# Consumers Reason For Purchase Of Eco-Friendly Products

Sudha, N.\* and Dr. N. Lalitha\*\*

\*Ph.D. Research Scholar, Department of Commerce,
Annamalai University, Tamil Nadu – 608 002.

\*\*Assistant Professor in Commerce, Annamalai University,
Tamil Nadu – 608 002.

## **ABSTRACT**

In the field of green marketing consumers attitudes have frequently used in various past studies to predict ecologically conscious consumer behavior and usage of green products. Thus, this research aimed to analyse the consumers reason for purchase of eco-friendly products in Chennai region. Here descriptive research design has been applied. Awareness, attributes, product, price, promotion, eco-friendly, attributes as considered as a independent variable. Purchase intention of consumers is taken as a dependent variable. These variables has been identified based on the previous literature. On the basis of previous literature questionnaire has been constructed to collect the primary data. Using convenience sampling method 182 consumers data has been collected. Further, the data are analyses with help of frequency analysis correlation and regression. The result shows that male, 21-30 years old, unmarried, under graduates respondents purchase the eco-friendly products more on organic shop. The purchase of green food products found to be more among the customers. This also found that awareness, attributes, products, price benefits, promotion, eco-friendly and purchase intention have been related and influence with purchase intention consumers.

Keywords: Awareness, Attributes, Products, Price Benefits, Promotion, Eco-friendly and Purchase Intention.

#### Introduction

Environmentally friendly products are broadly defined as green products that will not pollute earth or natural resources and can be recycled. As, the concept of green product is very recent, the text is still deficient of the commonly accepted definition of green products. In search of the clear definition of green products given by various researchers in the field of green selling. The meta-analysis of definitions enabled to prepare an integrative definition of green product. A green product is a product whose design and attributes are renewable, toxic free, biodegradables resources and which improves reduces ecological toxic damage throughout its complete life cycle (Wind, 2004).

Green consumer is an occupant who approves the principles of green marketing and advocates eco-friendly life style (Banyte, et. al., 2010). Hence, it may be generalized that green consumers are referred to those who prefer to purchase green products and who try to minimize the impact of these products on the environment. Minton and Rose (1997) reported that the roper studies recognized five segments of consumers based on their purchase behaviours, post purchase behaviours and other behaviours (Shwartz and Miller, Out of five, three segments reflected environmentally active consumer groups and two reflected environmentally inactive groups. The first section "true-blue greens" represented environmentally active and highly dedicated consumers in terms of altering their behavioural patterns. Second segment "green-back greens" represented the consumers who supported the environmental movement financially, but the change in behavior was not as prominent as was there in true-blue greens. Third segment "sprouts" were in the beginning stage of changing behavior patterns with regard to environmental issues. Fourth segment "grousers" opined that companies should owe the responsibility towards the environment instead of consumers. Fifth segment "basic browns" portrayed

apathetic attitude and felt that individual efforts were not sufficient (Minton and Rose, 1997).

Schlegelmilch, et. al., (1996) found that environmental attitude was most consistent in determining the pro-environmental purchase. Roberts (1996) confirmed the philosophical significance of attitudinal variables in explaining ecologically conscious consumer behavior. Aligned with the study of Roberts, Minton and Rose (1997) also postulated the significant effect of attitude on environmentally concerned intentions and behavior. Manaktola and Jauhari (2007) also found significant relationship between consumer attitude and behavior towards green practices in hotel industry. Kassarjian (1971) found that consumer attitude towards the air pollution was most important variable in determining their behavior towards gasoline that reduces air pollution (Mostafa, 2007). Balderjahn (1988) in a German study found that consumers' positive attitude towards ecologically conscious living led them to purchase and use products in ecologically responsible manner (Mostafa, 2007).

## **Review of Literature**

Suganya and Kavitha (2017) stated that consumers awareness is about making the consumer aware of their rights. It is a marketing term which means that consumers are aware of products or services. Brand awareness is the extent to which a brand is recognized by potential customers, and is correctly associated with a particular product. Expressed usually as a percentage of target market, brand awareness is the primary goal of advertising in the early months or years of a product's introduction. Product awareness can consist of consumer knowledge of brand benefits, features, slogan, tag lines and other brand messaging elements. Consumers are becoming more ecologically conscious and desirous of purchasing environment friendly products i.e. green products.

