0%** of the respondents stated that even in the high priced hotels too, the food adulterations is possible.

**Question 9: I am not healthy due to Argy Products with Chemicals and Pesticides**

**Table 9**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
211	26.3	592	<b>73.7</b>

It is observed from the above table that **73.7%** of the respondents stated that they are not healthy due to argy products with chemicals and pesticides.

**Question 10: I provide healthy and traditional food to my kids**

**Table 10(a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
304	37.9	499	<b>62.1</b>

It is observed from the above table that **62.1%** of the respondents stated that they provide healthy and traditional food to their kids.

**Table 10(b)**

**Response of Sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Occupation	Govt employee	46	47.9	50	52.1
	Government Aided	43	35.5	78	64.5
	Home Maker	105	34.9	196	65.1
	Coolie	27	32.1	57	67.9
	Farmer	21	42.0	29	58.0
	Business	62	41.1	89	58.9
	Native	Rural	67	43.2	88
Urban		237	36.6	411	63.4

It is observed from the above table that **47.9%** of the government employees stated that they do not provide healthy and traditional food to their kids.

It is observed from the above table that **43.2%** of rural respondents stated that they do not provide healthy and traditional food to their kids.

**Question 11: I prefer seedless fruits**

**Table 11**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
329	41.0	473	59.0

It is observed from the above table that **59.0%** of the respondents stated that they prefer seedless fruits.

**Question 12: I preserve food items for a week in the refrigerator**

**Table 12(a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage

436	54.3	367	45.7
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It is observed from the above table that **54.3%** of the respondents stated that they don't preserve food items for a week in the refrigerator.

**Table 12(b)**

**Response of Sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Occupation	Govt employee	46	47.9	50	52.1
	Govt. Funded	63	52.1	58	47.9
	Home Maker	173	57.5	128	42.5
	Coolie	52	61.9	32	38.1
	Business	81	53.6	70	46.4

It is observed from the above table that **52.1%** of government employees stated that they preserve food items for a week in the refrigerator.

**Question 13: Even though I Know about Food Adulteration, I am unable to avoid it**

**Table 13**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
232	28.9	571	71.1

It is observed from the above table that **71.1%** of the respondents stated that they know about food adulterations, but they are unable to avoid it.

**1.1 7 FINDINGS**

- 50.8 % of the respondents stated that they used to take the readymade packed foods.
- 66% of the respondents stated that they don't visit the fast food shops regularly.
- 55.7% of male and 73.7% of female respondents stated that they don't visit the fast food shops regularly.
- 67.6% of urban respondents stated that they don't visit the fast food shops regularly.
- 58.9% of the respondents stated that they found the food with adulteration.
- 60.1% of male and 58.0% of female respondents stated that they found the food adulterations.

- g. 51.4% of the respondents stated that they know the consumer rights and court regulations.
- h. 63.9% of respondents having college educational qualification stated that they know the consumer rights and court regulations.
- i. 52.1% of the respondents stated that preventing food adulteration is possible.
- j. 75.3 % of the respondents accepted that adding Agenomoto in the fast food is a mistake.
- k. 78.6% of the respondents stated that they check the expiry date when they buy food and grocery items.
- l. 68.0% of the respondents stated that in the high priced hotels too, the food adulterations is possible.
- m. 73.7% of the respondents stated that they are not healthy due to Agricultural products with chemicals and pesticides.
- n. 62.1% of the respondents stated that they provide healthy and traditional food to their kids.
- o. 59.0% of the respondents stated that they prefer seedless fruits.
- p. 54.3% of the respondents stated that they don't preserve food items for a week in the refrigerator.
- q. 71.1% of the respondents stated that they know about food adulterations, but they are unable to avoid it.

### **1.18 RECOMMENDATIONS**

The following are the recommendations to the common people based on the findings

- a. Try to use the fresh vegetables and grocery items which could be purchased from the local market.
- b. Cleaning before usage and simple adulteration removal techniques would help us to be on the safer side.
- c. Preserving food, raw materials in the refrigerators would affect the help in long run. Avoid that.
- d. Use the wooden, Clay, Mud containers at home to preserve grocery and other materials for cooking
- e. Find the Organic vegetables from local farmers
- f. Take eatables, drinking water and food packets with you, while travel .
- g. Follow the Guidelines of the state and Central Governments on the Prevention of Food Adulation policies

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## 2. PERCEPTION ON BAN OF PLASTICS

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### 1.1 HISTORY OF PLASTICS

Plastic is a word that originally meant “pliable and easily shaped.” It only recently became a name for a category of materials called polymers. The word polymer means “of many parts,” and polymers are made of long chains of molecules. Polymers abound in nature. Cellulose, the material that makes up the cell walls of plants, is a very common natural polymer.

Over the last century and a half humans have learned how to make synthetic polymers, sometimes using natural substances like cellulose, but more often using the plentiful carbon atoms provided by petroleum and other fossil fuels. Synthetic polymers are made up of long chains of atoms, arranged in repeating units, often much longer than those found in nature. It is the length of these chains, and the patterns in which they are arrayed, that make polymers strong, lightweight, and flexible

These properties make synthetic polymers exceptionally useful, and since we learned how to create and manipulate those, polymers have become an essential part of our lives. Especially over the last 50 years plastics have saturated our world and changed the way that we live.

#### 1.1.1 The First Synthetic Plastic

The first synthetic polymer was invented in 1869 by John Wesley Hyatt, who was inspired by a New York firm’s offer of \$10,000 for anyone who could provide a substitute for ivory. The growing popularity of billiards had put a strain on the supply of natural ivory, obtained through the slaughter of wild elephants. By treating cellulose, derived from cotton fiber, with camphor, Hyatt discovered a plastic that could be crafted into a variety of shapes and made to imitate natural substances like tortoise shell, horn, linen, and ivory.

This discovery was revolutionary. For the first time human manufacturing was not constrained by the limits of nature. Nature only supplied so much wood, metal, stone, bone, tusk, and horn. But now humans could create new materials. This development helped not only people but also the environment. Advertisements praised celluloid as the savior of the elephant and the tortoise. Plastics could protect the natural world from the destructive forces of human need.

The creation of new materials also helped free people from the social and economic constraints imposed by the scarcity of natural resources. Inexpensive celluloid made material wealth more widespread and obtainable.

### **1.1.2 Development of New Plastics**

In 1907 Leo Baekeland invented Bakelite, the first fully synthetic plastic, meaning it contained no molecules found in nature. Baekeland had been searching for a synthetic substitute for shellac, a natural electrical insulator, to meet the needs of the rapidly electrifying United States. Bakelite was not only a good insulator; it was also durable, heat resistant, and, unlike celluloid, ideally suited for mechanical mass production. Marketed as “the material of a thousand uses,” Bakelite could be shaped or moulded into almost anything, providing endless possibilities.

Hyatt’s and Baekeland’s successes led major chemical companies to invest in the research and development of new polymers. While Hyatt and Baekeland had been searching for materials with specific properties, the new research programs sought new plastics for their own sake and worried about finding uses for them later.

### **1.1.3 Plastics Come of Age**

World War II necessitated a great expansion of the plastics industry in the United States, as industrial might prove as important to victory as military success. The need to preserve scarce natural resources made the production of synthetic alternatives a priority. Plastics provided those substitutes. Nylon, invented by Wallace Carothers in 1935 as a synthetic silk, was used during the war for parachutes, ropes, body armour, helmet liners, and more. Plexiglas provided an alternative to glass for aircraft windows. A Time magazine article noted that because of the war, “plastics have been turned to new uses and the adaptability of plastics demonstrated all over again.” During World War II plastic production in the United States increased by 300%.

The surge in plastic production continued after the war ended. After experiencing the Great Depression and then World War II, Americans were ready to spend again, and much of what they bought was made of plastic. According to author Susan Freinkel, “In product after product, market after market, plastics challenged traditional materials and won, taking the place of steel in cars, paper and glass in packaging, and wood in furniture. The possibilities of plastics gave some observers an almost utopian vision of a future with abundant material wealth which is inexpensive, safe, sanitary substance gain could be shaped by humans to their every whim.



### **1.1.4 Plastic Problems: Waste and Health**

Plastic's reputation fell further in the 1970s and 1980s as anxiety about waste increased. Plastic became a special target because, while so many plastic products are disposable, plastic lasts forever in the environment. It was the plastics industry that offered recycling as a solution. In the 1980s the plastics industry led an influential drive encouraging municipalities to collect and process recyclable materials as part of their waste-management systems. However, recycling is far from perfect, and most plastics still end up in landfills or in the environment. Grocery-store plastic bags have become a target for activists looking to ban one-use, disposable plastics, and several American cities have already passed bag bans. The ultimate symbol of the problem of plastic waste is the Great Pacific Garbage Patch, which has often been described as a swirl of plastic garbage the size of Texas floating in the Pacific Ocean.

The reputation of plastics has suffered further thanks to a growing concern about the potential threat they pose to human health. These concerns focus on the additives (such as the much-discussed bisphenol A [BPA] and a class of chemicals called phthalates) that go into plastics during the manufacturing process, making them more flexible, durable, and transparent. Some scientists and members of the public are concerned about evidence that these chemicals leaching out of plastics enter into our food, water, and bodies. In very high doses these chemicals can disrupt the endocrine (or hormonal) system. Researchers worry particularly about the effects of these chemicals on children and what continued accumulation means for future generations.

## **1.2 DISADVANTAGES OF PLASTICS**

### **a) Flammable**

This is definitely an advantage in that they can be melted down, however smouldering plastics can release toxic fumes into the environment.

### **b) Cost of Recycling**

While recycling is a plus, recycling is a very costly endeavour.

### **c) Environmental Damage**

Plastic bags have been known to cause a lot of environmental damage. A single plastic bag can take up to 1000 years, to decay completely. This makes the bags stay in environments longer, in turn leading to great build-up on the natural landscape (much more than degradable materials like paper). In other words, the more plastic bags you use, the greater the chances of environmental damage.

### **d) Threat to Animal Life**

As per Marrickville Council of Australia, as many as 100,000 whales, turtles and birds die have been reported to every year, mainly because of plastic in their environment. Plastic bags not only have adverse effects on our natural habitats, but have also been found to be responsible for the death of many animals, mainly on account of the suffocation encountered on eating them.

#### **e) Suffocation**

Not only animals, infants and young children have also been reported to have lost their life, on account of plastic bags. Since plastic bags are thin and airtight as well, children often end up blocking their mouths and nostrils with them. In case they are not being monitored by an adult, this leads to suffocation and, in some cases, even death.

#### **f) Pollution**

Plastic bags are extremely durable. In case you are thinking of this as an advantage, just bring to mind an image of the huge landfill that you visited on the city outskirts, the other day. In most probability, majority of the rubbish present would comprise of plastic bags.

#### **g) Fumes**

Since plastic bags are not bio-degradable, the only way to get rid of them is to burn them up. Though lighting a match to them is easy, it has more than its fair share of disadvantages. The biggest of them is that smouldering plastics can release toxic fumes into the environment, in turn taking the air pollution to much higher levels.

#### **h) Durability**

Plastic is light, moldable, sturdy, and can have countless forms, but one of the most known features is its durability. Plastic is artificially created polymer compound which can survive many centuries before nature is able to degrade it (some degrade into basic ingredients and some only divide into very small pieces). This troublesome ability of plastic doesn't have great immediate impact on our environment, but its continuous dumping into seas and land will eventually create problems for future generations. Even with all this durability, plastic products are not indestructible and it cannot be used as a basic building block for everything we need.

#### **i) Chemical Risk**

Not only that creation and recycling of plastic can cause serious environmental risk, but some of the additives that are infused in plastic can cause permanent harm to our metabolism. Chemicals such as phthalates and BPA are widely used as an additive that prevents degrading of plastic structure, but they also interfere with our natural hormone levels

which can cause serious problems to both males and females (lower testosterone levels in men, and premature girl puberty).

#### **j) Choking Hazard**

Plastic is one of the most popular building materials for small items. This is most evident in toy industry, where vast majority of children toys is manufactured with plastic. These toys and small plastic objects of many uses can easily get into children's hands (especially babies and toddlers) that unknowingly put them in their mouth. To prevent these serious accidents, governments have implemented detailed set of rules which force manufacturers to clearly label their plastic products and warn users of the possible choking potential. Another problematic plastic product that can cause serious injuries or death are plastic bags (grocery or trash bags) who can sometimes end up wrapped around children faces, disrupting their breathing.

### **1.3 PLASTICS IN MEDICINE**

Plastic is defined as any material that is part of a huge range of semi-synthetic or synthetic solids that are used in creating industrial products. Usually, plastics are polymers that feature a high molecular mass, and often incorporate other substances to both improve the appearance and function as well as lower production costs. The word "plastic" has its roots in the Greek word "plastikos," which translates into "capable of being molded or shaped". Plastic is renowned for being very malleable as it is being manufactured, which enables plastic to be machined, cast, extruded or pressed into a variety of shapes.

The use of plastics revolutionized the field of medicine making patients safer, and procedures simpler. For example, doctors experienced difficulties when the MRI machine was first introduced. An MRI is basically a giant magnet with the ability to attract any metal object within range. Metal objects situated too close to the MRI machine could become airborne and dangerous if they should fly towards the magnetized unit. Today, all of the equipment that surrounds an MRI is created out of plastic to guard against this. Even tools utilized to install the MRI are fabricated out of plastic.





The incorporation of plastic into modern medicine has steadily increased in the last decade. Plastics have contributed to a reduction in medical costs, infectious disease and pain management. High tech polymers are used to create new and improved artificial limbs and plastic disposable delivery devices have succeeded in reducing the risk of infection to patients. Patients directly benefit from the use of plastic with more lives being saved, improved and prolonged due to its use.



Even for something as simple and commonplace as eyeglasses, plastics have improved people’s lives. The incorporation of plastics into the frames and lenses of eyewear has helped to reduce their weight and increase overall safety. Consumers who do not want to wear eyeglasses have the option of wearing contact lenses, which are also made of plastic.

Lately, in the media, plastics have been getting a bad reputation. Due in part to the fact that plastic is not bio-degradable. But it is not likely that anything can replace plastic in the field of medicine, or that its use will be reduced in the very near future. The medical industry has been greatly improved due to the incorporation of plastics across a whole range of uses in all fields of medicine. The medical industry has become safer as a result of the introduction of plastics. Ultimately the patients, and that’s you and me, benefit the most from the use of plastics in medicine.

#### 1.4 IDENTIFYING PLASTICS

There is no mandatory need to mark plastics however, as an aid to recycling; the BPF recommends that larger parts and packaging should be marked with an appropriate identification code. To identify plastics packaging materials, the BPF recommends the use of a coding system devised by the Plastics Industry Association. In brief;

	PET	polyethylene terephthalate	Water bottles, soft and fizzy drink bottles, pots, tubs, oven ready trays, jam jars
	HDP E	high-density polyethylene	Chemical drums, jerricans, carboys, toys, picnic ware, household and kitchenware, cable insulation, carrier bags, food wrapping material.
	PVC	polyvinyl chloride	Window frames, drainage pipe, water service pipe, medical devices, blood storage bags, cable and wire insulation, resilient flooring, roofing membranes, stationery, automotive interiors and seat coverings, fashion and footwear, packaging, cling film, credit cards, synthetic leather and other coated fabrics.
	LDP E	low density polyethylene	Squeeze bottles, toys, carrier bags, high frequency insulation, chemical tank linings, heavy duty sacks, general packaging, gas and water pipes.

	PP	polypropylene	Polypropylene can be processed by virtually all thermoplastic-processing methods. Most typically PP Products are manufactured by: Extrusion Blow Moulding, Injection Moulding, and General Purpose Extrusion. Expanded Polypropylene (EPP) may be moulded in a specialist process.
	PS	polystyrene	Toys and novelties, rigid packaging, refrigerator trays and boxes, cosmetic packs and costume jewellery, lighting diffusers, audio cassette and CD cases.

The On-Pack Recycling Label (OPRL) provides information to consumers on if a plastic product can be recycled. Retailers and brand owners are encouraged to use this help communicate with the public on what can and cannot be recycled.

In summary, Chung has three pieces of advice on plastics.

- a) Try to understand your plastics, the different categories and what types can or cannot be recycled.
- b) If you must buy plastic, consider buying pre-loved (second hand) items, like toys and so on
- c) Cut down on using plastic (especially those used just once and then thrown away) and look for alternatives.

### 1.5 THE ‘SEVEN SISTERS’ OF PLASTIC

Plastics under the categories of one, two and five are 99% recyclable. The other types are more difficult, due to the lack of supporting facilities.

The seven general categories of plastics are:

#### 1. Polyethylene Terephthalate (PET or PETE)



Category 1: Polyethylene Terephthalate (PET or PETE). Photo: The Star/Azman Ghani  
Commonly recycled, PET sometimes absorbs odours and flavours from the foods and drinks that are stored in them.

This type of plastic is used to make many common household items like beverage bottles (mineral water bottles), food trays, medicine jars, rope, clothing and carpet fibre.

Festive season cookie jars are also made from PET material, with their caps made from Polypropylene (PP).

## 2. High-Density Polyethylene (HDPE)



Category 2: High-Density Polyethylene

(HDPE). Photo: The Star/Azman Ghani

Also commonly recycled, HDPE products are safe and not known to transmit any chemicals into foods or drinks.

Items made from HDPE plastic include containers for milk and non-carbonated drinks, toys, buckets, motor oil, shampoos and conditioners, soap bottles, detergents, and bleaches.

## 3. Polyvinyl Chloride (PVC)



Category 3: Polyvinyl Chloride (PVC). Photo: The Star/Azman Ghani

PVC is most commonly found in plumbing pipes. It is also used to make credit cards and synthetic leather products.

However, PVC should not be mixed with food items as it can be harmful if ingested.

(In the early 1990s, several Thai workers died mysterious deaths in Singapore. It was later found that they had been cooking rice in PVC pipes that could be easily found for free on construction sites. When heated, PVC pipes give off potentially toxic hydrogen chloride fumes.)

## 4. Low-Density Polyethylene (LDPE)





Category 4: Low-Density Polyethylene

(LDPE). Photo: The Star/Azman Ghani

Sometimes recycled, this is a plastic that tends to be both durable and flexible.

Items such as cling-film, bubble

wrap, sandwich bags, squeezable bottles, and plastic grocery bags are made from LDPE.

### 5. Polypropylene (PP)



Category 5: Polypropylene (PP). Photo: The Star/Azman Ghani

Commonly recycled, PP is strong and can usually withstand higher temperatures. It is commonly used to make lunch boxes and margarine containers.

Yoghurt pots, syrup bottles,

medicine bottles and plastic bottle caps are often made from PP as well.

### 6. Polystyrene (PS)

Category 6: Polystyrene (PS). Photo: The Star/Azman Ghani

PS can be recycled but it is usually difficult to do so. Items such as disposable coffee cups, plastic food boxes, egg boxes, clear vegetable clamshell packaging are made from PS.

Other things made from this material are bottles holding yoghurt or other similar drinks, plastic cutlery, packing foam and cassette tape covers.



## 1.6 METHODS OF DISPOSAL PLASTIC

Industrialized nations are grappling

with the problem of expeditious and safe waste disposal. Non-biodegradable and toxic wastes like radioactive remnants can potentially cause irreparable damage to the environment and human health if not strategically disposed of.

Though waste disposal has been a matter of concern for several decades, the main problem has been taking massive proportions due to growth in population and industrialization, the two major factors that contribute to waste generation. Though some advancement is being made in waste disposal methods, they are still not adequate. The challenge is to detect newer and unhazardous methods of waste disposal and put these methods to use.

