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STUDY ON CONSUMERS SATISFACTION AND PREFERENCE FOR COLGATE SWARNA VEDSHAKTI TOOTH PASTE – WITH REFERENCE TO CITY OF MUMBAI

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ABSTRACT

Fast moving consumer good (FMCG) is the 4th largest sector in the Indian economy, personal care products industry accounts for almost 50 per cent. Today the Indian consumers are becoming more health conscious and have preference for safe, natural, organic and herbal products especially for personal care products and cosmetics. The year 2016 has been a distinct advantage for this industry. Its popularity and demand are increasing year by year.

In personal care products segments herbal toothpaste is becoming more and more common. Shifting the preference to herbal toothpaste and growth for demand for herbal products began with introduction of Dant kanti by Patanjali in 2016. It had impact on sales of Colgate toothpaste. To retain its market share and leadership Colgate introduced the tooth paste with herbal content. Other companies and multinational companies too began with rolling out the herbal and natural products.

The objective of research paper is to analyze and understand the business strategy of Colgate to beat competition of other brands of herbal tooth paste and consumers' response to it. Around one hundred people in Mumbai city were questioned on awareness and usage of herbal products, consumption and satisfaction of using Colgate herbal tooth paste.

KEYWORDS: Personal care products, Herbal Products

INTRODUCTION

The FMCG sector is one of the key sectors in India generating the major revenue and employment in the economy. It was worth US\$ 52.75 billion in 2017-18 and US\$ 31.6 billion in 2011. It indicates the robust growth of this sector and is further expected to grow at a compound Annual Growth Rate (CAGR) of 27.86 per cent. Personal care products occupy almost half of FMCG sector. The personal-care products industry creates, manufactures, and sells personal-care, beauty, and hygiene products.

There is a change in consumers' preference to natural, organic and herbal products. Due to inclination for natural and herbal products, its applications in personal care products has exponentially increased.

Herbal products are botanical nutritional supplements derived from plant sources that are typically used in an effort to maintain or improve health, and may be used for other therapeutic purposes.

The wave for natural and organic products has been started by spiritual leaders in India like Baba Ramdev and Sri Sri Ravi Shanker. The use of natural products for skin care, tooth care and in food is rooted in Indian culture since ancient times. The share of natural personal care products in overall personal products has increased from 32% in March 2017 to 35% in March 2019. Rural Consumers are equally preferring the such products, in fact growth rate in rural areas is more as compared to urban markets.

ORAL CARE MARKET IN INDIA

In fast – moving consumer goods market in India, oral care occupies almost 16%. The increasing awareness on side effects of fluoride in toothpaste had pushed companies to roll out herbal and organic oral care products. Herbal toothpastes use natural ingredients like mint, cloves, neem and other herbs helps to fight tooth and gums diseases.

In 2016 Dant kanti by Patanjali and Dabur Lal tooth paste and powder had captured the market share of giant players HUL and Colgate. Brands with an herbal offer were having the market share worth Rs 10,000 crore (US\$ 1.57 billion) oral-care market in the year 2017. Ayurvedic competitors targeted second-tier cities and smaller towns and had increasing consumer base by aggressive advertising and creating more awareness on herbal benefits. To beat its competitors in 2017, Colgate-Palmolive launched Cibaca Vedshakti and Swarna Vedshakti. HUL added natural product line to its existing products by buying one of known Indian brand of Ayurvedic personal products Indulekha and also introduced natural products under the brand Ayush in August

2017. In 2019 Colgate again introduced another natural variant Colgate charcoal clean toothpaste. This indicates the foray of multinational companies into herbal products to counter the competition and retain their major market share in Indian oral care sector. As per financial reports of 2019 Colgate's market share has been stable over the past few quarters enjoying almost 58% of market share. Counter strategy of Colgate resulted in regaining its market share and increasing the volume growth.

Statement of Problem

Tooth paste is one of highly consumed personal care product. It is found in every household and consumed by almost everyone and every day. Oral care market in India has varied players with number of variants. This research paper has tried to find the answers for awareness and usage of herbal products, Colgate brand awareness, and its launch of different variants and demand of it.

Scope of Study

- 1) To understand the awareness of consumers on herbal personal care products in market.
- 2) To understand the usage of different herbal personal products by consumers
- 3) To study problems faced by consumers on usage of herbal products
- 4) To find out awareness and preference for Colgate tooth paste
- 5) To find out knowledge of consumers on different variants of Colgate tooth paste in oral care market.
- 6) To find out consumers' preference and satisfaction on usage of Colgate Swarna herbal toothpaste

Objectives of Paper:

- 1) To study the increasing demand for natural and herbal products
- 2) To understand companies' counter strategies by launching the herbal products in addition to existing product line.
- 3) To find the preference and satisfaction of Colgate herbal tooth paste by consumers.
- 4) To analyze on impact of market share of Colgate on before and after introduction of herbal tooth- paste in the oral care market of India.