Poornima and Abishek (2023) examined that Consumer demand for environmentally friendly items has

increased as awareness of environmental challenges. They explored the elements that affect consumers' purchasing decisions and reviews the literature on consumer awareness of environmentally friendly products. Consumers have a favourable attitude towards eco-friendly products, and their willingness to pay a higher price for them is influenced by a number of variables, including their understanding of the environment, their perception of the benefits, social norms, and their own personal values. The study also emphasises the value of product certification and labelling in raising consumer awareness of and trust in environmentally friendly goods.

Shayala and Sharmin (2018) examined consumer level of awareness and perception towards green products in Bangladesh. An increasing number of consumers have adequate knowledge about green products features, majority of them view green products as healthy and safe. Consumers prefer to believe that green products are offering high quality over conventional products but they are not having any precise opinion about the excessive prices of green products. They found consumers' disappointment towards the promotional measures taken by the marketer.

## **Research Problem**

An understanding of buyer behavior towards fast moving consumer goods green products is essential as it reflects the influence of brands, price, quality, mode of purchase etc. the success of the market or the failure dependents on the purchase behavior of consumer. Consumers are the more centre of the modern marketing, understanding their behavior is quite essential for efficient and effective marketing management. Consumers may not be in touch with their deeper motivations. Indians consumer market is riding the crest of the country's economic boom. Driven by a young population with access to disposal incomes and easily finance options, the consumer market has been throwing up staggering figures. Marketing problems confronted from the consumers behavior has a greater degree of similarity with behavioural problems. The uses

of eco-friendly products are becoming increasingly popular in recent years in India. The introduction of different types of green products has been brought out many significant changes in the taste and preferences of ultimate consumers in recent years. Hence, the present study has been chosen to identify the relationship between the variables with buyer behavior and factors contributing towards buyer behavior while purchase of FMCG green products in Chennai.

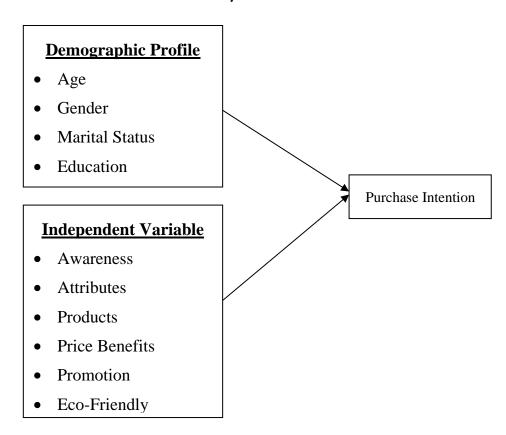
## **Objectives of this Study**

 To identify the consumers reason for purchase of ecofriendly products.

# **Hypothesis**

 Consumers reasons for purchase of eco-friendly products have been associated with their demographic profile such as gender, age, marital status and education.

# Framework of this Study



## Methodology

The aim of the study is find the research for purchase of eco-friendly products. Thus, descriptive research design has been applied. This research designed allowed the researcher to describe the result based on the sample respondents views. In this research consumers demographic variables such as age, gender, marital status, education are considered as factor variables. Awareness, attributes, product features, price benefits, promotion and eco-friendly factors and considered as the independent variables. Consumers purchase intention has been taken as the dependent variable. Based on the above said variables, questionnaire has been constructed for collecting primary data from the consumers in living in Chennai. Through convenience sampling method 200 consumers has been approached. Out of 200 responses, 182 consumers responses fit for further analysis. The response rate shows that the consumers responses found to be satisfaction. Further frequency analysis, correlation and regression test have been used.

# **Results and Discussion**

Percent,
Male, 55.5

Gender

Percent,
Female, 44.5

Male
Female

Fig. 1: Distribution of consumer based on gender

From the above Fig. –1, it is clear that 55.5 percentages of consumers belongs to male and 44.5 percentages of consumers belongs to female. Hence, majority of the employees are male category. This clearly

shows that the frequency distribution of consumers of male gender in the eco-friendly products is very high at 55.5 percent, while the female is only 44.5 percent.

The reason for the high percentage of male consumers is due to buy the eco-friendly products.