### **1.6.1 Effective Waste Disposal Methods**

**1. Preventing or reducing waste generation:** Extensive use of new or unnecessary products is the root cause of unchecked waste formation. The rapid population growth makes it imperative to use secondhand products or judiciously use the existing ones because if not, there is a potential risk of people succumbing to the ill effects of toxic wastes. Disposing of the wastes will also assume formidable shape. A conscious decision should be made at the personal and professional level to judiciously curb the menacing growth of wastes.

**2. Recycling:** Recycling serves to transform the wastes into products of their own genre through industrial processing. Paper, glass, aluminum, and plastics are commonly recycled. It is environmentally friendly to reuse the wastes instead of adding them to nature. However, processing technologies are pretty expensive.

**3. Incineration:** Incineration features combustion of wastes to transform them into base components, with the generated heat being trapped for deriving energy. Assorted gases and inert ash are common by-products. Pollution is caused by varied degrees dependent on nature of waste combusted and incinerator design. Use of filters can check pollution. It is rather inexpensive to burn wastes and the waste volume is reduced by about 90%. The nutrient rich ash derived out of burning organic wastes can facilitate hydroponic solutions. Hazardous and toxic wastes can be easily be rid of by using this method. The energy extracted can be used for cooking, heating, and supplying power to turbines. However, strict vigilance and due diligence should be exercised to check the accidental leakage of micro level contaminants, such as dioxins from incinerator lines.

**4. Composting:** It involves decomposition of organic wastes by microbes by allowing the waste to stay accumulated in a pit for a long period of time. The nutrient rich compost can be used as plant manure. However, the process is slow and consumes a significant amount of land. Biological reprocessing tremendously improves the fertility of the soil.



**5. Sanitary Landfill:** This involves the dumping of wastes into a landfill. The base is prepared of a protective lining, which serves as a barrier between wastes and ground water, and prevents the separation of toxic chemicals into the water zone. Waste layers are subjected to compaction and subsequently coated with an earth layer. Soil that is non-porous is preferred to mitigate the vulnerability of accidental leakage of toxic chemicals. Landfills should be created in places with low groundwater level and far from sources of flooding. However, a sufficient number of skilled manpower is required to maintain sanitary landfills.

**6. Disposal in ocean/sea:** Wastes generally of radioactive nature are dumped in the oceans far from active human habitats. However, environmentalists are challenging this method, as such an action is believed to spell doom for aquatic life by depriving the ocean waters of its inherent nutrients. Effective waste disposal calls for concerted efforts from all, no matter how anxious or worried they may be about our environment.

### 1.7 ALTERNATIVE OF PLASTICS

**Glass:** Glass is made from sand and not made from fossil fuels unlike plastics. This is a renewable thing that doesn't have chemicals which can come in contact with your food and body. It can be easily recycled too and can be made into new bottles and reused glass jars for storage.

**Reusable Shopping Bags:** Most supermarkets offer plastic bag alternatives today. Some of it has patterns and some reusable **packaging** is printed with the establishment's name. These reusable bags come in canvas, cotton, hemp, leather, fiber, and woven plastic. The nylon ones can be folded up into a pouch and small enough to suit in your pocket. The good point about avoiding plastic bags is you don't have much to accumulate and stock in your cupboards.

**Plastic Additives:** While some are preoccupied in making plastic alternatives, there are some who are making conventional biodegradable thermoplastics by using metal compound additives called prodegradant concentrates (PDCs). PDCs undergo oxidation processes that turn plastics into brittle and low-molecular-weight fragments. As fragments disintegrate, they turn into carbon dioxide, water, and biomass that contain no harmful residues. These additives are used to

produce single-use plastic **packaging** like food containers, disposable diapers, landfill covers, thin plastic shopping bags, and trash bags. While the additives are not completely



biodegradable, PDC-containing polymers are eco-friendlier than purer polymer that stock in landfills for several years.

### **Milk Protein**

Scientists indicate that milk protein can help produce a biodegradable plastic to make insulation, furniture cushions, **packaging**, and other products. Researchers are reconsidering casein, the main protein present in milk, into a biodegradable material that complements the compressibility and stiffness of polystyrene. The contemporary milk-based plastic doesn't crack easily, and it is less toxic.



**Chicken Feathers:** The United States found out that disposing of chicken feathers is a problem, but with the help of innovation, they can be a material useful to make a water-resistant thermoplastic. Chicken feathers consist of keratin, a tough and durable protein like plastics. It can be found in hair and wool. The keratin-based plastic is proven to be more resistant to tearing

than other plastics made from soy, starch, and other agricultural sources. It is cost-effective, renewable, and fully biodegradable.

**Liquid Wood:** Liquid wood looks, feels and acts like plastics but unlike petroleum-based plastic, this is biodegradable and suitable for various product packaging. Some researchers use this as substitute to make toys, golf tees, and hi-fi speaker boxes.

**PCL Polyesters:** Polycaprolactone is a synthetic aliphatic polyester that's not created from renewable resources but could degrade after weeks of composting. The process is easy, but it is seldom used because of its manufacturing costs.

**PHA Polyesters:** Polyhydroxyalkanoate (PHA) polyesters are biodegradable plastics that resemble with man-made polypropylene. They are less flexible than petroleum-based plastics, and useful in plastic films, injection-molded bottles, and packaging.

### **PLA Polyesters**

Polylactic acid (PLA) is an aliphatic polyester and can be made from lactic acid. PLA can also be created from wheat or sugarcane. It has the ability to decompose within forty-seven days in an industrial composting site, and it would not release toxic fumes when burned. It is open to new packaging applications for green plastic, automotive parts, and coffee cups.

## **1.8 SIGNIFICANCE OF THE STUDY**

Over the last century and a half humans have learned how to make synthetic polymers, sometimes using natural substances like cellulose, but more often using the

plentiful carbon atoms provided by petroleum and other fossil fuels. Synthetic polymers are made up of long chains of atoms, arranged in repeating units, often much longer than those found in nature. It is the length of these chains, and the patterns in which they are arrayed, that make polymers strong, lightweight, and flexible. In other words, it's what makes them so plastic. Plastic bags are extremely durable. In case you are thinking of this as an advantage, just bring to mind an image of the huge landfill that you visited on the city outskirts, the other day. Not only that creation and recycling of plastic can cause serious environmental risk, but some of the additives that are infused in plastic can cause permanent harm to our metabolism. Plastic is one of the most popular building materials for small items. This is most evident in toy industry, where vast majority of children toys is manufactured with plastic. Recently, the Government of Tamil Nadu banned the use of plastics in the state which was appreciated by everyone. So, the investigators thought that this is the right time to know the perception of the common people on the ban of the plastics.

### **1.9 STATEMENT OF THE PROBLEM**

Perception of Tirunelveli People on Ban of Plastics

### **1.10 OBJECTIVES OF THE STUDY**

- c. To find out the level of perception of Tirunelveli People on Ban of Plastics
- d. To find out the level of Perception of Tirunelveli People on Ban of Plastics with respect to demographic variables such as Gender, age, qualification, occupation and place.

### **1.11 METHOD USED FOR THE STUDY**

The investigators adopted the survey method to find out the Perception of Tirunelveli People on Ban of Plastics

### **1.12 POPULATION AND SAMPLE FOR THE STUDY**

The population for the present study consisted of the common people in Tirunelveli city. The investigators have used simple random sampling technique for selecting the sample from the population. The sample consists of 778 people in and around Tirunelveli city.

### **1.13 DISTRIBUTION OF THE SAMPLE**

The following are the distribution of sample in and around Tirunelveli District

<b>Demographic Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>	<b>Male</b>	392	50.4
	<b>Female</b>	386	49.6

<b>Age</b>	<b>18 to 30</b>	228	29.3
	<b>31 to 45</b>	309	39.7
	<b>46 to 60</b>	160	20.6
	<b>Above 60</b>	81	10.4
<b>Place</b>	<b>Rural</b>	187	24.0
	<b>Urban</b>	591	76.0

#### 1.14 TOOL USED FOR THE PRESENT STUDY

By keeping various objectives of the study in mind, the following tool was used by professor and their team for collecting the data.

1. Personal data form.
2. Perception on Ban of Plastics Questionnaire was developed and validated by Thomas Alexander, Michael J Leo and their team (2019).

The questionnaire contains 20 items and each item has two choices namely 'Yes' and 'No'. The scoring of the questionnaire is '1' for 'Yes' and '0' for 'No'. The questionnaire is annexed at the end of this chapter.

#### 1.15 ANALYSIS OF DATA

##### Question 1: Plastic is against our traditional way of using utensils

**Table 1**

##### Response of Total Sample

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
86	11.1	692	<b>88.9</b>

It is inferred from the above table that 88.9% of the respondents accepted that the plastic is against our traditional way of using utensils.

##### Question 2: We can live without plastic materials

**Table 2 (a)**

##### Response of Total Sample

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
195	25.1	583	<b>74.9</b>

It is inferred from the above table that 74.9% of the respondents accepted that we can live without plastic materials.

**Table 2 (b)**

**Response of total Sample with respect to Demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Place	Rural	86	46.0	101	54.0
	Urban	109	18.4	482	81.6

It is inferred from the above table that 46.0% of the rural respondents accepted that we cannot live without plastic materials.

**Question 3: It is good to use plastic objects and utensils**

**Table 3 (a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
515	66.2	263	33.8

It is inferred from the above table that 66.2% of the respondents said that it is not good to use plastic objects and utensils.

**Table 3 (b)**

**Response of total Sample with respect to Demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Place	Rural	87	46.5	100	53.5
	Urban	428	72.4	163	27.6

It is inferred from the above table that 53.5% of the rural respondents accepted that it is good to use plastic objects and utensils and 72.4% of the urban respondents observed that it is not good to use plastic objects and utensils.

**Question 4: Our Traditional Utensils are the Real Alternatives to Plastic Materials**

**Table 4**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage

120	15.4	658	<b>84.6</b>
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It is inferred from the above table that 84.6% of the respondents accepted that our traditional utensils are the real alternatives to plastic materials.

**Question 5: The world without plastics is not possible**

**Table 5**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
286	36.8	492	<b>63.2</b>

It is inferred from the above table that 63.2% of the respondents accepted that the world without plastics is not possible.

**Question 6: I welcome the decision of banning plastic**

**Table 6 (a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
98	12.6	680	<b>87.4</b>

It is inferred from the above table that 87.4% of the respondents welcomed the decision of banning plastic.

**Table 6 (b)**

**Response of total Sample with respect to Demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	57	14.5	335	<b>85.5</b>
	Female	41	10.6	345	<b>89.4</b>
	Professional	27	23.9	86	<b>76.1</b>
Occupation	Government	10	11.1	80	<b>88.9</b>
	Aided	41	25.2	122	<b>74.8</b>
	Home maker	18	6.8	247	<b>93.2</b>
	Business	17	10.4	146	<b>89.6</b>
	Daily wages	6	9.7	56	<b>90.3</b>

	<b>Farmer</b>	6	17.1	29	<b>82.9</b>
<b>Place</b>	<b>Rural</b>	48	25.7	139	<b>74.3</b>
	<b>Urban</b>	50	8.5	541	<b>91.5</b>

It is inferred from the above table that 85.5% of the male and 89.4% of female respondents welcomed the decision of banning plastic.

It is inferred from the above table that 88.9% of the government employees, 74.8% of respondents from aided organisations, 93.2% of the home makers, 89.6% of the business people, 90.3% of the daily wages and 82.9% of farmers welcomed the decision of banning plastic.

It is inferred from the above table that 74.3% of the rural respondents and 91.5% of the urban respondents welcomed the decision of banning plastic.

**Question 7: I know the plastic is used to be mixed with food items**

**Table 7 (a)**

**Response of Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
208	26.7	570	<b>73.3</b>

It is inferred from the above table that 73.3% of the respondents accepted that they know the plastic is used to be mixed with food items.

**Table 7 (b)**

**Response of total Sample with respect to Demographic variables**

<b>Demographic variables</b>		<b>No</b>		<b>Yes</b>	
		<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
<b>Occupation</b>	<b>Government</b>	29	32.2	61	<b>67.8</b>
	<b>Aided</b>	41	25.2	122	<b>74.8</b>
	<b>Home maker</b>	73	27.5	192	<b>72.5</b>
	<b>Business</b>	47	28.8	116	<b>71.2</b>
	<b>Daily wages</b>	12	19.4	50	<b>80.6</b>
	<b>Farmer</b>	6	17.1	29	<b>82.9</b>

It is inferred from the above table that 67.8% of the government employees, 74.8% of respondents from aided organisations, 72.5% of the home makers, 71.2% of the business

people, 80.6% of the daily wages and 82.9% of farmers accepted that they know the plastic is used to be mixed with food items.

**Question 8: The alternative materials to plastics are expensive**

**Table 8**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
244	31.4	534	<b>68.6</b>

It is inferred from the above table that 68.6% of the respondents accepted that the alternative materials to plastics are expensive.

**Question 9: Majority of my home utensils are made up of plastics**

**Table 9 (a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
260	33.4	518	<b>66.6</b>

It is inferred from the above table that 66.6% of the respondents accepted that majority of their home utensils are made up of plastics.

**Table 9 (b)**

**Response of total Sample with respect to Demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Place	Rural	46	24.6	141	<b>75.4</b>
	Urban	214	36.2	377	<b>63.8</b>

It is inferred from the above table that 75.4% of the rural respondents accepted that the majority of their home utensils are made up of plastics.

**Question 10: The plastic packets of multinational companies should be also banned**

**Table 10**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
82	10.5	696	<b>89.5</b>



It is inferred from the above table that 89.5% of the respondents accepted that the plastic packets of multinational companies should be also banned.

**Question 11: I know that the excess of plastic is a factor for cancer**

**Table 11 (a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
82	10.5	696	<b>89.5</b>

It is inferred from the above table that 89.5% of the respondents accepted that they know the excess of plastic is a factor for cancer

**Question 12: The ban of plastic will help to increase the ground water**

**Table 12 (a)**

**Response of Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
83	10.7	695	<b>89.3</b>

It is inferred from the above table that 89.3% of the respondents accepted that the ban of plastic will help to increase the ground water.

**1.16 FINDINGS**

- a. 85.5% of the male and 89.4% of female respondents welcomed the decision of banning plastic.
- b. 73.3% of the respondents accepted that they know the plastic is used to be mixed with food items.
- c. 68.6% of the respondents accepted that the alternative materials to plastics are expensive.
- d. 66.6% of the respondents accepted that majority of their home utensils are made up of plastics.
- e. 89.5% of the respondents accepted that the plastic packets of multinational companies should be also banned.
- f. 89.5% of the respondents accepted that they know the excess of plastic is a factor for cancer
- g. 89.3% of the respondents accepted that the ban of plastic will help to increase the ground water.

**1.17 RECOMMENDATIONS**

The following are the suggestions and recommendations based on the findings.

- a. **Glass:** Glass is made from sand and not made from fossil fuels unlike plastics.
- b. **Reusable Shopping Bags:** Most supermarkets offer plastic bag alternatives today. These reusable bags come in canvas, cotton, hemp, leather, fiber, and woven plastic.
- c. **Milk Protein:** Scientists indicate that milk protein can help produce a biodegradable plastic to make insulation, furniture cushions, packaging, and other products.
- d. **Chicken Feathers:** The United States found out that disposing of chicken feathers is a problem, but with the help of innovation, they can be a material useful to make a water-resistant thermoplastic. Chicken feathers are consisting of keratin, a tough and durable protein like plastics.
- e. **Liquid Wood:** Liquid wood looks, feels and acts like plastics but unlike petroleum-based plastic, this is biodegradable and suitable for various product packaging.
- f. Take the stainless steel, silver, vessels with you, to purchase food items from the shop
- g. The furniture and others articles could be made up of wood and steel.

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### 3. PERCEPTION OF TIRUNELVELI PEOPLE ON HAPPINESS

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#### 1.1 INTRODUCTION

The fundamental reason why happiness is so important is that it's extremely vital to our own goals in life and can help us achieve many other cherished personal ambitions and goals. Also, by being happy, one can have the potential to change many other lives just by being ourselves. When happiness is on board, this not only affects the self but it has positive effects on all those with whom you come into contact.

#### 1.2 CAUSES OF HAPPINESS

All living beings have the same general wish: we all want to be happy and free from suffering. Everyone shares this common wish. It doesn't matter which country we're from, what tradition we follow, our background, or our beliefs our goal is the same.

One should embrace this deep, common ground we share, and try to respect, appreciate, and have patience with one another. One has to learn from another, support one another, and to grow together. Everyone is important and special.

Since we all like happiness and peace, we shouldn't ignore their causes. We can't really expect results to appear without their causes. There is nothing we know of where results have arisen without their necessary causes and conditions. So, as much as we love the results, we should also love the causes and conditions behind them. As much as we want to be happy, we have to love the causes for happiness as well. The foundation of happiness is to bring more joy to our own hearts—appreciation for who we are and what we have. Many times we ignore what we already have. We're always looking ahead to somewhere else without looking at our own richness. We look outside at what others have and ignore our own beauty. We should have more joy and appreciation for who we are and what we already have. We're all such amazing beings who are so fortunate to enjoy one another's company. Let's deeply remember our richness, and celebrate and appreciate one another and ourselves.

*The first cause of happiness* is to see that's it's not enough for us to be happy without thinking about others. We should expand our concern for the happiness of all living beings. Wishing and working for others' happiness is called "love." Boundless love is the basic nature of all living beings. Without love everything becomes dry. Love makes everything rich, lush, and vital. It's like a protein that makes a more nutritious life. Love without clinging naturally shines on every living being like sunlight. We become a friend to everyone, and our mind becomes very calm and peaceful, clear and gentle. This is something we can

experience for ourselves. With love, we see everyone as special, beautiful, and lovely—outside and inside. We might not see this because of our limited preferences and vision, but everyone has unique beauty. We depend on others for everything we have—their cooperation and support makes everything possible for us. We're here for all living beings and we have a responsibility to love everyone. So we should bring on the love, opening and radiating it in our hearts as much as we can.

*The second cause of happiness* is compassion, which is the outreaching expression of our love. Compassion is the wish and activity to help relieve the suffering of others. When someone we love is in trouble, we naturally feel compassion and want to help. Every living being experiences difficulties, suffering, and sorrow. No one is above that. Genuine compassion connects to others in their current situation. We stand with them and share their experience, their thoughts, and their pains. We can offer our help according to our capabilities, and each time feel joy, appreciation, and happiness for however much we're able to help, and sincerely wish to be able to help more in the future. If we have courage, commitment, and determination, gradually our capabilities will grow and our compassionate activities will increase. Rather than becoming bored and tired with others' difficulties—including our own—take them as opportunities to increase our courage, confidence, joy, and our love, compassion, and wisdom.

*The third cause of happiness* is rejoicing. Rejoicing in others' happiness is very special because it reaffirms and strengthens our own love and compassion. When we love someone and they experience some degree of happiness and peace, or they're relieved of suffering and difficulties, it's always a cause to rejoice. How wonderful it is! How special it is! May their joy, peace, and achievement last forever! Rather than feeling jealous or competitive with their success, let's celebrate their happiness and wish that it becomes even greater! This is boundless joy.