Research methodology:

This research paper is descriptive in nature considering the facts from articles, journals, annual reports and survey from consumers. Therefore, it covers both primary and secondary data.

Primary data is collected from consumers to understand preference and usage for herbal personal care products, awareness of Colgate herbal tooth paste etc. Data is collected by preparing the questionnaire covering the scope and objectives of study. Sample size is around 100 and area covered is Mumbai.

Data Analysis:

Simple percentage method is applied to analyze the different parameters of questionnaire. For presenting the data pie charts are used.

Limitation of Study:

1. The study was limited to around 100 respondents only.
2. The time limit is one of the main factors to conduct the study effectively.
3. The respondent may not be true in filling up the questionnaire.
4. The reliability of the data may not be dependable.
5. The area of study is Mumbai only

Data Analysis and interpretation:

1. Increase in the usage of herbal products among Indian consumers:



Data Analysis

Out of the 104 respondents surveyed, 82 respondents (78.8%) feel that the usage of herbal products is increasing, whereas, only 2 respondent (1.9%) feels that usage of herbal products has not increased. However, it must be noted that 20 respondents (19.2%) could not come to a conclusion.

Data Interpretation

It can be seen that the usage of herbal products amongst the Indian population is on the rise because herbal products offer various benefits to its users. As people are becoming more health conscious, they prefer using herbal products over products which have a certain chemical content.

2. Reasons for increase in the preference of herbal products:

Following are a few responses given by the respondents surveyed

- Herbal products have no side effects, they are chemical-free, and all ingredients used are natural extracts of the source or the source itself, without any additives.
- People are becoming very health conscious and they prefer using herbal products due to low risk of side effects.
- People have realized that being healthy in a natural way can benefit them in the long run.
- Presence of all different plants and its derived components in the paste which proves to have good effects.
- Easy availability, less risk, chemical free.

Data Interpretation:

Reasons got from respondents clearly indicates that awareness and preference for herbal products is based on knowledge of side effects of much usage of chemical and artificial products. Easily accessible of natural products have pushed to more demand of herbal products.

3. Number of respondents using actively herbal products:



Data Analysis:

Out of the 104 respondents surveyed, 82 respondents (78.8%) use herbal products, whereas, 22 respondents (21.2%) do not use.

Data Interpretation:

Herbal products are cost effective and have lower risk of side effects. Also, herbal products are easily available and promote natural healing. Hence a greater number of people are switching to herbal products.

4. Number of people using or might consider using FMCG herbal products:

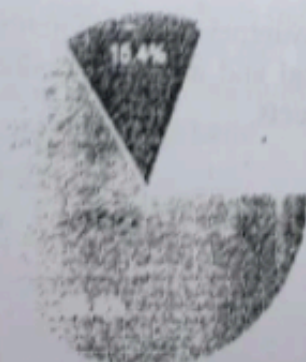
Data Analysis:

Out of the 104 respondents surveyed, 70 respondents (67.3%) are using or might consider using herbal toothpaste, 28 respondents (26.9%) herbal shampoo, 60 respondents (57.7%) herbal face wash, 42 respondents (40.4%) herbal soap, 24 respondents (23.1%) herbal cosmetics such as herbal kajal, hair dye, lipsticks, nail paint, etc., 14 respondents (13.5%) herbal hair oil.

Data Interpretation:

From the above analysis we can see that majority are using or would like to use herbal toothpaste. It indicates consumers don't have just awareness and knowledge of herbal products but they consume these products. The demand and consumption are on growing stage.

5. Affordability of Herbal products:



Data Analysis:

Out of the 104 respondents surveyed, 68 respondents (65.4%) feel that herbal products are affordable, whereas, 16 respondents (15.4%) feel that herbal products are not affordable. However, 20 respondents (19.2%) did not have an opinion.

Data Interpretation:

As herbal products are made up of natural ingredients and are chemical free, they are less expensive as compared to the conventional products. A few herbal products may not be affordable as it may contain a high value herb or ingredient. Its cost effectiveness encourages every class of income of people to buy herbal products.

6. Problems faced while using herbal products

Following are a few responses given by the respondents surveyed.