Fig. 2 – Distribution respondents of consumers based on age

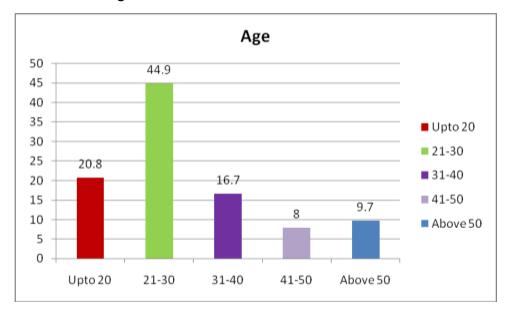


Fig. -2 displays the distribution of consumers based on their age. Here age factor is classified into five categories such as upto 20 years of age, 21-30 years, 31-40 years, 41-50 years and above 50 years of age group.

Further frequency analysis has been carried out. The result shows that 20.8% of the consumers belong to upto 20 years of age, 44.9% of the consumers belong to 21 to 30 years, 16.7% years of the consumers of age group 31 to 40 years, 8.0% of the consumers belong to 41 and 50 years and 9.7% of the consumers belong to above 50 years of age group.

Marital Status

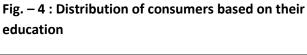
44.3%

Married

Single

Fig. 3 : Distribution of consumers based on their marital status

Fig. -3 portrays the distribution of consumers based on their marital status. Here marital status has been categorized into two categories as married and single. Further frequency analysis has been applied. From the result it is found that 44.3% of the consumers are married and 55.7% of the consumers have single.



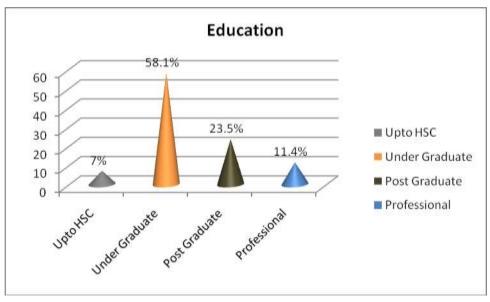


Fig. – 4 portrays the distribution of consumers based on their education. Here education has been categorized into four categories as upto HSC, under graduate, post graduate and professional. Further frequency analysis has been applied. From the result it is found that 7.0% of the consumers are up to HSC, 58.1% of the consumers have under graduate, 23.5% of the consumers are post graduates and 11.4% of the consumers belong to professional.

Fig. – 5 : Distribution of consumers based on their place of purchase

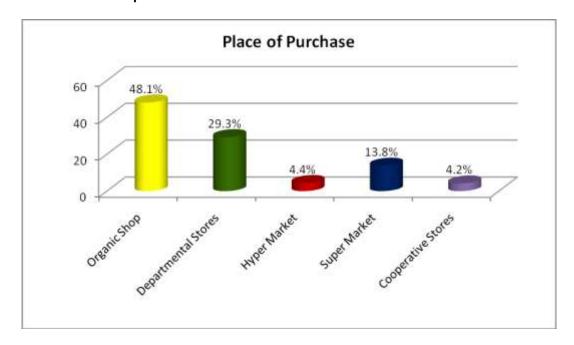


Fig. – 5 displays the distribution of consumers based on their place of purchase. Here place of purchase has been categorized into five groups such as organic shop, department stores, hyper market, super market and cooperative stores. Further, frequency analysis has been carried out. From the result it is found that 48.1% of the respondents are having organic shop, 29.3% of the respondents are departmental stores, 4.4% of the respondents are hyper market, 13.8% of the respondents are super market and 4.2% of the respondents are cooperative stores.

Frequency of Purchase

49.2%

40

30

21.8%

10

Less than once a Once a fortnight Once a month More than once a month

Fig. – 6 : Distribution of consumers based on their frequency of purchase

Fig. – 6 displays the distribution of consumers based on their frequently. Here frequently has been categorized into four groups such as less than once a month, once a fortnight, once a month and more than once a fortnight. Further, frequency analysis has been carried out. From the result it is found that 21.8% of the respondents are having less than once a month, 16.2% of the respondents are having once a fortnight, 49.2% of the respondents are once a month and 12.8% of the respondents are more than once a fortnight.

Eco-Friendly Product

55.5%

7.4% 8.2% 4% 6%

O Green Costnetics...

Green Costnetics...

Green Costnetics...

Green Costnetics...

Green Costnetics...

F.co-Friendly Cleaning...