Along with boundless love, boundless compassion, and boundless joy, *the fourth cause of happiness* boundless equanimity, or balance. With balance we become more flexible and strong so that we can grow and develop without allowing anything to become too rigid and extreme. We become imbalanced when we hold on to things too tightly. Deep down, our nature is open and fluid, dynamic, creative, and inclusive. With boundless equanimity, we bring balance to our activities and our minds, and we're more fully expressive of our goodness nature.

Where do these boundless qualities of love, compassion, joy, and equanimity come from? We all know that these don't come from outside. They come from our own hearts and

minds. They're an infinite treasure that we already have—we just have to open and reveal them. This is the nature of the mind. When we're in touch with our love, it means we're in touch with the essence of our mind and hearts. Whatever we do, it's so important to be in touch with our hearts and minds. Essentially this means that we relax into the nature of our minds, and share our natural, beautiful qualities with others. This will bring lasting happiness for everyone.

### **1.3 BENEFITS OF HAPPINESS**

***Happiness Boosts Productivity:*** Consider a study which measured people's initial level of happiness, and then followed their job performance for the next 18 months. Even after controlling for other factors, people who were happier at the beginning received higher pay and better evaluations later on.

***Happiness Improves Your Physical Health:*** One of the most famous happiness studies includes the diaries of 180 Catholic nuns born before 1917. More than five decades later, researchers looked at those diary entries and coded them for positive emotional content.

The results were startling. The higher the level of positivity as 20-somethings, the longer these nuns tended to live. There was a seven-year difference in longevity between the happiest and least happy nuns! At any age, the nuns who used the fewest positive emotion words (e.g., contentment, appreciation, hope, love, or happiness) had twice the death risk when compared to those who used the most positive emotion words. Happiness is good for your health. It predicts lower heart rate and blood pressure. It combats stress, boosts your immune system, and protects you from aches and pains.

An experiment I found even more fascinating revealed that immune system activity in the same person fluctuates depending on their happiness. For two months, 30 dental students took pills containing harmless blood protein from rabbits, causing an immune response in humans. Participants rated their happiness by indicating whether they had experienced various positive emotions that day. On days when they were happier, the students had a better immune response, as measured by the presence of an antibody that defends against foreign substances.

***Happiness is Perhaps the Best Antidote to Stress and Anxiety:*** Happiness makes you resilient. It helps you recover from stress. Barbara Fredrickson, one of the researchers of this study, has called this the “undo effect.” Happiness can quell or “undo” the negative after effects of stress, anxiety, depression, or negativity in general. When one is feeling stressed, find something to be positive about. Remind yourself of your family, call a friend, or watch a short clip of your favourite comedy show. If someone you love is stressed, doesn't pile on the

pressure be reminding them of the high stakes they face. Instead, give them the gift of positivity. Remind them of their strengths, friends and family who love them, or an upcoming event they're anticipating.

***Happiness Creates Success:*** Society preaches a simple success/happiness model: If you work hard, you'll become successful, and once you're sufficiently successful, you'll be happy. Don't even worry about happiness right now. First, become a success, and then happiness will follow. Keep chasing after success, and once you've made it, then you'll be happy. But don't try to be happy right now! That's futile, if you're not yet successful enough. First, you need to work hard, sacrifice your health and friendships, and then you'll automatically be happy.

More importantly, though, the formula is broken because it's backwards. As you've just learned, happiness fuels performance like nothing else. By sacrificing happiness, we limit our own potential for success. Actively and deliberately work on becoming happier now. Not only will it make you happy, but it will make you a success too. Maybe you've already understood that. By reading this book, you've certainly taken the first step

#### **1.4 CAUSES FOR HAPPINESS**

Clearly, all of us, regardless of our age, gender, or race are somehow striving to attain happiness in our own ways. Some find happiness in love, some find it in materialistic things, some in the number of awards they have achieved and some simply in the number of faces they have been light with a smile. Everybody has their own definition of happiness.

***Success:*** Success is not only about financial success; it is actually about being able to set goals and achieve them. If you have passed your exam with flying colors, or you have successfully lost 10 pounds in 1 month, or your boss has announced that you are getting a bonus, all these achievements are going to make you happy. Thus, if you want to experience the delight and happiness by achieving success, then you should set realistic goals more often and strive to attain them. Mostly, it is the journey towards the goal that keeps one content. Remember that success and happiness are interlinked. Success makes people happier and it is often the happy people who are more likely to become successful.

***Family and Friends:*** According to Daniel Gilbert, a Harvard happiness expert, spending quality time with family and friends causes true happiness., and all other things that make us happy are in reality a means of getting to spend more time with family and friends. Thus, having a warm conversation at the dinner table, playing a

board game or Uno cards with family, or just visiting a park nearby for a walk with them, can really cheer us up. Furthermore, bringing smiles on the faces of our family members and friends also instill the feeling of joy in us, this is why, we love to arrange birthday parties for our best friends and strive harder to make our parents proud at many stages of our lives.

**Food and Exercise:** Yes, food, a group of several essential chemical compounds that pleases our taste buds, satiates our craving, and eventually reacts with our brain cells to stimulate happy hormones, is one of the main causes of happiness. This is why various nutrition and diet experts allow their clients to go for a cheat diet at least once a week. Fatty foods such as fries, chocolate, ice cream, pizza, burger, and many more do have a positive psychological effect on us but only if they are taken in moderate quantity. Besides, we are encouraged to eat several fresh fruits and vegetables which consist of photochemical, antioxidants, and tryptophan that boost serotonin, endorphins, dopamine, and other hormones which fights depression and elevate our mood. These neurotransmitters are also released in greater amounts when we exercise. Also, working out daily keeps you in a good shape which further enhances your confidence and self-esteem.

**Religion and Spirituality:** A research study from 2009 reveals that having a purpose of life which is granted by spirituality greatly enhances the feeling of happiness and contentment. Also, all religions in the world teach humanity, promotes forgiveness, meditation, charity, and helping others. These things in turn boost self-esteem and the feeling of empowerment, grant inner peace, give a sense of belonging, and make one more grateful. Collectively, all these feelings contribute to a happier mood.

**Yourself:** Yes, there could be a variety of things which cause happiness but the foremost thing which will make you a happy-go-lucky dude is yourself. Happiness actually comes from within and you are the sole person in charge of how you choose to feel. Not only accept yourself but also love yourself unconditionally; be more optimistic, and never ever underestimate yourself. Do more of the things that make you happy within the confines of legal system. Also, thinking about all the blessings you have and seeing things with the perspective of glass half-full rather than half-empty is what will keep you alive and delightful from within. After all gratitude is the key to happiness

## 1.5 FINDING HEALTHY HAPPINESS

But how exactly can we attain a healthy dose of happiness? This is the million-dollar question. First, it is important to experience happiness in the right amount. Too little happiness is just as problematic as too much.

Second, happiness has a time and a place, and one must be mindful about the context or situation in which one experiences happiness.

Third, it is important to strike an emotional balance. One cannot experience happiness at the cost or expense of negative emotions, such as sadness or anger or guilt. These are all part of a complex recipe for emotional health and help us attain a more grounded perspective. Emotional balance is crucial.

Finally, it is important to pursue and experience happiness for the right reasons. Too much focus on striving for happiness as an end in itself can actually be self-defeating. Rather than trying to zealously find happiness, we should work to build acceptance of our current emotional state, whatever it may be. True happiness, it seems, comes from fostering kindness toward others—and toward yourself.

## 1.6 REASONS OF ELUDING HAPPINESS

It seems like happiness is just beyond your grasp, no matter how hard you try to feel good. It may feel like a lot of people have this "happiness" thing down, and you are one step outside that circle. Here are reasons why happiness may be eluding you, and how you can fix it.

### **You are too hard on yourself.**

You may be expecting perfection from yourself, and when you don't reach it, you get upset with yourself. No one is perfect. Aim for good enough. Very few things in life really require that you do them perfectly. And if you do something perfectly, you are still an imperfect person. The imperfections are what make life interesting and fun. Imperfections give you good stories to talk about later. Remember, you always have the right to do less than what is humanly possible.

### **You forget you have a choice.**

You may be feeling stuck in your life - you're having the same issues at work, hearing the same complaints from your kids, having the same money issues every month. First try to change something about your circumstances. If you can't change your circumstances, you can change how you feel about them. When you change just one thing in your life, your whole world can change. Sometimes we have difficulties making changes in our lives



because it means taking risks and experiencing loss. However, when we don't make changes, we forget we have choices.

### **You're aiming for happiness instead of contentment or meaning.**

People who find happiness usually describe it as being content or finding meaning in their lives. Being "happy" can be overrated - change your definition of it. Happiness may not mean smiling and feeling "up" every day. Happiness can mean that you give back to others in your community; you have close relationships with others; or you work for a cause you believe in.

### **You rely on others for your happiness.**

Life is like a cake. If you have holes in your cake and try to fill those holes with people's approval and love, you will never have a whole cake. However, if you work on having a whole cake on your own, other people become the icing on the cake. How do you work on having a whole cake? Self-reflection, therapy, and meditation are just some of the ways you can work on feeling whole.

### **You have too much stuff.**

Studies have found that clutter is associated with increase rates of depression and anxiety, particularly in women. Read more about clutter's relationship to depression and anxiety here. If you have constant visual clutter, it just brings you down. Get tough with yourself about whether you really use the items in your home. Have a trusted friend or family member help you go through your closet, garage, and other areas where clutter has accumulated. The Law of Usage states if you neglect using an item, it tends to run down and break. Give it to someone else who can use it.

### **You are envious of others.**

Steve Furtick said, "The reason we struggle with insecurity is because we compare our behind-the-scenes with everyone else's highlight reel." What you see on social media are people's highest points. You don't see the day-to-day struggles everyone faces. Everyone has challenges. It's how you perceive your challenges that makes the difference. And that leads us to number 8.

### **You focus on the negative.**

Your beliefs about what happens to you greatly influence your consequences. This ties into number 2 above, "You forget you have a choice". You always have a choice on what you are going to focus on. If you step in a puddle on the way to work, you can either curse the storm cloud and think you are incredibly unlucky, or you can say "these things happen" and go about your day. Which choice do you think makes you feel better? The next

time you have a negative thought, visualize a stop sign popping up. Now change that negative thought to a positive. The more you practice this technique, the more your brain will automatically think positive thoughts.

### **You don't make time for fun.**

If things seem heavy or serious most of the day, it might be that you are not taking enough breaks for just plain fun. Many people think being serious means being solemn - but if you've taught a class you know that people learn more when the material is presented in an enjoyable way. For example, the Broadway show "Hamilton" has taught U.S. and world history through entertainment. For ideas on how to have more fun in your life, see my Psychology Today post "8 Ways to Make Your Life More Fun".

### **You have issues with your neurotransmitters.**

You may have inherited genes for depression, anxiety, ADHD, or other issues that impact your levels of neurotransmitters or brain chemicals. Medication has been found to be the most effective treatment for these issues, and a combination of medication and therapy has been found to be more effective than either treatment on their own. See your primary care doctor for a referral, look in the Psychology Today directory, or get referrals from family and friends.

### **You aren't getting enough exercise.**

Regular exercise increases low levels of dopamine and serotonin in your brain (the neurotransmitters I told you about in number 9 above). When you increase those low neurotransmitter levels, you reduce symptoms of anxiety, depression, and ADHD. Even exercising for as little as 20 to 30 minutes a day can help you feel better. Quick ways to get exercise in your workday are to take the stairs instead of the elevator, parking further away from your office, and walking instead of taking a moving sidewalk.

Focusing less on pursuing happiness causes it to show up more quickly. Good luck on your journey.

## **1.7 HAPPINESS INDEX**

Happiness Index is a development philosophy as well as an index which is used to measure the collective happiness in a nation.

### **1.7.1 History**

In July 2011, the UN General Assembly adopted resolution 65/309 Happiness: Towards a Holistic Definition of Development inviting member countries to measure the happiness of their people and to use the data to help guide public policy. On April 2, 2012, this was followed by the first UN High Level Meeting called Wellbeing and Happiness:

Defining a New Economic Paradigm, which was chaired by UN Secretary General Ban Ki-moon and Prime Minister Jigme Thinley of Bhutan, a nation that adopted gross national happiness instead of gross domestic product as their main development indicator.

The first World Happiness Report was released on April 1, 2012 as a foundational text for the UN High Level Meeting: Well-being and Happiness: Defining a New Economic Paradigm, drawing international attention. The report outlined the state of world happiness, causes of happiness and misery, and policy implications highlighted by case studies. In 2013, the second World Happiness Report was issued, and since then has been issued on an annual basis with the exception of 2014. The report primarily uses data from the Gallup World Poll. Each annual report is available to the public to download on the World Happiness Report website.

### **1.7.2 Methods and Philosophy**

The rankings of national happiness are based on a Cantril ladder survey. Nationally representative samples of respondents are asked to think of a ladder, with the best possible life for them being a 10, and the worst possible life being a 0. They are then asked to rate their own current lives on that 0 to 10 scale. The report correlates the results with various life factors.

In the reports, experts in fields including economics, psychology, survey analysis, and national statistics, describe how measurements of well-being can be used effectively to assess the progress of nations, and other topics. Each report is organized by chapters that delve deeper into issues relating to happiness, including mental illness, the objective benefits of happiness, the importance of ethics, policy implications, and links with the Organization for Economic Co-operation and Development's (OECD) approach to measuring subjective well-being and other international and national efforts.

### **1.8 WORLD HAPPINESS REPORT (2018)**





The 2018 iteration was released on 14 March and focused on the relation between happiness and migration. As per 2018 Happiness Report, Finland is the happiest country in the world, with Norway, Denmark, Iceland, and Switzerland holding the next top positions. The World Happiness Report 2018 ranks 156 countries by their happiness levels, and 117 countries by the happiness of their immigrants. The main focus of this year's report, in addition to its usual ranking of the levels and changes in happiness around the world, is on migration within and between countries. The overall rankings of country happiness are based on the pooled results from Gallup World Poll surveys from 2015–2017, and show both change and stability. Four countries have held the top spot in the last four reports: Denmark,

Switzerland, Norway and now Finland. All the top countries tend to have high values for all six of the key variables that have been found to support well-being: income, healthy life expectancy, social support, freedom, trust and generosity. Among the top countries, differences are small enough that year-to-year changes in the rankings are to be expected.

The analysis of happiness changes from 2008–2015 shows Togo as the biggest gainer, moving up 17 places in the overall rankings from 2015. The biggest loser is Venezuela, down 2.2 points. Five of the report's seven chapters deal primarily with migration, as summarized in Chapter 1. For both domestic and international migrants, the report studies the happiness of those migrants and their host communities, and also of those in the countryside or in the country of origin.

The results are generally positive. Perhaps the most striking finding of the whole report is that a ranking of countries according to the happiness of their immigrant populations is almost exactly the same as for the rest of the population. The immigrant happiness rankings are based on the full span of Gallup data from 2005 to 2017, sufficient to have 117 countries with more than 100 immigrant respondents. The ten happiest countries in the overall rankings also make up ten of the top eleven spots in the ranking of immigrant happiness.

Finland is at the top of both rankings in this report, with the happiest immigrants, and the happiest population in general. While convergence to local happiness levels is quite rapid, it is not complete, as there is a 'footprint' effect based on the happiness in each source country. This effect ranges from 10% to 25%. This footprint effect explains why immigrant happiness is less than that of the locals in the happiest countries, while being greater in the least happy countries.

Overall Rank	Country	Score	GDP per capita	Social support	Healthy life expectancy	Freedom to make life choices	Generosity	Perceptions of corruption
1	 Finland	7.632	1.305	1.592	0.874	0.681	0.192	0.393
2	 Norway	7.594	1.456	1.582	0.861	0.686	0.286	0.340
3	 Denmark	7.555	1.351	1.590	0.868	0.683	0.284	0.408
133	 India	4.190	0.721	0.747	0.485	0.539	0.172	0.093

### 1.8.1 Parameters of Ranking

According to a report by Reuters, the UN Sustainable Development Solutions Network's (SDSN) 2018 World Happiness Report ranked 156 countries according to

things such as GDP, per capita, social support, healthy life expectancy, social freedom, generosity and absence of corruption. Even Nepal, despite its poverty issues, was in the global list of the happiest countries, according to a United Nations report released on Wednesday.

For the first time since it was started in 2012, the report, which uses a variety of polling organisations, official figures and research methods, ranked the happiness of foreign-born immigrants in 117 countries. Finland took top honours in that category too, giving the country a statistical double-gold status. The foreign-born were least happy in Syria, which has been mired in civil war for seven years.

There are four chief criteria, which also form the pillar of the index. They are:

- Sustainable Development
- Preservation and promotion of cultural values
- Conservation of the natural environment
- Establishment of good governance.

However, quantifying them is a challenge. In 2010, Bhutan's Center for Bhutan Studies and GNH Research identified nine specific components of GNH among which 33 indicators were distributed. The nine areas:

- Psychological Wellbeing (Psychological indicators)
- Mental and Spiritual Health (Health and mental health indicators)
- Time-balance (Work and Sleep Indicators)
- Social and Community Vitality (Philanthropy, Family related indicators)
- Cultural Vitality (Native speaker, Domestic industry indicators)
- Education (Literacy indicators)
- Standard of life (Living Standards indicators)
- Good governance (Human rights, political participation, government performance indicators)
- Ecological Vitality (Wildlife, Forest, Urban-Rural, Environmental indicators)

### **1.8.2 Happiness Index of India**

From being on 122nd rank in 2017 to 133rd rank in 2018, India has slipped 11 places on the 'World Happiness Index'. This ranking by the United Nations reflect how happy the country is. On the other hand, Pakistan is at 75th position, despite being terror ravaged.

## 1.9 TIPS TO BECOME A HAPPIER COUNTRY

All around the world, there are more than 350 million people of all ages suffering from depression (Depression). Not only does depression lower the happiness levels in a person, but it can be deadly, sometimes leading to suicide. While overcoming depression isn't quick or easy, it's far from impossible. The key is to start small and build from there. Below are 5 simple ways to help lower a citizen's depression and increase their happiness.

**Exercise:** Exercise has a profound effect on our happiness and well-being. It's also an effective strategy for overcoming depression, but you don't need to be depressed to exercise. Exercise can help you relax, increase your brain power, and even improve your body image, even if you don't lose any weight. When we exercise, our brains release proteins and endorphins that make us feel happier (Haden). These protein and endorphins can also reduce stress, putting us in a better mood for the day. Think you don't have time for exercise? Well, think again. Check out the 7 minute workout mentioned in *The New York Times*, a workout anyone could fit into their busy schedules.

**Sleep:** Sleep is an important factor of happiness. Not only does sleep help our body to recover from the day, but it helps us be less sensitive to negative emotions. In a study conducted in 2011 by the BPS Research Digest, researchers found that people who take an afternoon nap are desensitized to negative emotions yet more responsive to positive ones (Lim). When you take an afternoon nap, it lets your body recover and repair itself so when you wake up, you are more alert and attentive. Not only are you more alert and attentive, naps can also reduce stress, boost creativity as well as memory. In a survey conducted in the U.S. of more than 7,000 adults, researchers reported that people who received more sleep had a higher overall well-being than those who received less sleep. For example, the average well-being score for people who reported getting 8 hours of sleep a night was 65.7 out of 100, compared to the 64.2 for those who received 7 hours of sleep and 59.4 for those who received 6 hours of sleep. When it comes to happiness, sleep is a big factor.

**Meditate:** Meditation helps improve your focus, clarity, attention span, calmness, and your happiness. According to a research team from Massachusetts General Hospital, meditation can increase the part of your brain associated with compassion and self-awareness and decrease the parts associated with stress (Lim). That's why in the minutes right after meditating, we experience feelings of calm and contentment, as well as heightened awareness

and appreciation. The research also shows that regular meditation can permanently rewire the brain to raise levels of happiness (Haden). Not only does meditation clear your mind and calm you down, but it has been proven to be the single most effective way to live a happier life.

**Get Outside More:** Happiness is maximized at 57°F (Haden). Making time to go outside on a nice day delivers a huge advantage. Not only does spending 20 minutes outside in good weather boosts positive mood, but it also broadens your thinking and helps improve a working memory. In a study from the University of Sussex, researchers found that people are substantially happier outdoors in all natural environments than in urban environments (Haden). Being outside and around nature not only makes you happier, but it can reduce your stress levels and your levels of anger. So, if you are angry or really stressed out, try going outside and taking a walk and you'll feel better immediately. Even if your schedule is busy or chaotic, spending 20 minutes outside, whether its fit into your commute or on a lunch break, can really boost your happiness levels.

**Help Others:** If you want to feel happier, you should help others. In fact, 100 hours per year, or 2 hours per week, is the optimal time we should dedicate to helping others (Haden). By dedicating 100 hours per year to helping others, you will feel less stressed without giving up a lot of your time. Even though 2 hours per week is the optimal time, taking just 5 minutes out of your day and helping a stranger can really make an impact not only on your happiness but the stranger's as well. In a study conducted by United Healthcare, researchers found that among people who spent a few hours per week doing face-to-face volunteer work, 96% said that they felt happier and 73% said that they felt less stressed (Botek). This is because when you help others, dopamine and oxytocin, two mood-boosting chemicals, are released, causing you to feel happier. Helping others is a great way to boost your happiness levels as well as self-esteem levels too.

## **1.10 SIGNIFICANCE OF THE STUDY**

The key to a happier country is all within their citizens. In order for a country to be happy and rank higher on the happiness scale, their citizens must be happy. By using these simple steps, you can improve your happiness substantially and maybe even help improve the overall happiness experienced within your country. India is a country known for its rich culture, festivals and customs. It always celebrate human beings and known for humanism. Indian culture is the best example of hospitality and happy community living. Especially the

South Indian Dravidian Culture is very old and has richest heritage. Tamil is the oldest language of the world and mother of all south Indian Languages. Tirunelveli is one of the cities that have the River Thamirabarani which flows throughout the year. The people of this city are known for their brave and slang of Tamil Language. So the Investigators thought of finding the Happiness level of the people of this city Tirunelveli.

### **1.11 STATEMENT OF THE PROBLEM**

Perception of Tirunelveli People on Happiness

### **1.12 OBJECTIVES OF THE STUDY**

1. To find out the level of Perception of Tirunelveli People on Happiness.
2. To find out the level of Perception of Tirunelveli People on Happiness with respect to demographic variables such as Gender, age, qualification, occupation and place.

### **1.13 METHOD USED FOR THE STUDY**

The investigators adopted the survey method to find out the Perception of Tirunelveli People on Happiness.

### **1.14 POPULATION AND SAMPLE FOR THE STUDY**

The population for the present study consisted of Perception of Tirunelveli People on Happiness. The investigators have used simple random sampling technique for selecting the sample from the population. The sample consists of 721 people in and around Tirunelveli city.



### 1.15 DISTRIBUTION OF THE SAMPLE

The distribution of the sample is given as follows.

**Table 1.14.1**

**Distribution of the sample with respect to all the Background Variables**

<b>Background Variables</b>	<b>Categories</b>	<b>Number</b>	<b>Percentage</b>
<b>Gender</b>	<b>Male</b>	388	53.8
	<b>Female</b>	333	46.2
<b>Age</b>	<b>18 to 30</b>	390	54.1
	<b>31 to 45</b>	213	29.5
	<b>46 to 60</b>	84	11.7
	<b>Above 60</b>	34	4.7
<b>Qualification</b>	<b>10th std</b>	178	24.7
	<b>12 std</b>	135	18.7
	<b>College</b>	365	50.6
	<b>Professional</b>	43	6.0

### 1.16 TOOL USED FOR THE PRESENT STUDY

By keeping various objectives of the study in mind, the following tool was used by professor and their team for collecting the data.

1. Personal data form.
2. Perception of Tirunelveli People on Happiness Questionnaire was developed and validated by Thomas Alexander, Michael J Leo and their team (2019).

The questionnaire contains 20 items and each item has two choices namely 'Yes' and 'No'. The scoring of the questionnaire is '1' for 'Yes' and '0' for 'No'. The questionnaire is annexed at the end of this chapter.

### 1.17 ANALYSIS OF DATA

**Question 1: I have the attitude of living a satisfied life with what I have**

**Table 1**

**Response of the Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
62	8.6	659	<b>91.4</b>

It is inferred from the above table that 91.4% of the respondents have the attitude of living a satisfied life with what they have.

**Question 2: I think that my life depends on others**

**Table 2 (a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
381	52.8	340	47.2

It is inferred from the above table that 52.8% of the respondents think that their life do not depend on others.

**Table 2 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	221	57.0	167	43.0
	Female	160	48.0	173	52.0
Occupation	Government Employee	61	58.1	44	41.9
	Government Aided	69	52.7	62	47.3
	Home Maker	41	42.7	55	57.3
	Business	139	55.6	111	44.4
	Daily Wages	53	50.0	53	50.0
	Farmer	18	54.5	15	45.5

It is inferred from the above table that 57% of the male respondents think that their life do not depend on others.

It is inferred from the above table that 58.1% of the Government Employee think that their life depend on others.

It is inferred from the above table that 57.3% of Home maker think that their life depend on others.

**Question 3: Chatting and Spending time happily with friends gives me soul satisfaction**

**Table 3**

**Response of the Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
90	12.5	631	87.5

It is inferred from the above table that 87.5% of the respondents accepted that chatting and spending time happily with friends gives them soul satisfaction.

**Question 4: My studies are very much helpful to my life**

**Table 4 (a)**

**Response of the Total Sample**

<b>No</b>		<b>Yes</b>	
<b>Count</b>	<b>Percentage</b>	<b>Count</b>	<b>Percentage</b>
251	34.8	470	65.2

It is inferred from the above table that 65.2% of the respondents stated that their studies are very much helpful to their life.

**Table 4 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	18 to 30	122	31.3	268	<b>68.7</b>
	31 to 45	79	37.1	134	62.9
	46 to 60	32	38.1	52	61.9
	Above 60	18	52.9	16	47.1
Educational Qualification	10th Std	88	49.4	90	50.6
	12th Std	42	31.1	93	68.9
	College	108	29.6	257	<b>70.4</b>
	Professional	13	30.2	30	69.8
Occupation	Government Employee	22	21.0	83	<b>79.0</b>
	Government Aided	47	35.9	84	64.1
	Home Maker	32	33.3	64	66.7
	Business	86	34.4	164	65.6
	Daily Wages	53	50.0	53	50.0
	Farmer	11	33.3	22	66.7

It is inferred from the above table that 68.7% of the respondents whose age between 18 to 30 stated that their studies are very much helpful to their life.

It is inferred from the above table that 70.4% of the respondents who are college level educated stated that their studies are very much helpful to their life.

It is inferred from the above table that 79.0% of the government employees stated that their studies are very much helpful to their life.

**Question 5: I work in a field in line with what I studied**

**Table 5 (a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
411	57.0	310	43.0

It is inferred from the above table that 57.0% of the respondents stated that they are not working in the field in line with what they studied.

**Table 5 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	18 to 30	241	61.8	149	38.2
	31 to 45	110	51.6	103	48.4
	46 to 60	37	44.0	47	56.0
	Above 60	23	<b>67.6</b>	11	32.4
Educational Qualification	10th Std	100	56.2	78	43.8
	12th Std	74	54.8	61	45.2
	College	216	59.2	149	40.8
	Professional	21	48.8	22	51.2
Occupation	Government Employee	45	42.9	60	57.1
	Government Aided	74	56.5	57	43.5
	Home Maker	65	67.7	31	32.3
	Business	142	56.8	108	43.2
	Daily Wages	62	58.5	44	41.5
	Farmer	23	<b>69.7</b>	10	30.3

It is inferred from the above table that 67.6% of the respondents whose age above 60 are not working in the field in line with what they studied.

It is inferred from the above table that 69.7% of the farmers are not working in the field in line with what they studied.

**Question 6: I believe that I am eating healthy food**

**Table 6 (a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
315	43.7	406	56.3

It is inferred from the above table that 56.3% of the respondents believe that they are eating healthy food.

**Table 6 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Occupation	Government Employee	50	47.6	55	52.4
	Government Aided	65	49.6	66	50.4
	Home Maker	36	37.5	60	<b>62.5</b>
	Business	94	37.6	156	62.4
	Daily Wages	57	53.8	49	46.2
	Farmer	13	39.4	20	60.6
Nativity	Rural	142	47.2	159	52.8
	Urban	173	41.2	247	<b>58.8</b>

It is inferred from the above table that 62.5% of the home makers believe that they are eating healthy food.

It is inferred from the above table that 58.8% of the urban people believe that they are eating health food.

**Question 7: I feel that the environment I live is hygienic**

**Table 7 (a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
289	40.1	432	59.9

It is inferred from the above table that 59.9% of the respondents accept that the environment they live is hygienic.

**Table 7 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	18 to 30	196	50.3	194	49.7
	31 to 45	69	32.4	144	67.6
	46 to 60	21	25.0	63	75.0
	Above 60	3	8.8	31	<b>91.2</b>
Occupation	Government Employee	42	40.0	63	60.0
	Government Aided	55	42.0	76	58.0
	Home Maker	21	21.9	75	<b>78.1</b>
	Business	112	44.8	138	55.2
	Daily Wages	40	37.7	66	62.3
	Farmer	19	57.6	14	42.4

It is inferred from the above table that 91.2% of the respondents whose age above 60 feel that the environment they live is hygienic.

It is inferred from the above table that 78.1% of the home makers feel that the environment they live is hygienic.

But 57.6% of the farmers feel that the environment they live is not hygienic.

**Question 8: I feel a sense of happiness through the day**

**Table 8 (a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
218	30.2	503	69.8

It is inferred from the above table that 69.8% of the respondents feel a sense of happiness through the day.

**Table 8 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	18 to 30	141	36.2	249	63.8
	31 to 45	59	27.7	154	72.3
	46 to 60	10	11.9	74	<b>88.1</b>
	Above 60	8	23.5	26	76.5

It is inferred from the above table that 88.1% of the respondents whose age between 40 to 60 feel a sense of happiness through the day.

**Question 9: I feel happy that I live in Tirunelveli**

**Table 9 (a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
92	12.8	629	87.2

It is inferred from the above table that 87.2% of the respondents feel happy to live in Tirunelveli.

**Table 9 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	55	14.2	333	85.8
	Female	37	11.1	296	<b>88.9</b>
Age	18 to 30	52	13.3	338	86.7
	31 to 45	32	15.0	181	85.0
	46 to 60	4	4.8	80	<b>95.2</b>
	Above 60	4	11.8	30	88.2

It is inferred from the above table that 88.9% of the female respondents feel happy to live in Tirunelveli.



It is inferred from the above table that 95.2% of the respondents whose age between 46 to 60 feel happy to live in Tirunelveli.

**Question 10: I know my strength and weakness**

**Table 10**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
124	17.2	597	82.8

It is inferred from the above table that 82.8% of the respondents know their strength and weakness.

**Question 11: I myself try to solve my own problem**

**Table 11**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
158	21.9	563	78.1

It is inferred from the above table that 78.1% of the respondents try to solve their own problem by themselves.

**Table 11 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	18 to 30	99	25.4	291	74.6
	31 to 45	44	20.7	169	79.3
	46 to 60	11	13.1	73	86.9
	Above 60	4	11.8	30	<b>88.2</b>

It is inferred from the above table that 88.2% of the respondents whose age above 60 try to solve their own problem by themselves.

**Question 12: My income is sufficient to my family for a happy life**

**Table 12 (a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
249	34.5	472	65.5

It is inferred from the above table that 78.1% of the respondents stated that their income is sufficient to their family for a happy life.

**Table 12 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	18 to 30	167	42.8	223	57.2
	31 to 45	53	24.9	160	75.1
	46 to 60	23	27.4	61	72.6
	Above 60	6	17.6	28	<b>82.4</b>
Occupation	Government Employee	28	26.7	77	<b>73.3</b>
	Government Aided	43	32.8	88	67.2
	Home Maker	31	32.3	65	67.7
	Business	82	32.8	168	67.2
	Daily Wages	55	51.9	51	48.1
	Farmer	10	30.3	23	69.7

It is inferred from the above table that 82.4% of the respondents whose age above 60 stated that their income is sufficient to their family for a happy life.

It is inferred from the above table that 73.3% of the government employee stated that their income is sufficient to their family for a happy life.

**Question 13: Men and Women have equal duty and responsibility in a family**

**Table 13**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
88	12.2	633	87.8

It is inferred from the above table that 87.8% of the respondents stated that Men and Women have equal duty and responsibility in a family.

**Question 14: I have a good contact with my childhood friends**

**Table 14**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
138	19.1	583	80.9

It is inferred from the above table that 80.9% of the respondents stated that they have a good contact with their childhood friends.

**Question 15: I encourage and Cheer my fellow human beings**

**Table 15**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
106	14.7	615	85.3

It is inferred from the above table that 85.3% of the respondents stated that they encourage and Cheer their fellow human beings.

**Question 16: I believe that being alone gives happiness**

**Table 16(a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
370	51.3	351	48.7

It is inferred from the above table that 51.3% of the respondents stated that being alone does not give happiness.

**Table 16 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	210	54.1	178	45.9
	Female	160	48.0	173	52.0
Age	18 to 30	202	51.8	188	48.2
	31 to 45	107	50.2	106	49.8
	46 to 60	46	54.8	38	45.2
	Above 60	15	44.1	19	55.9
Occupation	Government Employee	51	48.6	54	51.4
	Government Aided	75	57.3	56	42.7
	Home Maker	47	49.0	49	51.0
	Business	113	45.2	137	54.8
	Daily Wages	63	59.4	43	40.6
	Farmer	21	63.6	12	36.4
Nativity	Rural	151	50.2	150	49.8
	Urban	219	52.1	201	47.9

It is inferred from the above table that 54.1% of the male respondents believe that being alone does not give happiness.

It is inferred from the above table that 55.9% of the respondents whose age above 60 believe that being alone gives happiness.

It is inferred from the above table that 63.6% of the farmers believe that being alone would not give happiness.

It is inferred from the above table that 52.1% of the urban people stated that they do not believe that being alone gives happiness.

**Question 17: I do my work with all sincerity and happily**

**Table 17(a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
143	19.8	578	80.2

It is inferred from the above table that 80.2% of the respondents do their work with all sincerity and happily.

**Table 17 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic variables		No		Yes	
		Count	Percentage	Count	Percentage
Educational Qualification	10th Std	21	11.8	157	<b>88.2</b>
	12th Std	20	14.8	115	85.2
	College	90	24.7	275	75.3
	Professional	12	27.9	31	72.1
Occupation	Government Employee	24	22.9	81	77.1
	Government Aided	26	19.8	105	80.2
	Home Maker	18	18.8	78	81.3
	Business	54	21.6	196	78.4
	Daily Wages	12	11.3	94	<b>88.7</b>
	Farmer	9	27.3	24	72.7

It is inferred from the above table that 88.2% of the respondents who have SSLC as their do their work with all sincerity and happily.

It is inferred from the above table that 88.7% of the daily wages do their work with all sincerity and happily.

**Question 18: I lived a satisfied life so far**

**Table 18(a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
181	25.1	540	74.9

It is inferred from the above table that 74.9% of the respondents lived a satisfied life so far.

**Table 18 (b)**

**Response of the Total Sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Sex	Male	102	26.3	286	73.7
	Female	79	23.7	254	<b>76.3</b>
Age	18 to 30	117	30.0	273	70.0
	31 to 45	52	24.4	161	75.6
	46 to 60	6	7.1	78	<b>92.9</b>
	Above 60	6	17.6	28	82.4
Educational Qualification	10th Std	32	18.0	146	<b>82.0</b>
	12th Std	36	26.7	99	73.3
	College	102	27.9	263	72.1
	Professional	11	25.6	32	74.4

It is inferred from the above table that 76.3% of the female respondents lived a satisfied life so far.

It is inferred from the above table that 92.9% of the respondents having age between 46 to 60 lived a satisfied life so far.

It is inferred from the above table that 82.0% of the respondents having SSLC qualification lived a satisfied life so far.

**Question 19: I help neighbours and get help from them**

**Table 19**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
123	17.1	598	82.9

It is inferred from the above table that 82.9% of the respondents help neighbours and get help from them.

**Question 20: I maintain a smooth relationship with my relatives**

**Table 20**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
115	16.0	606	84.0

It is inferred from the above table that 84% of the respondents stated that they maintain a smooth relationship with my relatives.

**1.18 FINDINGS**

- a) 91.4% of the respondents have the attitude of living a satisfied life with what they have.
- b) 52.8% of the respondents think that their life do not depend on others.
- c) 87.5% of the respondents accepted that chatting and spending time happily with friends gives them soul satisfaction.
- d) 65.2% of the respondents stated that their studies are very much helpful to their life.
- e) 57.0% of the respondents stated that they are not working in the field in line with what they studied.
- f) 56.3% of the respondents believe that they are eating healthy food.
- g) 59.9% of the respondents accept that the environment they live is hygienic.
- h) 69.8% of the respondents feel a sense of happiness through the day.
- i) 87.2% of the respondents feel happy to live in Tirunelveli.
- j) 82.8% of the respondents know their strength and weakness.
- k) 78.1% of the respondents try to solve their own problem by themselves.
- l) 78.1% of the respondents stated that their income is sufficient to their family for a happy life.
- m) 87.8% of the respondents stated that Men and Women have equal duty and responsibility in a family.
- n) 85.3% of the respondents stated that they encourage and Cheer their fellow human beings.
- o) 51.3% of the respondents stated that being alone does not give happiness.
- p) 80.2% of the respondents do their work with all sincerity and happily.
- q) 74.9% of the respondents lived a satisfied life so far.
- r) 82.9% of the respondents help neighbours and get help from them.

- s) 84% of the respondents stated that they maintain a smooth relationship with my relatives.

### **1.19 RECOMMENDATIONS**

Base on the findings, following are the few recommendations to the people to craft their life more happy and cheerful.

- i. Being in physical contact with someone you care about is an automatic stress reliever. Hugs and holding hands with the people you care about are therapeutic for the both of you.
- ii. Find ways, even if they are small, to give to others. Stop to talk with someone and lend an ear, offer to assist a friend in need, or volunteer at a local charity.
- iii. Try to see your friends on a regular basis as it fits your schedule. If you are single or a couple, you might like a weekly get-together.
- iv. Weekend activities are like mini-vacations, and they are important to recharge your mind and body. They do not need to be expensive to be effective.
- v. Going to church or temple, for example, is a way to increase the social interactions in your life. It provides many affordable activities for families, and serves as a network for support and assistance in a crisis.
- vi. Create memories by visiting places, homes, being with friends and small gatherings.
- vii. Family traditions build a feeling of solidarity with your extended family, which creates a feeling of security that can help see you through difficult times. Feeling that you are not alone is a huge confidence booster.
- viii. Getting enough sleep will enable you to do your best work and help you handle daily challenges. If you sleep for less than seven hours per night it can greatly affect your health, even if you are just a little sleep-deprived.
- ix. Plan to include more vitamin-packed super foods in your diet. These foods not only keep you healthier and more energetic, but many of them may also combat stress.
- x. If you're trying to lead a happier, healthier life, making the necessary changes is up to you. Start with the items on this list that appeal the most to you, and work some of the others into your life a little at a time. Keep a notebook and write about which changes you made and how they worked for you

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## 4. PERCEPTION ON ONLINE SHOPPING

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### 1.1 INTRODUCTION

Online shopping is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. The sale or purchase transaction is completed electronically and interactively in real-time such as in Amazon.com for new books. However in some cases, an intermediary may be present in a sale or purchase transaction such as the transactions on eBay.com. An online shop, e-shop, e-store, internet shop, web shop, web store, online store, or virtual store evokes the physical analogy of buying products or services at a bricks-and-mortar retailer or in a shopping centre. The process is called Business-to-Consumer (B2C) online shopping. This is the type of electronic commerce conducted by companies such as Amazon.com. When a business buys from another business it is called Business-to-Business (B2B) online shopping.