Eco-Friendly Product

F.co-Friendly Product

F.co

Fig. -7: Distribution of consumers based on their ecofriendly product

Fig. – 7 displays the distribution of consumers based on their purchase of eco-friendly product. Here frequently has been categorized into six groups such as green cosmetics, green food products, green consumer, eco friendly cleaning, eco-friendly kitchen and eco-friendly packaging. Further, frequency analysis has been carried out. From the result it is found that 18.8% of the respondents are having green cosmetics, 55.5% of the respondents are having green food products, 7.4% of the respondents are green consumers, 8.2% of the respondents eco-friendly cleaning, 4% of the respondents eco-friendly kitchen and 6% of the respondents are eco-friendly packaging.

Level of Awareness

50.7%

1.8%

Fig. – 8 : Distribution of consumers based on their level of awareness

Fig. – 8 shows the distribution of the consumers based on their level of awareness. Here level of awareness has been categorized into five categories. The frequency figure shows that out of 500 consumers 6.4% of the respondents are under very high, 34.7% of the respondents are high level, 50.7% of the respondents are at average level, 6.4% of the respondents are at low level and 1.8% of the respondents are at very low level.

 $\label{eq:table-1} \textbf{Table-1}: \textbf{Relationship between the purchase intention} \\ \textbf{and Eco-friendly} \\$ 

Eco-Friendly	Purchase Intention		
Eco-Friendly	r-value	p-value	
Awareness	0.493**	0.001*	
Attitude	0.553**	0.001*	
Product Attributes	0.574**	0.001*	
Price Benefit	0.490**	0.001*	
Promotion	0.386**	0.001*	
Eco-friendly	0.498**	0.001*	

 $H_1$ : Eco-friendly factors are having significant relationship with purchase intention.

Table – 1 portrays the relationship between awareness, attitude, product attributes, price benefits, promotion and eco-friendly of the customers. In order to check the existence of significant relationship between awareness, attitude, product attributes, price benefits, promotion and eco-friendly of the consumers, pearson correlation test is carried out. The p-values are found to be significant at one percent level and thus the above stated hypothesis gets accepted.

From the correlation values, it is noted that product attributes is (0.574) highly correlated with purchase intention, followed by attitude is (0.553), ecofriendly is (0.498), awareness is (0.493), price benefit is (0.490) and promotion is (0.386). It is revealed that awareness, attitude, product attributes, price benefits, promotion and eco-friendly factors having significant and positive relationship with purchase intention. However, promotion is having the least level of relationship with purchase intention.

Table – 2 : Multiple Regression analysis for eco-friendly and purchase intention

R-value	R²-value	Adjusted R <sup>2</sup> value	F-value	P-value
0.668ª	0.446	0.440	66.133	0.001*

Predictors	Unstandardized Coefficients		Standardized Coefficients	't'	n volue
	В	Std. Error	Beta		p-value
(Constant)	1.014	0.145		6.987	0.000
Awareness	0.104	0.050	0.106	2.101	0.036
Attitude	0.142	0.055	0.144	2.582	0.010

Product Attributes	0.163	0.038	0.214	4.278	0.001
Price Benefit	0.141	0.037	0.173	3.859	0.001
Promotion	0.032	0.031	0.046	1.054	0.292
Eco-friendly	0.137	0.033	0.180	4.148	0.000

H<sub>1</sub>: Eco-friendly factors is significantly influencing the purchase intention of the consumers.

To verify the above stated hypothesis, multiple linear regression has been applied. The result is displayed in the table - 1. Here eco-friendly product has been treated as independent variable and purchase intention is taken as dependent variable. As with multiple regression, if the p-value of the F-test is zero to three decimal places, the model is statistically significant (F = 66.133, p < 0.001). The adjusted R² is 0.440, meaning that 44.0 percentage of the variability of purchase intention is accounted by the independent variable in the model.

In this case, the adjusted R<sup>2</sup> indicates that about 44.0 percentage of the variability of purchase intention is accounted by the model, even after taking into account 6 predictor variables in the model. The coefficients for each of the variables indicate the amount of change, one could except in purchase intention given a one-unit change in the value of that variable, given that all other variables in the model are held constant.

To compare the strengths of coefficient of predictor variables refer to the column of beta coefficients, also known as standardized regression coefficients. The beta coefficients are used to compare the relative strength of the various predictors within the model. Because the beta coefficients are all measured in standard deviations, instead of the units of the variables, they can be compared to one another.