A large percentage of electronic commerce is conducted entirely in electronic form for virtual items such as access to premium content on a website, but mostly electronic commerce involves the transportation of physical items in some way. Online retailers are sometimes known as e-trailers and online retail is sometimes known as e-tail. Almost all big retailers are now electronically present on the World Wide Web. Online marketplaces such as eBay and Amazon Marketplace have significantly reduced financial and reputational barriers to entry for SMEs wishing to trade online. These marketplaces provide web presence, marketing and payment services and, in the case of Amazon, fulfillment. This allows SMEs to focus on their core competencies e.g. managing supplier relationships. Moreover, SMEs have choices online, as these marketplaces compete with each other (some retailers sell across several marketplaces) and retailers' own websites. They also compete with paid search providers and others in providing marketing to SMEs. 3 Customer ratings are a key element of the marketplaces, enabling SMEs to build a reputation at low cost relative to the offline environment. This element of reputation may be achieved quickly (just one piece of feedback generates a rating) and is tied to particular platforms (i.e. ratings are non-transferable).

### 1.2 HISTORY OF ONLINE SHOPPING

In 1990, Tim Berners-Lee created the first World Wide Web server and browser in UK. 1 It opened for commercial use in 1991. In 1994 other advances took place, such as online banking and the opening of an online pizza shop by Pizza Hut. 1 During that same year,

Netscape introduced SSL encryption of data transferred online, which has become essential for secure online shopping. Also in 1994, the German company Interhop introduced its first online shopping system. In 1995, Amazon launched its online shopping site, and in 1996, eBay appeared.<sup>1</sup> Originally, electronic commerce was identified as the facilitation of commercial transactions electronically, using technology such as Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT). These were both introduced in the late 1970s, allowing businesses to send commercial documents like purchase orders or invoices electronically.

The growth and acceptance of credit cards, automated teller machines (ATM) and telephone banking in the 1980s were also forms of electronic commerce. Another form of e-commerce was the airline reservation system typified by Sabre in the USA and Travicom in the UK. From the 1990s onwards, electronic commerce would additionally include enterprise resource planning systems (ERP), data mining and data warehousing. In 1990, Tim Berners-Lee invented the Worldwide Web browser and transformed an academic telecommunication network into a worldwide everyman everyday communication system called internet/www. Commercial enterprise on the Internet was strictly prohibited by NSF until 1995.

### **1.3 NEED FOR INTERNET SHOPPING**

Few developments have altered India's lifestyle more quickly and more completely than the Internet. Online access has enabled people from all walks of life to bring entire libraries, entertainment venues, post offices and financial centers to a workplace, to a desktop or to a shirt pocket. The Internet's largest and most meaningful impact may very well be on the way consumers shop for everything from gifts, gadgets and groceries to clothing, cars, and cruises. The ease and selection that the Internet provides to shoppers has changed the face of retailing. More and more, consumers visit a store's Web site to make their choices before travelling to the store itself; and in a rapidly swelling tide, many shoppers are bypassing the store altogether and ordering online directly from the Web sites of their favourite brands and outlets.

Companies like Sephora, Sears and Crate & Barrel have increased the range and quantity of products available at their online stores and are sending online coupons and sale announcements via e-mail directly to their customers. Because online stores are open 24 hours a day, seven days a week, and their inventories are often more complete than those of their brick-and-mortar counterparts, the Internet makes it easy for shoppers to compare products within or between stores, to read product reviews from other customers, to access vendor return policies and to find warranty information. 7 1.4 Characteristics of Online

Markets Online markets are —dynamic|. Online markets are part of the information and communications technology-intensive service sector which has exhibited an acceleration of labour productivity growth in many countries.<sup>13</sup> A qualitative indication of the dynamic character of online markets is given by evidence of the range of experimentation in terms of business models, the rate of growth of successful platforms and the level of ongoing innovation and —disruptive| change in areas such as growth of mobile internet and devices and of the social web. The dynamic character of online markets may result in greater risk of failure for some start-ups but spectacular success for others. —Normal| returns for the market as a whole may therefore correspond to ex post returns that are high for successful firms. Online markets are also very much information intensive.

The very nature of many transactions places rich sources of information about consumers (and perhaps also other market participants) in conveniently digitized form, at the disposal of companies providing services such as search, payment and social network services. Collection of information about customers is not unique to online markets, but the scale under which it has become possible is unprecedented. The industry is undoubtedly very much alive to the value of information and is in process of implementing strategies to acquire it and use it profitably. We believe the formulation of strategies for profiting from the information explosion is very much in its infancy and, therefore, this is one major respect in which the market is „dynamic“. As the quantity and quality of information companies have about their customers and about the customers of their competitor’s increases, there arises scope for 8 provisions of valuable new services but also for the exercise of market power. As purchase recommendations become well tailored to customers they become less like junk-mail and more like a personal shopping service. On the other hand, firms might be also able to use information to better price discriminate and extract surplus from customers, or to preempt putative rivals from entering a market. However, better informed consumers may also be more discriminating in their decisions, for example, in terms of price or quality.

Fourteen Major platforms such as Amazon, PayPal, eBay, support and enforce a system of buyer and seller reputations which facilitates many valuable trades which otherwise could only take place in face-to-face markets. Hence, here is a vehicle for consumers and SMEs to benefit from the control of information by major platforms. However, there is also a possibility that an intermediary —certifies| parties to a transaction and extracts a large share of surplus whilst only minimally improving information flows in the market<sup>15</sup>. Information will both create opportunities for adding value for customers and opportunities to extract value whilst adding little value if competition is limited. A general implication of the highly

dynamic nature of online markets is that the body of economics literature developed within a paradigm of static market analysis may fail to account for some of the observed characteristics of online markets and may be a poor guide to judging the efficiency of observed behaviour. For example, innovation can make defining relevant product markets difficult because business executives and government officials alike may not yet know what the future products will be

#### **1.4 CATEGORIES OF PRODUCTS IN INTERNET SHOPPING**

Consumers across the globe are increasingly swapping crowded stores for one-click convenience, as online shopping becomes a safe and popular option. According to a recent global survey conducted by The Nielsen Company, over 85 percent of the world's online population has used the Internet to make a purchase, up 40 percent from two years ago, and more than half of Internet users are regular online shoppers, making online purchases at least once a month. The Nielsen survey, the largest survey of its kind on the topic of Internet shopping habits, was conducted from October to November 2007 and polled 26,312 Internet users in 48 markets from Europe, Asia Pacific, North America and the Middle East

#### **1.5 DRIVERS OF INTERNET SHOPPING**

Online stores are usually available 24 hours a day, and many consumers have Internet access both at work and at home. Other establishments such as internet cafes and schools provide access as well. A visit to a conventional retail store requires travel and must take place during business hours. In the event of a problem with the item – it is not what the consumer ordered, or it is not what they expected – consumers are concerned with the ease with which they can return an item for the correct one or for a refund. Consumers may need to contact the retailer, visit the post office and pay return shipping, and then wait for a replacement or refund. Some online companies have more generous return policies to compensate for the traditional advantage of physical stores. For example, the online shoe retailer Zappos.com includes labels for free return shipping, and does not charge a restocking fee, even for returns which are not the result of merchant error. Online stores must describe products for sale with text, photos, and multimedia files, whereas in a physical retail store, the actual product and the manufacturer's packaging will be available for direct inspection (which might involve a test drive, fitting, or other experimentation). Some online stores provide or link to supplemental product information, such as instructions, safety procedures, demonstrations, or manufacturer specifications. Some provide background information, advice, or how-to guides designed to help consumers decide which product to buy. Some stores even allow customers to comment or rate their items. There are also dedicated review

sites that host user reviews for different products. Reviews and now blogs gives customers the option of shopping cheaper or gain purchases from all over the world without having to depend on local retailers.

In a conventional retail store, clerks are generally available to answer questions. Some online stores have real-time chat features, but most rely on e-mail or phone calls to handle customer questions. One advantage of shopping online is being able to quickly seek out deals for items or services with many different vendors (though some local search engines do exist to help consumers locate products for sale in nearby stores). Search engines, online price comparison services and discovery shopping engines can be used to look up sellers of a particular product or service. Shipping costs (if applicable) reduce the price advantage of online merchandise, though depending on the jurisdiction, a lack of sales tax may compensate for this. Shipping a small number of items, especially from another country, is much more expensive than making the larger shipments bricks-and-mortar retailers order. Some retailers (especially those selling small, high-value items like electronics) offer free shipping on sufficiently large orders. Another major advantage for retailers is the ability to rapidly switch suppliers and vendors without disrupting users' shopping experience.

## **1.6 PROBLEMS IN INTERNET SHOPPING**

Given the lack of ability to inspect merchandise before purchase, consumers are at higher risk of fraud on the part of the merchant than in a physical store. Merchants also risk fraudulent purchases using stolen credit cards or fraudulent repudiation of the online purchase. With a warehouse instead of a retail storefront, merchants face less risk from physical theft. Secure Sockets Layer (SSL) encryption has generally solved the problem of credit card numbers being intercepted in transit between the consumer and the merchant. Identity theft is still a concern for consumers when hackers break into a merchant's web site and steal names, addresses and credit card numbers.

A number of high-profile break-ins in the 2000s has prompted some U.S. states to require disclosure to consumers when this happens. Computer security has thus become a major concern for merchants and e-commerce service providers, who deploy countermeasures such as firewalls and anti-virus software to protect their networks. Phishing is another danger, where consumers are fooled into thinking they are dealing with a reputable retailer, when they have actually been manipulated into feeding private information to a system operated by a malicious party. Denial of service attacks are a minor risk for merchants, as are server and network outages. Quality seals can be placed on the Shop web page if it has undergone an independent assessment and meets all requirements of the

company issuing the seal. The purpose of these seals is to increase the confidence of the online shoppers; the existence of many different seals, or seals unfamiliar to consumers, may foil this effort to a certain extent.

A number of resources offer advice on how consumers can protect themselves when using online retailer services. These include: Sticking with known stores, or attempting to find independent consumer reviews of their experiences; also ensuring that there is comprehensive contact information on the website before using the service, and noting if the retailer has enrolled in industry oversight programs such as trust mark or trust seal. Before buying from a new company, evaluate the website by considering issues such as: the professionalism and user-friendliness of the site; whether or not the company lists a telephone number and/or street address along with e-contact information; whether a fair and reasonable refund and return policy is clearly stated; and whether there are hidden price inflators, such as excessive shipping and handling charges. Ensuring that the retailer has an acceptable privacy policy posted. For example note if the retailer does not explicitly state that it will not share private information with others without consent.

Whenever you purchase a product, you are going to be required to put in your credit card information and billing/shipping address. If the website is not secure a customer's information can be accessible to anyone who knows how to obtain it. Most large online corporations are inventing new ways to make fraud more difficult, however, the criminals are constantly responding to these developments with new ways to manipulate the system. Even though these efforts are making it easier to protect yourself online, it is a constant fight to maintain the lead. It is advisable to be aware of the most current technology and scams out there to fully protect yourself and your finances. One of the hardest areas to deal with in online shopping is the delivery of the products. Most companies offer shipping insurance in case the product is lost or damaged; however, if the buyer opts not to purchase insurance on their products, they are generally out of luck. Some shipping companies will offer refunds or compensation for the damage, but it is up to their discretion if this will happen. It is important to realize that once the product leaves the hands of the seller, they have no responsibility (provided the product is what the buyer ordered and is in the specified condition). The lack of full disclosure with regards to the total cost of purchase is one of the concerns of online shopping. While it may be easy to compare the base price of an item online, it may not be easy to see the total cost up front as additional fees such as shipping are often not be visible until the final step in the checkout process.

The problem is especially evident with cross-border purchases, where the cost indicated at the final checkout screen may not include additional fees that must be paid upon delivery such as duties and brokerage. Some services such as the Canadian based Wasabi attempts to include estimates of this additional cost, but nevertheless, the lack of general full cost disclosure remains a concern. 18 Privacy of personal information is a significant issue for some consumers. Many larger stores use the address information encoded on consumers' credit cards (often without their knowledge) to add them to a catalog mailing list. This information is obviously not accessible to the merchant when paying in cash.

### **1.7 PAYMENT PROCEDURES**

Online shoppers commonly use a [credit card](#) or a [PayPal](#) account in order to make payments. However, some systems enable users to create accounts and pay by alternative means, such as:

- Billing to mobile phones and landlines<sup>[25][26]</sup>
- Cash on delivery (C.O.D.)
- Cheque/ Check
- Debit card
- Direct debit in some countries
- Electronic money of various types
- Gift cards
- Postal money order
- Wire transfer/delivery on payment
- Invoice, especially popular in some markets/countries, such as Switzerland
- Bitcoin or other cryptocurrencies

Some online shops will not accept international credit cards. Some require both the purchaser's billing and shipping address to be in the same country as the online shop's base of operation. Other online shops allow customers from any country to send gifts anywhere. The financial part of a transaction may be processed in real time (e.g. letting the consumer know their credit card was declined before they log off), or may be done later as part of the fulfilment process.

### **1.8 PRODUCT DELIEVERY**

Once a payment has been accepted, the goods or services can be delivered in the following ways. For physical items:

- **Shipping:** The product is shipped to a customer-designated address. Retail package delivery is typically done by the public postal system or a retail courier such as FedEx, UPS, DHL, or TNT.
- **Drop shipping:** The order is passed to the manufacturer or third-party distributor, who then ships the item directly to the consumer, bypassing the retailer's physical location to save time, money, and space.
- **In-store pick-up:** The customer selects a local store using a locator software and picks up the delivered product at the selected location. This is the method often used in the bricks and clicks business model.

## 1.9 ADVANTAGES OF ONLINE SHOPPING

### Convenience

Online stores are usually available 24 hours a day, and many consumers in Western countries have Internet access both at work and at home. Other establishments such as Internet cafes, community centers and schools provide internet access as well. In contrast, visiting a conventional retail store requires travel or commuting and costs such as gas, parking, or bus tickets, and must typically take place during business hours. Delivery was always a problem which affected the convenience of online shopping. However to overcome this many retailers including online retailers in Taiwan brought in a store pick up service. This now meant that customers could purchase goods online and pick them up at a nearby convenience store, making online shopping more advantageous to customers.<sup>[42]</sup> In the event of a problem with the item (e.g., the product was not what the consumer ordered or the product was not satisfactory), consumers are concerned with the ease of returning an item in exchange for the correct product or a refund. Consumers may need to contact the retailer, visit the post office and pay return shipping, and then wait for a replacement or refund. Some online companies have more generous return policies to compensate for the traditional advantage of physical stores. For example, the online shoe retailer Zappos.com includes labels for free return shipping, and does not charge a restocking fee, even for returns which are not the result of merchant error

### Information and reviews

Online stores must describe products for sale with text, photos, and multimedia files, whereas in a physical retail store, the actual product and the manufacturer's packaging will be available for direct inspection (which might involve a test drive, fitting, or other experimentation). Some online stores provide or link to supplemental product information, such as instructions, safety procedures, demonstrations, or manufacturer specifications. Some



provide background information, advice, or how-to guides designed to help consumers decide which product to buy. Some stores even allow customers to comment or rate their items. There are also dedicated review sites that host user reviews for different products. Reviews and even some blogs give customers the option of shopping for cheaper purchases from all over the world without having to depend on local retailers. In a conventional retail store, clerks are generally available to answer questions. Some online stores have real-time chat features, but most rely on e-mails or phone calls to handle customer questions. Even if an online store is open 24 hours a day, seven days a week, the customer service team may only be available during regular business hours.

### **Price and selection**

One advantage of shopping online is being able to quickly seek out deals for items or services provided by many different vendors (though some local search engines do exist to help consumers locate products for sale in nearby stores). Search engines, online price comparison services and discovery shopping engines can be used to look up sellers of a particular product or service. Shipping costs (if applicable) reduce the price advantage of online merchandise, though depending on the jurisdiction, a lack of sales tax may compensate for this. Shipping a small number of items, especially from another country, is much more expensive than making the larger shipments bricks-and-mortar retailers order. Some retailers (especially those selling small, high-value items like electronics) offer free shipping on sufficiently large orders. Another major advantage for retailers is the ability to rapidly switch suppliers and vendors without disrupting users' shopping experience.

## **1.10 DISADVANTAGES OF ONLINE SHOPPING**

### **Fraud and security concerns**

Given the lack of ability to inspect merchandise before purchase, consumers are at higher risk of fraud than face-to-face transactions. When ordering merchandise online, the item may not work properly, it may have defects, or it might not be the same item pictured in the online photo. Merchants also risk fraudulent purchases if customers are using stolen credit cards or fraudulent repudiation of the online purchase. However, merchants face less risk from physical theft by using a warehouse instead of a retail storefront. Secure Sockets Layer (SSL) encryption has generally solved the problem of credit card numbers being intercepted in transit between the consumer and the merchant. However, one must still trust the merchant (and employees) not to use the credit card information subsequently for their own purchases, and not to pass the information to others. Also, hackers might break into a merchant's web site and steal names, addresses and credit card numbers, although

the Payment Card Industry Data Security Standard is intended to minimize the impact of such breaches. Identity theft is still a concern for consumers. A number of high-profile break-ins in the 2000s has prompted some U.S. states to require disclosure to consumers when this happens. Computer security has thus become a major concern for merchants and e-commerce service providers, who deploy countermeasures such as firewalls and anti-virus software to protect their networks. Phishing is another danger, where consumers are fooled into thinking they are dealing with a reputable retailer, when they have actually been manipulated into feeding private information to a system operated by a malicious party. Denial of service attacks are a minor risk for merchants, as are server and network outages.

Quality seals can be placed on the Shop web page if it has undergone an independent assessment and meets all requirements of the company issuing the seal. The purpose of these seals is to increase the confidence of online shoppers. However, the existence of many different seals, or seals unfamiliar to consumers, may foil this effort to a certain extent.

A number of resources offer advice on how consumers can protect themselves when using online retailer services. These include:

- Sticking with well-known stores, or attempting to find independent consumer reviews of their experiences; also ensuring that there is comprehensive contact information on the website before using the service, and noting if the retailer has enrolled in industry oversight programs such as a trust mark or a trust seal.
- Before buying from a new company, evaluating the website by considering issues such as: the professionalism and user-friendliness of the site; whether or not the company lists a telephone number and/or street address along with e-contact information; whether a fair and reasonable refund and return policy is clearly stated; and whether there are hidden price inflators, such as excessive shipping and handling charges.
- Ensuring that the retailer has an acceptable privacy policy posted. For example, note if the retailer does not explicitly state that it will not share private information with others without consent.
- Ensuring that the vendor address is protected with SSL (see above) when entering credit card information. If it does the address on the credit card information entry screen will start with "HTTPS".
- Using strong passwords which do not contain personal information such as the user's name or birth date. Another option is a "pass phrase," which might be something along the lines: "I shop 4 good a buy" These are difficult to hack, since they do not consist of

words found in a dictionary, and provides a variety of upper, lower, and special characters. These passwords can be site specific and may be easy to remember.

Although the benefits of online shopping are considerable, when the process goes poorly it can create a thorny situation. A few problems that shoppers potentially face include identity theft, faulty products, and the accumulation of spyware. If users are required to put in their credit card information and billing/shipping address and the website is not secure, customer information can be accessible to anyone who knows how to obtain it. Most large online corporations are inventing new ways to make fraud more difficult. However, criminals are constantly responding to these developments with new ways to manipulate the system. Even though online retailers are making efforts to protect consumer information, it is a constant fight to maintain the lead. It is advisable to be aware of the most current technology and scams to protect consumer identity and finances. Product delivery is also a main concern of online shopping. Most companies offer shipping insurance in case the product is lost or damaged. Some shipping companies will offer refunds or compensation for the damage, but this is up to their discretion.

### **Lack of full cost disclosure**

The lack of full cost disclosure may also be problematic. While it may be easy to compare the base price of an item online, it may not be easy to see the total cost up front. Additional fees such as shipping are often not visible until the final step in the checkout process. The problem is especially evident with cross-border purchases, where the cost indicated at the final checkout screen may not include additional fees that must be paid upon delivery such as duties and brokerage. Some services such as the Canadian-based Wishabi attempts to include estimates of these additional cost,<sup>[45]</sup> but nevertheless, the lack of general full cost disclosure remains a concern.

### **Privacy**

Privacy of personal information is a significant issue for some consumers. Many consumers wish to avoid spam and telemarketing which could result from supplying contact information to an online merchant. In response, many merchants promise to not use consumer information for these purposes, Many websites keep track of consumer shopping habits in order to suggest items and other websites to view. Brick-and-mortar stores also collect consumer information. Some ask for a shopper's address and phone number at checkout, though consumers may refuse to provide it. Many larger stores use the address information encoded on consumers' credit cards (often without their knowledge) to add them to a catalog mailing

list. This information is obviously not accessible to the merchant when paying in cash or through a bank (money transfer, in which case there is also proof of payment).

### **1.11. TOP ONLINE SHOPPING SITES IN INDIA**

**1. Amazon India:** This is by far the most popular online shopping sites in India. Reputed for superior products, services, delivery and returns policies, Amazon India brings to this country a truly international online shopping experience. You can buy almost all products from Amazon with great discounts.

**2. Flip kart:** This online shopping website is India's own. It is fast becoming popular outside the country too, thanks to excellent product range and highly competitive rates. Flip kart has unbeatable reach in semi-urban and rural India, thanks to its extensive delivery network

**3. Snap deal:** Featuring innumerable products from over 800 categories, Snap deal has emerged as top destination for online shoppers in India. Great discounts are available 24x7x365 on this online store. Fast delivery schedules and flexibility of payments has helped Snap deal grab leading position in India's online shopping sector.

**4. Jabong:** You can buy anything from a trendy scarf to down-to-earth formal wear at Jabong. The online store is popular among online shoppers of all ages. Jabong has dresses and accessories to suit various needs- casuals, formal, sportswear, action wear and ethnic fashions. It boasts of a selection to meet myriad social and cultural needs of Indians.

### **1.12 SIGNIFICANCE OF THE STUDY**

Few developments have altered India's lifestyle more quickly and more completely than the Internet. Online access has enabled people from all walks of life to bring entire libraries, entertainment venues, post offices and financial centers to a workplace, to a desktop or to a shirt pocket. The Internet's largest and most meaningful impact may very well be on the way consumers shop for everything from gifts, gadgets and groceries to clothing, cars, and cruises. The ease and selection that the Internet provides to shoppers has changed the face of retailing. More and more, consumers visit a store's Web site to make their choices before travelling to the store itself; and in a rapidly swelling tide, many shoppers are bypassing the store altogether and ordering online directly from the Web sites of their favourite brands and outlets. On the other hand, the local shop keepers are also affected by the on line shopping tendency among the public. So we thought of investigating the Perception of the common people on Online Shopping.

### **1.13 STATEMENT OF THE PROBLEM**

Perception of the common people on Online Shopping

### **1.14 OBJECTIVES OF THE STUDY**

- a. To find out the level of Perception of the common people on Online Shopping
- b. To find out the level of Perception of the common people on Online Shopping with respect to demographic variables such as Gender, age, qualification, occupation and place.

### 1.15 METHOD USED FOR THE STUDY

The investigators adopted the survey method to find out the Perception of the common people on Online Shopping

### 1.16 POPULATION AND SAMPLE FOR THE STUDY

The population for the present study consisted of the common people in Tirunelveli city. The investigators have used simple random sampling technique for selecting the sample from the population. The sample consists of 629 people in and around Tirunelveli city.

### 1.17 TOOL USED FOR THE PRESENT STUDY

By keeping various objectives of the study in mind, the following tool was used by professor and their team for collecting the data.

1. Personal data form.
2. Perception on Online Shopping Questionnaire was developed and validated by Thomas Alexander, Michael J Leo and their team (2019).

The questionnaire contains 20 items and each item has two choices namely 'Yes' and 'No'. The scoring of the questionnaire is '1' for 'Yes' and '0' for 'No'. The questionnaire is annexed at the end of this chapter.

### 1.18 ANALYSIS OF DATA

#### Question 1: The products Purchased through Online Shopping

**Table 1**  
**Response of the Total Sample**

Dress		Electronic Items		Home Appliances	
Count	percentage	Count	percentage	Count	percentage
142	22.6	314	50	173	27.6

It is inferred from the above table that 50% of the respondents purchased electronic products through online shopping.

**Question 2: Number of time Shopped in a Month through on line Shopping**

**Table 2(a)**

**Response of the Total Sample**

Below 2 times		3 to 7 times		8 and Above	
Count	percentage	Count	percentage	Count	percentage
345	54.8	234	37.2	50	7.9

It is inferred from the above table that 54.8% of the respondents shop below 2 times in a month and 37.2% of them shop 3 to 7 times in a month through on line.

**Table 2(b)**

**Response of the Total Sample with respect to Demographic Variables**

Demographic variables		Below 2 times		3 to 7 times		8 and Above	
		Count	percentage	Count	percentage	Count	percentage
<b>Educational Qualification</b>	<b>10th Std</b>	18	72.0	5	20.0	2	8.0
	<b>12th Std</b>	41	58.6	21	30.0	8	11.4
	<b>College</b>	248	54.7	170	37.5	35	7.7
	<b>Professional</b>	38	46.9	38	46.9	5	6.2
<b>Place</b>	<b>Rural</b>	111	55.8	69	34.7	19	9.5
	<b>Urban</b>	234	54.4	165	38.4	31	7.2

It is inferred from the above table that 72% of the respondents having 10<sup>th</sup> as their educational qualification, shop below 2 times in a month through on line shopping. But 46.9% of the respondents having professional educational qualification shop 3 to 7 times in a month through on line shopping

**Question 3: The Article Purchased**

**Table 3(a)**

**Response of the Total Sample**

Dress		Electronic Items		Home Appliances	
Count	percentage	Count	percentage	Count	percentage
142	22.6	314	49.9	173	27.5

It is inferred from the above table that 49.9% of the respondents purchase electronic items through on line shopping.

**Table 3(b)****Response of the Total Sample with respect to Demographic Variables**

Demographic Variables		Dress		Electronic Items		Home Appliances	
		Count	percentage	Count	percentage	Count	percentage
Occupation	Students	22	17.3	68	53.5	37	29.1
	Government	40	24.0	86	51.5	41	24.6
	Aided Organisation	23	21.7	51	48.1	32	30.2
	Home Maker	21	<b>35</b>	20	33.3	19	31.7
	Private Work	20	18.9	52	49.1	34	32.1
	Business	16	25.4	37	<b>58.7</b>	10	15.9
Place	Rural	52	26.1	96	48.2	51	25.6
	Urban	90	20.9	218	<b>50.7</b>	122	28.4

It is inferred from the table that 35% of homemakers purchased dress where as 58.7% of business men purchased electronic items through online shopping.

It is inferred from the table that urban people purchased electronic items through online shopping.

**Question 4: The Cost of the products****Table 4(a)****Response of the Total Sample**

Less than 5,000		5,000 to 15,000		15, 000 to 25,000		Above 25,000	
Count	percentage	Count	percentage	Count	percentage	Count	percentage
346	55.0	162	25.8	90	14.3	31	4.9

It is inferred from the above table that 55% of the respondents purchases product at the cost of less than Rs. 5,000 and only 14.3% of the respondent purchases products at the rate of Rs.15, 000 to Rs.25, 000.

**Table 4(b)**

**Response of the Total Sample with respect to Demographic Variables**

Demographic variables		Less than 5,000		5,000 to 15,000		15, 000 to 25,000		Above 25,000	Above 25,000
		Count	percentage	Count	percentage	Count	percentage	Count	percentage
Gender	Male	122	43.1	97	<b>34.3</b>	41	14.5	23	8.1
	Female	224	<b>64.7</b>	65	18.8	49	14.2	8	2.3

It is inferred from the above table that 64.7% of the female respondents purchased product at the cost of less than 5,000 rupees and 34.3% of the male respondents purchased product of rate 15,000 to 25,000.

**Question 5: My friends refers me a number of on line shopping offers**

**Table 5(a)**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
175	27.8	454	<b>72.2</b>

It is inferred from the above table that 72.2% of the respondents said that their friends refer them a number of on line shopping offers

**Table 5(b)**

**Response of the Total Sample with respect to Demographic Variables**

Demographic variables		No		Yes	
		Count	percentage	Count	percentage
Occupation	Students	21	16.5	106	<b>83.5</b>
	Government	51	30.5	116	69.5
	Aided Organisation	25	23.6	81	76.4
	Home Maker	23	38.3	37	61.7
	Private Work	31	29.2	75	70.8
	Business	24	38.1	39	61.9

It is inferred from the above table that 83.5% of the students said that their friends refers them a number of on line shopping offers.



**Question 6: The quality of the material in online shopping is good.**

**Table 6(a)**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
257	40.9	372	<b>59.1</b>

It is inferred from the above table that 59.1% of the respondents ensure that the quality of the material they purchase through online is good.

**Table 6(b)**

**Response of the Total Sample with respect to Demographic Variables**

Demographic variables		No		Yes	
		Count	percentage	Count	percentage
<b>Gender</b>	<b>Male</b>	102	36.0	181	<b>64.0</b>
	<b>Female</b>	155	<b>44.8</b>	191	55.2
<b>Age</b>	<b>Below 18</b>	24	35.3	44	<b>64.7</b>
	<b>18 to 30</b>	204	42.5	276	57.5
	<b>31 to 45</b>	29	35.8	52	64.2

It is inferred from the above table that 44.8% of the female said that the quality of the material they purchased through online was not good, but 64% of the male said that quality of the material they purchased through online was good.

It is inferred from the above table 64.7% of the respondents said that the quality of the material they purchase through online was good.

**Question 7: I find it difficult to repair and service the products purchased through online**

**Table 7**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
259	41.2	370	<b>58.8</b>

It is inferred from the above table that 58.8% of the respondent said that it is difficult to repair and service the products purchased through on line.

**Question 8: Cash back offer is the special feature of on line shopping**

**Table 8**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
312	49.6	317	<b>50.4</b>

It is inferred from the above table that 50.4% of the respondent accepted that Cash back offer is the special feature of on line shopping.

**Question 9: I feel proud, if i purchase something through on line**

**Table 9**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
402	<b>63.9</b>	227	36.1

It is inferred from the above table that 63.9% of the respondent said that purchase something through on line is a proud

**Question 10: I prefer on line shopping, since it gives offers and discounts**

**Table 10**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
252	40.1	377	<b>59.9</b>

It is inferred from the above table that 59.9% of the respondent said that they prefer on line shopping, since it gives offers and discounts

**Question 10: I think my on line transactions are safe.**

**Table 10(a)**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
306	48.6	323	51.4

It is inferred from the above table that 51.4% of the respondents accepted that their on line transactions are safe.

**Table 10(b)**

**Response of the Total Sample with respect to Demographic Variables**

Demographic variables		No		Yes	
		Count	percentage	Count	percentage
Gender	Male	111	39.2	172	60.8
	Female	195	<b>56.4</b>	151	43.6
Place	Rural	123	<b>61.8</b>	76	38.2
	Urban	183	42.6	247	57.4

It is inferred from the above table that 51.4% of the female respondents observed that their on line transactions are not safe.

It is inferred from the above table that 61.8% of the rural people responded that their on line transactions are not safe.

**Question 11: I used to read the reviews, before I buy**

**Table 11(a)**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
165	26.2	464	<b>73.8</b>

It is inferred from the above table that 73.8% of the respondents used to read reviews, before they buy.

**Tables 11 (b)**

**Response of the Total Sample with respect to Demographic Variables**

Demographic variables		No		Yes	
		Count	percentage	Count	percentage
Gender	Male	63	22.3	220	<b>77.7</b>
	Female	102	29.5	244	70.5
Age	Below 18	18	26.5	50	73.5
	18 to 30	122	25.4	358	<b>74.6</b>
	31 to 45	25	30.9	56	69.1

It is inferred from the table that 77.7% of male respondents have the habit of reading the reviews, before they buy and 74.6% of the respondents of age between 18 to 30 used to read reviews, before they buy.

**Question 12: My family members purchase through on line, without my knowledge**

**Table 12**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
443	70.4	186	29.6

It is inferred from the above table that 70.4% of the respondent says that their family members purchase through online, without their knowledge.

**Question 13: The local merchants are affected by the Online shopping system**

**Table 13**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
181	28.8	448	71.2

It is inferred from the above table that 71.2% of the respondents accepted that the local merchants are affected by the Online shopping system

**Question 14: The local merchants are affected by the Online shopping system**

**Table 14**

**Response of the Total Sample**

No		Yes	
Count	percentage	Count	percentage
157	25.0	472	75.0

It is inferred from the above table that 75% of the respondent feels that the local merchants are affected by the Online shopping system.

**1.19 FINDINGS**

- 50% of the respondents purchased electronic products through online shopping.
- 54.8% of the respondents shop below 2 times in a month and 37.2% of them shop 3 to 7 times in a month through on line.
- 49.9% of the respondents purchase electronic items through on line shopping.
- 35% of homemakers purchased dress where as 58.7% of business men purchased electronic items through online shopping.
- 55% of the respondents purchases product at the cost of less than Rs. 5,000 and only 14.3% of the respondent purchases products at the rate of Rs.15, 000 to Rs.25, 000.

- f. 64.7% of the female respondents purchased product at the cost of less than 5,000 rupees and 34.3% of the male respondents purchased product of rate 15,000 to 25,000.
- g. 72.2% of the respondents said that their friends refer them a number of on line shopping offers
- h. 59.1% of the respondents ensure that the quality of the material they purchase through online is good.
- i. 58.8% of the respondent said that it is difficult to repair and service the products purchased through on line.
- j. 50.4% of the respondent accepted that Cash back offer is the special feature of on line shopping.
- k. 63.9% of the respondent said that purchase something through on line is a proud
- l. 59.9% of the respondent said that they prefer on line shopping, since it gives offers and discounts
- m. 51.4% of the respondents accepted that their on line transactions are safe.
- n. 51.4% of the female respondents observed that their on line transactions are not safe.
- o. 73.8% of the respondents used to read reviews, before they buy.
- p. 70.4% of the respondent says that their family members purchase through online, without their knowledge.
- q. 71.2% of the respondents accepted that the local merchants are affected by the Online shopping system
- r. 75% of the respondent feels that the local merchants are affected by the Online shopping system.

## **1.20 RECOMMENDATIONS**

Base on the Findings of this survey, the following suggestions and recommendations are given to the common people.

- a. Some websites offer better prices for members, so take some time to make an account before making a purchase.
- b. Some sites offer different prices based on the device you're using. For example, a shopper using a Mac computer may see a higher price, because the algorithm assumes that shopper has a higher income.
- c. Open a "private session" or "incognito window" in your browser when searching for airline tickets or hotel reservations.
- d. Do a quick Google search for comments and reviews about the site – you'll figure out pretty quickly if a site is dangerous or a scam.

- e. Shipping fees can be pretty steep on some retail sites, but you can minimize them by buying more items, less often. So if you find something you like, bookmark it, and wait until you have 2 or 3 other things from that same site bookmarked before you buy.
- f. Comparing prices is the easiest way to save money, both in store and online.
- g. Since the local merchants and business men are affected by the on line stores, give preference to the local merchants.
- h. As the emergency purchasing without money is not possible through on line, the local shops are better always.
- i. For better relationship and mobility, go around the nearest stores for purchase.

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## 5. OFFSPRINGS USING SMART PHONES: PERCEPTION OF PARENTS

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### 1.1 GENERAL USES OF SMART PHONES

Mobile phones are used to communicate wirelessly and across borders. In the past decade or so, mobile phones have emerged as the primary communication devices for millions of users in rural, underdeveloped areas and remote locations in developing countries where it is quite difficult and expensive to lay fixed or land-line infrastructure. In case of emergency situations and natural disasters, a mobile phone is often the best way to communicate and seek help. With the ubiquity of social media applications such as Twitter and Facebook on mobile phones, alerts about potentially dangerous situations are often communicated faster through mobile phones.

#### **Multiple Functions**

Mobile phones have become all-in-one communication and infotainment devices. Apart from the ubiquitous voice and texting operations, the many features of new-age mobile phones have enhanced their functionality. Mobile phones now have large screens, audio and video recorders, GPS navigation, games, digital cameras, music playback, FM. The availability and usage of cables and USB slots in mobile phones facilitate easy downloads of songs, third-party applications and tools and even synchronizing applications with home and work-based PCs.

#### **Enterprise Usage**

The recent emergence of smart phones and full-featured, high-end cell phones has redefined enterprise usage of mobile phones. Many of these mobile phones have the functionality of a hand-held computer and are used by business executives, on-the-go professionals and small entrepreneurs to access and send email and load attachments, files and documents. Corporate IT directors and managers now facilitate access of key enterprise and business applications and tools on mobile phones by mobile workers and professionals anywhere, anytime.

### 1.2 SMART PHONE ADDICTION

Since the introduction of cell phones to the world, the anomalous use of smart phones has been called into question whether its usage could lead to addiction. This problem is often identified as a behavioral addiction just like addictions to food, shopping, gambling, video games, work, and the internet. It is worth to note that behavioral addiction is different from substance addiction like drugs and alcohol. For substance addiction issue, there are clear

changes in the addicts' daily lifestyle and interferences. On the other, behavioral addiction like the addiction to cell phone shows no clear or direct signs of any interference to the addicts' lifestyle.

To put it in a simple term, cell phone addiction can be referred to as a dependence syndrome. This term is used by WHO in 1964 and is categorized either as a substance abuse or a behavioral addiction. And cell phone addiction falls into this category.

It is easy to get access to cell phones at a younger age these days. Teenagers are getting exposed and developed addiction to their phones. Apart from that, the problem can also come from non-stop checking updates from social media, heavy gaming and other extensions of the functionality of smartphone.