In other words, the beta coefficients are the coefficients when the outcome and predictor variables were all transformed to standard scores, also called z-scores, before running the regression. In this regression

product attributes has the largest beta coefficients (0.214) followed by the eco-friendly (0.180), price benefit (0.173), attribute (0.144), awareness (0.106) and promotion (0.046).

For one standard deviation increase in purchase intention there is (0.214) standard deviation increase in product attributes when other factors remain constant. Similarly there is (0.180) standard deviation increase in eco-friendly, (0.173) standard deviation increase in price benefit, (0.144) standard deviation increase in attribute, (0.106) standard deviation increase in awareness for one unit increase in the purchase intention of the consumers. For one unit least level in promotion there is (0.046) decrease of the other variables in the model held constant. In interpreting the output, it should be remembered that the difference between the regular coefficients and the standard coefficients is the units of measurement.

## **Findings and Recommendation**

- When compared to female, male have more purchased eco-friendly products. The awareness of the characteristics and features of different ecofriendly products have to reach all the consumers so that the female consumers also involve in buying ecofriendly products.
- It is found that majority of the consumers are in age of 21-30 years. All age group consumers must be given awareness of the green movement so that they use only eco-friendly products instead of other products.
- It is found that majority of the consumers are unmarried. Both single and married consumers have to be aware of the need to protect environment and thus have to decide to buy eco-friendly products.
- Majority of the consumers are under graduate degree holders. The promotional activity of eco-friendly products have to be enhanced through advertisement and other social media.
- Majority of the consumers are buying in organic shop.
   So it is easy to buying awareness of eco-friendly products among the public.

- Majority of the consumers have purchased the ecofriendly products once a month. The frequency of buying eco-friendly products is found to be low in a month. This can be enhanced by increasing the satisfaction of the consumers in purchasing ecofriendly products.
- Majority of the consumers have purchased green food products. So the green attitude of the products have to research the consumers effectively.
- Most of the consumers are found to have average level of awareness.
- It is found that product attributes, attitudes, ecofriendly, awareness and price benefits have been highly related with purchase intention. However, promotion having the least level of relationship with purchase intention. The promotional activity of ecofriendly products can be increased by fixing the price at satisfaction level of the consumers.
- It is found that the product attributes, eco-friendly, price benefit, attributes, awareness are positively significantly influencing the purchase intention of the consumers. But, the promotion is least level of influencing the purchase intention of the consumers.

#### Conclusion

The result study found that the consumers have positive attitude for purchase of eco-friendly products in Chennai region. Demographic profile has been associated with consumer purchase intention towards eco-friendly products. Products attributes and value for money have highly influenced among consumers towards purchase of eco-friendly products. Although many researchers hold the opinion that consumers attitude toward green behaviours is a significant factor in determining ecofriendly purchasing, some researchers pointed out that only a small portion of environmentally conscious customers actually buy eco-friendly products because of and non-monetary costs monetary inconvenience associated with them. Though, majority of the consumers claim themselves to be green, the market

share of green products as compared to other mainstream products is almost negligible. This trend indicates a wide attitude behavior gap prevailing in the market of green products.

#### References

- Ashok and Aswathanarayana, 2018. Consumer Awareness and Perception Towards Ecofriendly Products - An Empirical Study. European Journal of Business and Management, Vol.10(27), 28-35.
- Indrajit Ghosal, Bijoy Gupta, Moumita Dey and Bikram Prasad, Impact Of Outlining Factors Towards Online Green Products: An Empirical Investigation On Consumers' Awareness.
- Maheswari, S.P. (2014). Awareness of Green Marketing and Its Influence on Buying Behaviour of Consumers: Special Reference to Madhya Pradesh, India. AIMA Journal of Management and Research, 8(1/4), pages 14.
- Poornima and Abishek, 2023. A Study on Consumer Awareness Towards Eco- Friendly Products in Coimbatore City. International Journal of Creative Research Thoughts (IJCRT), Vol. 11(4), g131-g137.
- Saran Duraisamy, 2022. Attitude of people towards green products. Sathyabama Institute of Science and Technology, pp. 1-54.
- Shayala Yesmin and Sharmin Akter, 2018. Consumer Awareness and Purchase Attitude Towards Green Products in Bangladesh. European Journal of Business and Management, Vol. 10(27), 28-35.
- Suganya and Dr. Kavitha, 2017. A Study on Consumer Awareness Towards Eco Friendly Products at Coimbatore. International Journal of Current Research and Modern Education (IJCRME), Vol. 2(1), pp. 237-241.
- Yong, F.Y. & Rashad Y. (2015). Green Marketing: A Study of Consumer's Buying Behaviour in Relation to Green Products. Global Journal of Management and Business Research: E Marketing, 15(5), pp 17-23.
- 9. Dr. N. Kesavan, "Exports and Imports Stagnation in India During Covid-19- A Review" GIS Business (ISSN: 1430-3663 Vol-15-Issue-4-April-2020).
- Dr. D.Paul Dhinakaran, "Customers Delight towards Service Excellence in Indian Overseas Bank Chennai" International Journal of Business Education and Management Studies (IJBEMS), ISSN:2941- 9638, (Vol.3.Issue 1. 2020 (March).