People who use a certain brand or latest model tend to feel that proud or 'up-to-date'. This will indirectly create the pressure to own the latest release and to download all of the popular applications. If you are still not convinced that cell phone addiction is as real and is at an alarming rate, consider these statistics:

- ✓ 71% of people sleep with their cell phones by their side.
- ✓ There are 35% of people think of their cell phones the moment they wake up and only about 10% of people think of their significant others.
- ✓ As high as 44% of 18-24 year-olds fall asleep with their phones still in their hands.
- ✓ Almost 40% of cell phone users never disconnect themselves from their phones, even when they are on vacation.
- ✓ And over 44% of Americans say that they cannot go on a day without their smart phones with them.

### **1.2.1. World Health Organization**

Overuse is often defined as a "dependence syndrome", which is the term used by the World Health Organization (WHO Expert Committee, 1964) to replace *addiction* or *habituation*. This is categorized either as substance abuse, such as from psychoactive drugs, alcohol and tobacco under ICD-10, or a behavioral addiction, such as a mobile phone addiction.

Substance use disorders can be defined by 11 factors, according to the DSM-5, including: (1) use in larger quantities or for longer than initially intended, (2) a desire to cut down or control use, (3) spending a great deal of time obtaining, using, or recovering from the substance, (4) craving, (5) use in situations in which it is physically hazardous, (6) continued use of the substance despite adverse physical or psychological consequences associated with use, and (7) withdrawal symptoms.



Smartphone addiction can be compared to substance use disorders in that smart phones provide the drug (entertainment and connection) while acting as the means by which the drug is consumed. A study conducted at Alabama State University on the effects of smart phones on students, defines the issue by stating that we are not addicted to smart phones themselves, but that we "are addicted to the information, entertainment, and personal connections that a smart phone delivers. People have an affinity for constant entertainment, and smart phones provide the quickest, most easily accessible route to it.

Smartphone addiction, sometimes colloquially known as “nomophobia” (fear of being without a mobile phone), is often fueled by an Internet overuse problem or Internet addiction disorder. After all, it’s rarely the phone or tablet itself that creates the compulsion, but rather the games, apps, and online worlds it connects us to. Smartphone addiction can encompass a variety of impulse-control problems. Mobile phone overuse (smartphone addiction, mobile-phone addiction, problem mobile phone use, or mobile phone dependency) is a dependence syndrome seen among mobile phone users. Some mobile phone users exhibit problematic behaviors related to substance use disorders. These behaviors can include preoccupation with mobile communication, excessive money or time spent on mobile phones, use of mobile phones in socially or physically inappropriate situations such as driving an automobile. Increased use can also lead to increased time on mobile communication, adverse effects on relationships, and anxiety if separated from a mobile phone or sufficient signal.

## **1.2 SYMPTOMS**

Almost everyone in the world today owned a cell phone, so how can you tell if someone is suffering the cell phone addiction syndrome from someone who is not? Well, like most illnesses and diseases, you can tell if someone is suffering the syndrome from symptoms showed. And there are plenty of symptoms to notice, but James Robert, the professor from Baylor University’s Hankamer School of Business has identified that almost every phone addict shows these six signs: tolerance, conflict, withdrawal, euphoria, relapse, and salience.

- 
- Insomnia
  - Inability to Focus / Complete a Task
  - Stress and Restlessness
  - Relationship Stress
  - Eye Strain
  - Neck Pain
  - Social Anxiety

- Escapist Behavior
- Dependence on Digital Validation

This is where people are looking to get validation and agreement from other people. We have to admit it, humans are creatures where we are always seeking approval and validation. We want others to agree with us and like. Thus, whenever you posted a photo to your social media account, you will want to check it constantly to see if people comment or like your photo.

Every time someone likes your photo or whatever you share in the social media, it makes you feel good, hence, the increase of dopamine level. Eventually, your brain will accept the act of consistently checking your phone and it becomes habitual. Just like if you are a blogger and you posted an article on your blog. People praise your work and it gets a lot of shares and likes. This will make you feel pleasurable and wanted to write more. You have to understand that a phone is not addictive by itself without the presence of internet, social media, games, etc. Your phone only becomes addictive when these other functions are available at your fingertips.

Although cell phone addiction is not yet listed in the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition (DSM-5), research has compared it to gambling addiction, which has clearer diagnostic criteria and is included in the DSM-5. At least 4 of the following signs and symptoms are thought to comprise criteria for cell phone addiction, and the problematic cell phone overuse must cause significant harm in the individual's life:

- **A need to use the cell phone more** and more often in order to achieve the same desired effect.
- Persistent **failed attempts to use cell phone less often.**
- **Preoccupation** with smartphone use.
- Turns to cell phone when experiencing unwanted feelings such as anxiety or depression.
- **Excessive use** characterized by loss of sense of time.
- Has put a **relationship or job at risk** due to excessive cell phone use.
- **Tolerance** - Need for newest cell phone, more applications, or increased use.
- **Withdrawal**, when cell phone or network is unreachable.
  - Anger.
  - Tension.
  - Depression.
  - Irritability.
  - Restlessness.

If you or a loved one displays these signs and symptoms of cell phone addiction, help is readily available. Call the phone number above to speak with a treatment specialist about various recovery options.

### **1.3 PHYSICAL EFFECTS OF MOBILE ADDICTION**

Overuse of your cell phone or smartphone can result in a number of different physical problems that may cause permanent damage or be difficult to treat, including:

- Digital eye strain.
  - The pain and discomfort associated with viewing a digital screen for over 2 hours.
  - Eyes begin to burn and itch.
  - Blurred vision.
  - Eye fatigue.
  - Digital Eye Strain can cause headaches.
- Neck problems - Also known as “text neck,” which refers to neck pain resulting from looking down at cell phone or tablet for too long.
- Increased illnesses due to germs.
  - Phones have been found to be 1 in 6 cell phones has fecal matter on it.
  - E. coli bacteria, which can cause fever, vomiting, and diarrhea, is found on many phones.
  - Contaminated with MRSA.
    - ✓ Causes painful abscesses.
    - ✓ Life-threatening infections in bones, joints, surgical wounds, bloodstream, heart valves, and lungs.
- Car accidents.
  - Many people believe that they can multitask and use their phones while driving, but this causes significant impairment and puts the driver and others on the road in danger.
  - Research has revealed that texting and driving can be just as dangerous as drinking and driving.
- Male infertility.
  - Preliminary studies have revealed that cell phone radiation may decrease sperm count, sperm motility and viability.

### **1.4 PSYCHOLOGICAL EFFECTS OF CELL PHONE ADDICTION**

Potential Indicators of Cell Phone Addiction:

- Conscious use of phones in dangerous situations or in prohibited contexts (e.g while driving)
- Excessive phone use that causes social and family conflicts and confrontations, as well as loss of interest in other shared activities
- Continuing the behavior despite the negative effects and/or personal malaise it causes
- Excessive phone use causing noticeable physical, mental, social, work, or family disturbances (e.g eye strain, symptoms of withdrawal, stress, and anxiety)
- Chronic impulsiveness to check your device
- Frequent and constant checking of phone in very brief periods of time causing insomnia and sleep disturbances
- Increase in use to achieve satisfaction or relaxation or to counteract a dysphoric mood
- Excessive use, urgency, need to be connected
- Need to respond immediately to messages, preferring the cell phone to personal contact
- Abstinence, dependence, craving
- Anxiety, irritability if cell phone is not accessible, feelings of unease when unable to use it
- Sleep disturbances.

Cell phone addiction has been linked to an increase in sleep disorders and fatigue in users. Using your cell phone before bed increases the likelihood of insomnia. Bright light may decrease sleep quality. Smartphone use could increase the amount of time it takes to fall asleep. Light emitted from the cell phone may activate the brain.

- Depression.
- Obsessive Compulsive Disorder.
- Relationship problems.

Offline relationships may suffer as a result of neglect in favor of excessive cell phone and social media use.

- Anxiety.

Research has found that college students who use their cell phones the most are more likely to feel anxious during downtime.

According to a 2016 NIH study, DSM-5 Criteria for drug abuse disorders can be used effectively to identify cell phone addiction. Mobile addiction, therefore, can be defined as a psychological dependence on mobile devices whereby users exhibit symptoms similar to drug addiction. Often, these symptoms manifest and develop over the course of months and years, but may also manifest in shorter ‘binges’.



If you Whenever your phone buzz and notify you to check it out, if you do it and you get rewarded by doing so, this action will create a new neural pathway in your brain. Repeat this consistently, day in and day out, every time your phone buzzes, you check it out and you feel good, it will become your habit. You will get used to it and become comfortable with it once more. The same goes with your phone. When you change your cell phone or the notification tone, you will feel odd at first, but eventually, you will get used to it. This explains the causes of how cell phone addiction is formed. You will develop the habit of checking your phone event when it is not ringing.

#### 1.4.1 Health Issue

The more time you spend using your smartphone, the less time you will have to exercise or even walk around. Many people found that they are lost in the virtual space their smartphone provides, and only to return to the reality after hours later. Cell phone usage has greatly replaced many of our physical activity in life. A survey conducted to a group of students and found that those who spend long hours using their phones were less fit than the other average that spent less time on their phone

### 1.5 MISUSES OF SMART PHOMES

Almost all new-generation mobile phones have in-built cameras. Many users are known to capture pictures of women, children, celebrities and other people in public places. The antisocial and unscrupulous elements among these users are known to manipulate and morph these images and circulate them on various mediums. Bullying through texting is quite common among teens and young adults. Impressionable and vulnerable teenagers are known to be affected mentally when bullied or harassed by peers and other students through text messages.

### **1.5.1 Criminal and Dangerous Activities**

Nearly every new commercial or consumer technology application can be misused for ulterior purposes apart from the known positive uses. The easy availability of mobile phones, and especially those with prepaid services, has ensured many subscribers among unscrupulous elements of society. Scammers, sophisticated criminals and thieves are known to indulge in criminal activities with the help of mobile phones. National security and law enforcement agencies are fearful about usage of high-end mobile phones by terrorists. The mobile phone is a uses and abuses of mobile phones device that is used to make calls or to send messages to our near and dear ones. But there are both uses and abuses of mobile phones. Now a day the use of mobile phone is not only to make calls or send SMS. In addition to that Mobile phone is used to listen to songs, watch movies, play online games, browse the internet, calculate things etc. But there are some abuses of mobile phones also. Doctors have warned that excessive use of mobile phone can be harmful to our health. Again mobile phone helps the anti-social groups in spreading their networks and they can easily do criminal activities in a much easier way with the help of mobile phone as well. We all carry a mobile phone or a smartphone with us. It helps us to communicate with our relatives or friends who are not near to us physically. The invention of the mobile phone is a great success of science. Though the main uses of the mobile phone are to make calls or to send messages, it can also be used in multi purpose tasks. In addition to calls or messages, the mobile phone can also be used as a calculator, camera, voice recording device, audio and video player etc. one can browse the internet on his/her mobile phone.

No doubt mobile phone has changed our lifestyle, but there are some abuses of the mobile phone, or we can say that there are a few disadvantages of mobile phones. A recent survey reveals a dangerous data that more than 35% to 40% road accidents are caused due to uses of mobile phones while driving across the globe. That is really a serious problem. Again some students misuse the mobile phone and give way to social pollution. On the other hand, the radiations emitted by mobile phones and its towers are very harmful to our health. In the conclusion, we must admit that there are both uses and abuses of the mobile phone. But mobile phone plays a vital role in the development of our civilization. It should be used properly or in a proper manner.

### **1.6 BAD SIDE EFFECTS OF SMARTPHONE ADDICTION**

***Text Claw and Cell Phone Elbow:*** "Text Claw" is a non-medical term used to describe all of the finger cramping and sore muscles that come from continuous scrolling, texting, and gaming on smartphone. An even more common side effect: Using your phone too

much can cause inflammation in your tendons and enhance existing conditions, like tendinitis and carpal tunnel. Similarly, "Cell Phone Elbow" describes tingling or numbness in ring and pinky fingers after bending your elbow for long periods of time. If your non-stop smart phoning has you feeling sore and weak, do some stretches. Put down the phone, then try bending your wrists backward, putting your hands together like a prayer and pushing down. Then, doing some wrist flexes. If you experience pain for longer than a week, try applying heat. Or better still, see a doctor.

***I-Posture and Text Neck:*** Slouching over your phone for hours at a time is ruining your neck and hurting your back muscles. "i-Posture" or "Text Neck" are just two of a few phrases doctors throw around to describe the excessive stress on neck muscles. According to a study of young adults in the U.K., 84% of those tracked experienced back pain during the last year, mainly due to being hunched over smartphone, tablets, and computers.

Fixing your posture can relieve lower back pain, and limiting your phone use can alleviate neck strain. While it seems awkward, try to hold your phone directly out and in front of your face, not on your lap where you might need to look down for minutes at a time.

***Computer Vision Syndrome:*** Staring at the tiny font in your texts and scrolling through dozens of tweets can lead to eyestrain, blurred vision, dizziness, and dry eyes. And blurred vision plus sore neck muscles can also cause headaches. If you're experiencing eye discomfort, make your phone's font size bigger. Mark Rosen field, O.D., Ph.D., told *Men's Health* that phone users should try to hold their phones at least 16 inches away from their faces. Every few minutes look up from your screen at something far away for short breaks, and don't forget to blink.

***Nomophobia:*** Short for "no-mobile-phone phobia," this is exactly what it sounds like: the fear of being without your cell. According to a study of 1,000 people in the U.K., 66% of the population fears losing or being without their phones at any given time. Some of the symptoms of nomophobia include anxiety or negative physical symptoms if you have lost or cannot use your cell phone, obsessively checking to make sure you have your phone with you, and constantly worrying about losing it somewhere. Interestingly, the study found that women suffer from this more than men. If this sounds like you, experts suggest employing common anxiety-relieving relaxation techniques like yoga and deep breathing.

***Phantom Pocket Vibration Syndrome:*** No, you didn't just get a text message! A professor at Indiana University found that 89% of the undergraduates in her study experienced phantom vibrations when their phones weren't actually vibrating. The study also found that students who were dependent on text messages and social media updates were more anxious when their phones weren't really vibrating.

## **1.7 WAYS TO BREAK PHONE ADDICTION**

### **1.7.1 Track Your Phone Time**

There's nothing that'll punch you in the stomach and fuel a change in behavior quite like becoming aware of how much time you're actually spending on your phone each day. According to e-Marketer's 2016 mobile report, the average user spends a whopping 4 hours, 5 minutes per day on her smartphone. Track your phone time automatically and see which apps you use the most with the Moment app. If you find that you're using your phone more than you'd like, you can set daily limits and the app will notify you when you've gone over. There's even a setting that will force you off your phone if your usage gets too high.

### **1.7.2 Give Your Home Screen a Makeover**

Take control of your screen time back in 2018 by utilizing the following tips suggested by the organization Time Well Spent: First, try moving your mindless apps (social media and other time-suckers) to the back page of your smartphone, and keeping only your utility apps (calendar, weather, etc.) to the front. Better yet, delete some of your mindless apps altogether.

Next, visit your Settings > Notifications and turn off app notifications you don't need. Do you need to remind that someone liked your twitter feed? Instead of being pulled mindlessly into apps throughout the day, why not take control? *You* decide when you want to visit an app and check notifications.

### **1.7.3 Take Small But Meaningful Actions Every Day**

Now that you've got the basics under control, it's time to download some apps that can help you get out of your device and into the real world. Giant good is a great option that helps you take meaningful actions every day - it's almost like having a fanatic personal trainer running next to you all day, motivating you to take small but meaningful actions. "Go on a walk after dinner!" She might offer. Or "Call up a relative!", 'cause she somehow knows you've been too busy scrolling Instagram to call up your dear sweet grandmother lately. "Buy a coffee for a stranger!" she might suggest, offering you options that benefit yourself, others, and the world around you.



The app sends you three choices every day - small but meaningful acts you can complete in just a few minutes, but that will help you get out of your device and connect with the three-dimensional world around you. All you need to do is pick one and complete it! Voila: Doing meaningful things in the real world has never been easier. Giant good is currently available for the iPhone and android.

#### **1.7.4 Get Outside**

Sometimes it's so easy to get sucked into the world of social media, emails, and Candy Crush Saga that you find you aren't getting your butt off the couch and into the outdoors as often as you'd like. Strava is an app that helps you disconnect from your device and get outside into nature. Use this app to track the time, pace, and distance of your hikes, runs, or rides and to connect you with other active people in your community.

#### **1.7.5 Tune In For A Tech-Free Dinner**

The Dinner mode app helps you break your phone addiction by challenging you to stay off your phone during dinner - but you can also use it anytime you want a tech-free experience. The concept is simple: All you need to do is choose an amount of time you want to stay off your phone - 15 minutes, 30 minutes, or one hour - and then your phone prompts you to turn it upside down on a flat surface. If you pick your phone up before the timer ends, you fail the Dinner mode challenge!

#### **1.7.6 Create a Schedule for Yourself**

This is the most effective way of overcoming phone addiction. You can decide to create time intervals within which you will not come into contact with your phone. You can start with 20 minutes then move to half an hour after getting used to the 20-minute interval. If you continue scheduling yourself, then by the end of the third month you will not be touching your phone for half a day. To succeed in overcoming phone addiction, you will have to be consistent. Consistency is the only way to overcome any addiction.

#### **1.7.7 Eliminate Distractions**

Social media notifications can really irritate you if you were performing an important task. Yet you would stop whatever you were doing and check the latest Facebook post from the socialite or influencer that you follow. You soon get engrossed in your phone and start procrastinating the task you had been doing before you heard the notification sound. You now treat your task as the distraction. But have you ever wondered why the notification sound compels you to grab your phone? The notification sound causes the brain to release dopamine, which is the feel-good hormone; you will definitely grab the phone. The only way

to overcome these distractions is to eliminate them. Turn off all push notifications for as many apps as you can. Go to Settings, then head to notifications tab and set your preferences.

### **1.7.8 Withdraw from Social Media**

Actually, social media is the main cause of phone addiction. Most youths spend a greater part of their wake hours on social media, looking at things that do not have a direct positive impact on them. They even begin to pretend to look rich on photos they shoot so that they can get more likes and shares. Facebook and Instagram are wasting your time if all you do is watch what other people have posted. Find a way of making money on that platform! Or uninstall it because it is stealing your time; the only true wealth that you have.

## **1.8 SIGNIFICANCE OF THE STUDY**

Smart phones are ubiquitous in everyday life and are having a major impact on work, education, social relationships and modes of communication. Children are the fastest growing population of smart phone users, with use often focusing around internet access, e.g., 1 in 3 internet users in the UK are under 18 years of age. Despite their widespread use, relatively little is known about the factors that underpin children's use. The home is a significant ecological context of development and recent research has highlighted the importance of the home environment in promoting and supporting the development of both safe and unsafe online behavior. The children at home are using mobile without the permission of their parents, wasting their study time, have less interaction with parents and try to hide their digital relationship in terms of calls and conversations. This deviate them from their studies and affects their real potential. So we planned to take a survey on the perception of parents on the usage of mobile phone by their Offsprings.

## **1.9 STATEMENT OF THE PROBLEM**

Perception of Parents on the Mobile usage of their Offsprings

## **1.10 OBJECTIVES OF THE STUDY**

- c. To find out the level of perception of parents on the Mobile usage of their Offsprings
- d. To find out the level of perception of of parents on the Mobile usage of their Offsprings with respect to demographic variables such as Gender, age, qualification, occupation and place.

## **1.11 METHOD USED FOR THE STUDY**

The investigators adopted the survey method to find out the perception of parents on the Mobile usage of their Offsprings

## 1.12 POPULATION AND SAMPLE FOR THE STUDY

The population for the present study consisted of parents having Offsprings using smart phones in Tirunelveli city. The investigators have used simple random sampling technique for selecting the sample from the population. The sample consists of 762 people in and around Tirunelveli city.

## 1.13 DISTRIBUTION OF THE SAMPLE

The distribution of the sample is given as follows.

**Table 1.13.1**

**Distribution of the sample with respect to all the Background Variables**

<b>Background Variables</b>	<b>Categories</b>	<b>Number</b>	<b>Percentage</b>
<b>Gender</b>	<b>Male</b>	416	54.6
	<b>Female</b>	346	45.4
<b>Age</b>	<b>Below 18</b>	211	27.7
	<b>19 to 30</b>	551	72.3
<b>Qualification</b>	<b>10th std</b>	125	16.4
	<b>12 std</b>	141	18.5
	<b>College</b>	339	44.5
	<b>Professional</b>	157	20.6

## 1.14 TOOL USED FOR THE PRESENT STUDY

By keeping various objectives of the study in mind, the following tool was used by professor and their team for collecting the data.

- a. Personal data form.
- b. Perception of parents on the Mobile usage of their Offsprings Questionnaire was developed and validated by Thomas Alexander, Michael J Leo and their team (2019).

The questionnaire contains 20 items and each item has two choices namely 'Yes' and 'No'. The scoring of the questionnaire is '1' for 'Yes' and '0' for 'No'. The questionnaire is annexed at the end of this chapter.

## 1.15 ANALYSIS OF DATA

### Objective 1: Hours of Using Mobile in a Day

Table 1 (a)

#### Response of the total sample

Up to One Hour		1 to 2 Hours		2 to 3 Hours		Above 3 Hours	
Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
97	12.7	242	31.8	381	50.0	42	5.5

It is inferred from the above table from the above table that 12.7% of the people using smart phone up to 1 hour, 31.8% of them using 1 to 2 hours, **50% of them using 2 to 3 hours** and 5.5% of them using the smart phone more than 3 hours.

Table 1 (b)

#### Response of the total sample with respect to demographic variables

Demographic Variables		Up to One Hour		1 to 2 Hours		2 to 3 Hours		Above 3 Hours	
		Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Age	Below 18	50	23.7	79	37.4	67	31.8	15	7.1
	19 to 30	47	8.5	163	29.6	314	<b>57.0</b>	27	4.9
Gender	Male	61	14.7	129	31.0	208	50.0	18	4.3
	Female	36	10.4	113	32.7	173	50.0	24	6.9
Educational Qualification	10th std	28	22.4	52	41.6	45	36.0	0	0.0
	12th std	28	19.9	47	33.3	65	46.1	1	0.7
	College	33	9.7	117	34.5	160	47.2	29	8.6
	Professional	8	5.1	26	16.6	111	70.7	12	7.6

It is inferred from the above table from the above table that 23.7% of the people having age below 18 are using smart phone up to 1 hour, 37.4% of them using 1 to 2 hours, 31.8% of them using 2 to 3 hours and 7.1% of them using the smart phone more than 3 hours as perceived by the parents.

Whereas, It is inferred from the above table from the above table that 8.5% of the people having age **between 19 to 30** are using smart phone up to 1 hour, 29.6% of them

using 1 to 2 hours, **57% of them using 2 to 3 hours** and 4.9% of them using the smart phone more than 3 hour as perceived by the parents.

**Objective 2: Preferred purpose of using mobile**

**Table 2(a)**

**Response of the total sample**

Whatsapp		Making/ Receiving Calls		Games		Internet		Facebook		Music/ Songs	
Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
267	35.0	98	12.9	139	18.2	147	19.3	71	9.3	40	5.2

It is inferred from the above table that 35% of the people preferably using the mobile for Whatsapp and **39%** of the college students are using mobile preferably for **Whatsapp** purpose as perceived by the parents.

**Question 1: My son/daughter uses the smart phone excessively**

**Table 3 (a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
203	26.6	559	73.4

It is inferred from the above table that **73.4%** of the youngsters are using smart phone excessively as perceived by the parents.

**Table 3 (b)**

**Response of the total sample with respect to demographic variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	84	39.8	127	60.2
	19 to 30	119	21.6	432	78.4
Gender	Male	99	23.8	317	76.2
	Female	104	30.1	242	69.9

It is inferred from the above table that 78.4% of the parents perceived that their son/daughters of age between 19 to 30 are using smart phone excessively.

It is inferred from the above table that 76.2% of mothers perceived that their son/daughters of age between 19 to 30 are using smart phone excessively.

**Question 2: The work being done by my son/daughter is distracted by the smart phone**

**Table 4 (a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
311	40.8	451	59.2

It is inferred from the above table that 59.2% of parents perceived that their son/daughters are distracted by the smart phone.

**Table 4 (b)**

**Response of the total sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	70	33.2	141	<b>66.8</b>
	19 to 30	241	43.7	310	56.3
Gender	Male	162	38.9	254	<b>61.1</b>
	Female	149	43.1	197	56.9

It is inferred from the above table that 66.8% of parents perceived that their son/daughters of age below are distracted by the smart phone.

It is inferred from the above table that 61.1% of male youngsters are distracted by the smart phone.

**Question 3: My son/daughter shows anger/stress, when they are not able to access the mobile**

**Table 5 (a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
329	43.2	433	56.8

It is inferred from the above table that 56.8% of the youngsters show anger/ stress, when they are not able to access the smart phone as perceived by the parents.

**Table 5 (b)**

**Response of the total sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	72	34.1	139	<b>65.9</b>
	19 to 30	257	46.6	294	53.4
Gender	Male	171	41.1	245	<b>58.9</b>
	Female	158	45.7	188	54.3

It is inferred from the above table that 65.9% of the youngsters of age below 18, show anger/ stress, when they are not able to access the smart phone as perceived by the parents.

It is inferred from the above table that 58.9% of the male youngsters show anger/ stress, when they are not able to access the smart phone as perceived by the parents.

**Question 4: My son/daughter takes the smart phone with them even to the unnecessary places**

**Table 6(a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
389	49.0	373	51.0

It is inferred from the above table that 51.0% of youngsters take their smart phone to the unnecessary places as perceived by their parents.

**Table 6 (b)**

**Response of the total sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	102	48.3	109	51.7
	19 to 30	287	52.1	264	47.9

It is inferred from the above table that 52.1% of youngsters of age below 18 take their smart phone to the unnecessary places as perceived by their parents.

**Question 5: My son/daughter isolates themselves with mobile in the family functions/marriages**

**Table 7(a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
335	44.0	427	56.0

It is inferred from the above table that 56% youngsters isolate themselves with mobile in the Family Functions/Marriages as perceived by the parents.

**Table 7 (b)**

**Response of the total Sample with respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	96	45.5	115	54.5
	19 to 30	239	43.4	312	<b>56.6</b>
Gender	Male	167	40.1	249	<b>59.9</b>
	Female	168	48.6	178	51.4

It is inferred from the above table that 56.6% youngsters of age between 19 to 30 isolate themselves with mobile in the Family Functions/Marriages as perceived by the parents.

It is inferred from the above table that 59.9% male youngsters isolate themselves with mobile in the Family Functions/Marriages as perceived by the parents.

**Question 6: The behaviour of my son/daughter has changed, once they started using smart phones.**

**Table 8(a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
348	45.7	414	<b>54.3</b>

It is inferred from the above table that 54.3% of the behaviour of the youngsters has changed, once they started using smart phones as perceived by the parents.



**Table 8 (b)**

**Response of the Total Sample With Respect To Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	99	46.9	112	53.1
	19 to 30	249	45.2	302	<b>54.8</b>
Gender	Male	185	44.5	231	<b>55.5</b>
	Female	163	47.1	183	52.9

It inferred from the above table that 54.8% of the behaviour of the youngsters with age between 19 to 30 has changed, once they started using smart phones as perceived by the parents.

It inferred from the above table that 54.3% of the behaviour of the male youngsters has changed, once they started using smart phones as perceived by the parents.

**Question 7: My son/daughter is deeply interested in taking selfie**

**Table 9(a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
211	27.7	550	72.3

It inferred from the above table that 72.3% of the youngsters are deeply interested in taking selfie as perceived by their parents.

**Table 9 (b)**

**Response of the Total Sample With Respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	49	23.2	162	<b>76.8</b>
	19 to 30	162	29.5	388	70.5

It inferred from the above table that 76.8% of the youngsters having age between 19 to 30 are deeply interested in taking selfie as perceived by their parents.

**Question 8: After using mobile, my son/daughter is affected by head ache/eye sight.**

**Table 10(a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
355	46.6	407	53.4

It is inferred from the above table that 53.4% of the youngsters are affected by Head Ache/Eye Sight as perceived by the parents.

**Table 10 (b)**

**Response of the total Sample with Respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Gender	Male	176	42.3	240	57.7
	Female	179	51.7	167	48.3

It is inferred from the above table that 57.7% of the male youngsters are affected by Head Ache/Eye Sight as perceived by the parents.

**Question 9: The reading habits of my son/daughter is declined due to smart phone usage.**

**Table 11(a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
313	41.1	448	58.9

It is inferred from the above table that 58.9% of the youngsters decline their reading habit due to Smart Phone Usage a perceived by their parents.

**Table 11(b)**

**Response of the total Sample with Respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	77	36.5	134	63.5
	19 to 30	236	42.9	314	57.1
Gender	Male	146	35.2	269	64.8
	Female	167	48.3	179	51.7

It is inferred from the above table that 63.5% of the youngsters of age below 18, decline their reading habit due to Smart Phone Usage as perceived by their parents.

It is inferred from the above table that 64.8% of the male youngsters decline their reading habit due to Smart Phone Usage as perceived by their parents.

**Question 10: The duration of sleep of my son/ daughter is reduced due to use of smart phone**

**Table 12(a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
282	37.0	480	63.0

It is inferred from the above table that 63.0% of youngsters' duration of sleep is reduced due to Use of Smart Phone as perceived by the parents.

**Table 12(b)**

**Response of the Total Sample With Respect To Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Age	Below 18	73	34.6	138	65.4
	19 to 30	209	37.9	342	62.1
Gender	Male	125	30.0	291	70.0
	Female	157	45.4	189	54.6

It is inferred from the above table that 65.4% of youngsters' (of age below 18) duration of sleep is reduced due to Use of Smart Phone as perceived by the parents.

It is inferred from the above table that 70% of male youngsters' duration of sleep is reduced due to Use of Smart Phone as perceived by the parents.

**Question 11: Even though there is no message or call, my son/daughter has the tendency of checking**

**Table 13(a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
279	35.7	483	64.3

It is inferred from the above table that 64.3% of the youngsters have the tendency of checking their mobile, even though there is no message or call as perceived by the parents.

**Table 13(b)**

**Response of the Total Sample With Respect to Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Gender	Male	136	32.7	279	67.3
	Female	142	41.0	204	59.0

It is inferred from the above table that 67.3% of the male youngsters have the tendency of checking their mobile, even though there is no message or call as perceived by the parents.

**Question 12: My son/daughter is searching their smart phone, the moment they wake up from bed.**

**Table 14(a)**

**Response of the total sample**

No		Yes	
Count	Percentage	Count	Percentage
289	37.9	473	62.1

It is inferred from the above table that 62.1% of the youngsters are searching their Smart Phone, the moment they wake up from bed as perceived by the parents.

**Table 14(b)**

**Response Of The Total Sample With Respect To Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Gender	Male	160	38.5	256	61.5
	Female	129	37.3	217	62.7

It is inferred from the above table that 62.7% of the female youngsters are searching their Smart Phone, the moment they wake up from bed as perceived by the parents.

**Question13: My son/daughter is having password for their smart phones**

**Table 15(a)**

**Response of the Total Sample**

No		Yes	
Count	Percentage	Count	Percentage
216	28.3	546	71.7

It is inferred from the above table that 71.7% of the youngsters are having Password for their Smart Phones as perceived by the parents.

**Table 15(a)**

**Response of the Total Sample With Respect To Demographic Variables**

Demographic Variables		No		Yes	
		Count	Percentage	Count	Percentage
Gender	Male	117	28.1	299	71.9
	Female	99	28.6	247	71.4

It is inferred from the above table that 71.9% of the male youngsters are having Password for their Smart Phones as perceived by the parents.

**1.16 FINDINGS**

- a. 12.7% of the people using smart phone up to 1 hour, 31.8% of them using 1 to 2 hours, 50% of them using 2 to 3 hours and 5.5% of them using the smart phone more than 3 hours.
- b. 23.7% of the people having age below 18 are using smart phone up to 1 hour, 37.4% of them using 1 to 2 hours, 31.8% of them using 2 to 3 hours and 7.1% of them using the smart phone more than 3 hours as perceived by the parents.
- c. 35% of the people preferably using the mobile for Whatsapp and 39% of the college students are using mobile preferably for Whatsapp purpose as perceived by the parents.

- d. 73.4% of the youngsters are using smart phone excessively as perceived by the parents.
- e. 59.2% of parents perceived that their son/daughters are distracted by the smart phone.
- f. 56.8% of the youngsters show anger/ stress, when they are not able to access the smart phone as perceived by the parents.
- g. 51.0% of youngsters take their smart phone to the unnecessary places as perceived by their parents.
- h. 56% youngsters isolate themselves with mobile in the Family Functions/Marriages as perceived by the parents.
- i. 54.3% of the behaviour of the youngsters has changed, once they started using smart phones as perceived by the parents.
- j. 54.8% of the behaviour of the youngsters with age between 19 to 30 has changed, once they started using smart phones as perceived by the parents.
- k. 72.3% of the youngsters are deeply interested in taking selfie as perceived by their parents.
- l. 53.4% of the youngsters are affected by Head Ache/Eye Sight as perceived by the parents.
- m. 58.9% of the youngsters decline their reading habit due to Smart Phone Usage as perceived by their parents.
- n. 63.0% of youngsters' duration of sleep is reduced due to Use of Smart Phone as perceived by the parents.
- o. 64.3% of the youngsters have the tendency of checking their mobile, even though there is no message or call as perceived by the parents.
- p. 62.1% of the youngsters are searching their Smart Phone, the moment they wake up from bed as perceived by the parents.
- q. 62.7% of the female youngsters are searching their Smart Phone, the moment they wake up from bed as perceived by the parents.
- r. 71.7% of the youngsters are having Password for their Smart Phones as perceived by the parents.

### **1.17 RECOMMENDATIONS**

Base on the findings that the parents have no control over their Offsprings using smart phones excessively. The following are the few recommendations to both parents and the youngsters to come out the use of mobile excessively.

- a) **Make your own plan of using media and practice it accordingly**
- b) **Set limits to use mobiles and encourage playtime in the family**
- c) **Screen time shouldn't always be alone time and kindly be with them**
- d) **Be a good role model and do not use the mobile excessively in front of your kids.**

- e) **Know the value of face-to-face communication and develop interesting conversations in the family**
- f) **Don't use technology as an emotional pacifier by which the Offsprings would become the smart phone addicts**
- g) Do not let children take mobile phones to school/college rather let them keep it at home.
- h) Prefer going for outdoor activities like field trip, nearest museum, temples, parks and so on.
- i) Visiting the houses of relations and neighbours strengthen the human relationship

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## REFERENCES

- Albers, S. (2003). *Eating Mindfully*. California: New Harbinger Publications, Inc.
- David, M. (1991). *Nourishing Wisdom*. New York: Random House.
- Halweil, B. (2007). *Still No Free Lunch: Nutrient Content of U.S. Food Suffers at Hands of High Yields*. Foster, RI: Organic Center.
- Hyman, M. (2003). *Ultraprevention*. New York: Scribner.
- Kabat-Zinn, J. (2005). *Coming to Our Senses*. New York: Hyperion.
- Kesten, D. & Scherwitz, L. (2007). *The Enlightened Diet*. California: Celestial Arts.
- [www.culturalindia.net](http://www.culturalindia.net)
- [www.culturalindia.net](http://www.culturalindia.net)
- [www.haldiramura.com](http://www.haldiramura.com)
- <http://www.chidambaravilas.com/traditional-food-tamil-nadu/>
- <https://scialert.net/fulltextmobile/?doi=pjn.2009.660.667>.
- [https://en.wikipedia.org/wiki/World\\_Happiness\\_Report](https://en.wikipedia.org/wiki/World_Happiness_Report)
- <http://worldhappiness.report/ed/2018/>
- <https://www.hjlifehacks.com/happiness-benefits>
- <https://www.quora.com/What-are-the-disadvantages-of-happiness>
- <https://www.moneycrashers.com/live-healthy-happy-life/>
- <https://www.bbb.org/article/tips/14040-bbb-tip-smart-shopping-online>
- <https://www.onegoodthingbyjillee.com/tips-for-shopping-smarter-online/>
- <https://pubs.rsc.org/en/content/articlelanding/2010/em/b914648b/unauth#!divAbstract-28.2.2019>
- <https://www.sciencehistory.org/the-history-and-future-of-plastics>
- <https://www.quora.com/What-are-the-disadvantages-of-plastic>
- <http://www.historyofplastic.com/plastic-facts/disadvantages-of-plastic/>
- [https://www.google.com/search?q=plastics+in+medical+field&rlz=1C1CHBD\\_enIN790IN790&plastics+in+medical+field&aqs=chrome..69i57.14565j0j8&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=plastics+in+medical+field&rlz=1C1CHBD_enIN790IN790&plastics+in+medical+field&aqs=chrome..69i57.14565j0j8&sourceid=chrome&ie=UTF-8)
- <https://www.sciencedirect.com/science/article/pii/S1359836816318601-28.2.2019>
- [https://www.norcalcompactors.net/6-waste-disposal-methods/-28.2.2019\)](https://www.norcalcompactors.net/6-waste-disposal-methods/-28.2.2019)
- [https://blogs.ei.columbia.edu/2012/01/31/what-happens-to-all-that-plastic/-28.2.2019\)](https://blogs.ei.columbia.edu/2012/01/31/what-happens-to-all-that-plastic/-28.2.2019)
- <https://science.sciencemag.org/content/347/6223/768-28.2.2019>
- <https://www.law.cornell.edu/uscode/text/21/342>
- <https://www.gpo.gov/fdsys/pkg/USCODE-2011-title21/html/USCODE-2011-title21-chap12-subchapI-sec601.html>



John F. Helliwell & Daniel Kahneman (Eds.) (2010). *International Differences in Well-Being*. New York: Oxford University Press.

<https://personal.eur.nl/veenhoven/Pub2010s/2012k-full.pdf>

<http://time.com/money/4070041/angus-deaton-nobel-winner-money-happiness/particularly-section-4>

Peterson, R. A.; Balasubramanian, S. & Bronnenberg, B. J. (1997). *Exploring the implications of the Internet for consumer marketing*". *Journal of the Academy of Marketing Science*. **25** (4): 329– 346. doi:10.1177/0092070397254005.

Stephen; Liou, Juhn-Shiuan (2004). *A framework for internet channel evaluation*. *International Journal of Information & Management*. **24**: 473–488.

Mehrabian, A., & Russel J.A. (1974) *An Approach to Environmental Psychology*. Cambridge: The MIT Press.

Huang, M (2000). *Information load: its relationship to online exploratory and shopping behaviour*. *International Journal of Information Management*. **20** (5): 337–347. doi:10.1016/s0268-4012(00)00027-x.

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