- 11. Dr. M. Surekha, "A study on utilization and convenient of credit card" Journal of Positive School Psychology, http://journalppw.com, 2022, Vol. 6, No. 4, 5635–5645.
- Dr.M.Rajarajn "Bus Operations of Service Quality in Tamil Nadu State Transport Corporation Limited, Kumbakonam" Asian Journal of Management, (A and V Publication), (ISSN:0976 – 495X), Volume: 4, Issue: 1, May, 2013.
- Dr.Umesh U, "Impact Of Human Resource Management (HRM)Practices On Employee Performance" International Journal of Early Childhood Special Education (INT-JECSE), ISSN: 1308-5581 Vol 14, Issue 03 2022.
- 14. M.Rajalakshmi "Current Trends in Cryptocurrency" Journal of Information and Computational Science, ISSN: 1548-7741, Volume 13 Issue 3 2023.
- Dr.M. Mohana Krishanan "Consumer Purchase Behavior Towards Patanjali Products in Chennai" Infokara Research, ISSN NO: 1021-9056, Volume 12, Issue 3, 2023.
- Dr. Malathi, "Impact of Covid-19 on Indian Pharmaceutical Industry" Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 6, 2021, Pages. 11155 – 11159.
- Dr.C. Vijai, "Mobile Banking in India: A Customer Experience Perspective" Journal of Contemporary Issues in Business and Government Vol. 27, No. 3, 2021, P-ISSN: 2204-1990; E-ISSN: 1323-6903.
- D.Paul Dhinakaran Community Relations of Tamilnadu State Transport Corporation Ltd International Journal of Research and Analytical ..., 2019
- Maneesh P, "Barriers to Healthcare for Sri Lankan Tamil Refugees in Tamil Nadu, India" Turkish Journal of Computer and Mathematics Education, Vol.12 No.12 (2021), 4075-4083.
- B. Lakshmi, "Rural Entrepreneurship in India: An Overview" Eur. Chem. Bull. 2023,12(Special Issue 4), 1180-1187.
- Dr.C. Paramasivan "Perceptions On Banking Service in Rural India: An Empirical Study" Eur. Chem. Bull. 2023,12(Special Issue 4), 1188-1201
- Dr G.S. Jayesh "Virtual Reality and Augmented Reality Applications: A Literature Review" A Journal for New Zealand Herpetology, ISSN NO: 2230-5807, Vol 12 Issue 02 2023.
- 23. Dr.S. Umamaheswari, "Role of Artificial Intelligence in The Banking Sector" Journal of Survey in Fisheries Sciences 10(4S) 2841-2849, 2023.

- 24. S Kalaiselvi "Green Marketing: A Study of Consumers Attitude towards Eco-Friendly Products in Thiruvallur District" Annals of the Romanian Society for Cell Biology. 2021/4/15.
- 25. Dr. D.Paul Dhinakaran, "Impact of Fintech on the Profitability of Public and Private Banks in India" Annals of the Romanian Society for Cell Biology, 2021
- Dr. Yabesh Abraham Durairaj Isravel, "Analysis of Ethical Aspects Among Bank Employees with Relation to Job Stratification Level" Eur. Chem. Bull. 2023, 12(Special Issue 4), 3970-3976.
- Dr. Sajan M. George "Stress Management Among Employees in Life Insurance Corporation of India" Eur. Chem. Bull. 2023, 12(Special Issue 4), 4031-4045.
- 28. Dr. Rohit Markan "E-Recruitment: An Exploratory Research Study of Paradigm Shift in Recruitment Process" Eur. Chem. Bull. 2023, 12(Special Issue 4), 4005-4013