- None
- No, I am not facing any problems using herbal products.
- No, I feel good after using it
- No problems but still looking for a better product
- The taste of herbal toothpaste is different as compared to other toothpastes
- Shampoo herbal derived doesn't suit as it caused more hair fall growth
- Toothpaste taste
- Finding herbal cream most suitable for my skin
- Herbal hair oil has solved my dandruff problem

Data Interpretation:

Majority of respondents shared positive feedback on using herbal products. Some came with response like different taste and high cost. But higher number of respondents find herbal products giving useful results.

7. Awareness of 'Colgate' as one of the most famous toothpaste brands in India

Data Analysis:

Out of the 104 respondents surveyed, all the respondents (100%) are aware of 'Colgate' as one of the famous toothpaste brands used in India.

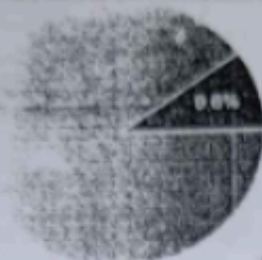
Data Interpretation:



Colgate-Palmolive (India) Limited is India's top manufacturer of scientifically proven oral care products. Colgate is widely used by the Indian population. It is the biggest player of the toothpaste market in India.

8. Awareness of the varieties of Colgate toothpaste that have been launched recently

Data Analysis:



Out of the 104 respondents surveyed, 94 respondents (90.4%) are aware of the varieties that Colgate has launched over the past few years, whereas, only 10 respondents (9.6%) are unaware of the varieties that Colgate has launched over the past few years.

Data Interpretation:

Colgate has come up with a lot of toothpaste variants such as Colgate strong teeth, Colgate total, Colgate visible white, Colgate sensitive, Colgate vedshakti, Colgate active salt, etc. Colgate advertises its products when being launched mostly through innovative and creative advertisements.

9. Usage of Varieties of Colgate toothpaste

Data Analysis:

14 respondents (13.5%) use Colgate Active Salt toothpaste, 30 respondents (28.8%) use Colgate Strong Teeth toothpaste, 4 respondents (3.8%) use Colgate Total toothpaste, 24 respondents (23.1%) use Colgate Max Fresh toothpaste, 10 respondents (9.6%) use Colgate Advanced Whitening toothpaste, 30 respondents (28.8%) used Colgate Vedshakti toothpaste. It must be noted that there are 14 respondents (13.5%) that do not use any of the above Colgate variant.

Data Interpretation:

Being one of the most trusted brands of toothpaste in India, Colgate caters to the unique needs of all its customers. The most used variant of Colgate is Colgate strong teeth. Since the past 2 years the Indian population has been actively using Colgate Vedshakti. All other variants of Colgate are also preferred by the Indian population according to their individual needs.

10. Success of the strategic decision of the launch of 'Colgate Vedshakti'



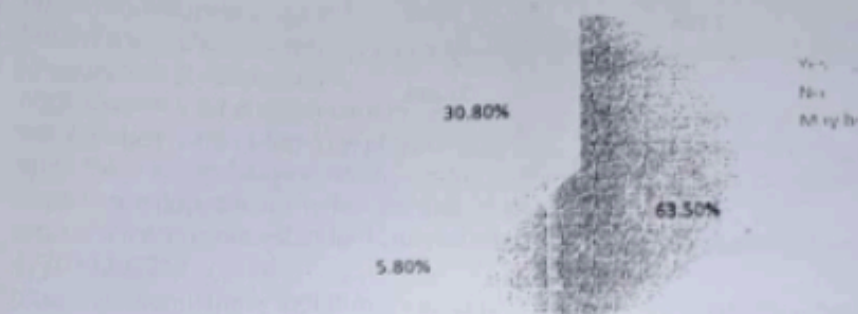
Data Analysis:

58 respondents (55.8%) agreed on successfulness of strategic decision of the launch of Colgate Vedshakti whereas, 8 respondents (7.7%) didn't. However, 38 (36.5%) respondents had no opinion about the same.

Data Interpretation:

The brand Colgate has been one of the most trusted brands for decades. The brand has faced bursts of competition from time to time and has fought back effectively to regain market share. Colgate's strategic decision to launch Vedshakti was successful to face the competition given by Dant kanti, Dabur Lal and other herbal tooth paste.

11. Satisfaction with the usage of 'Colgate Vedshakti'



Data Analysis

Out of the 104 respondents surveyed, 66 respondents (63.5%) have opinion they are satisfied with 'Colgate Vedshakti'. 32 respondents (30.8%) feel they were not sure about it, while 6 respondents (5.8%) feel that they were not satisfied.

Data Interpretation

Most of the people are satisfied with Colgate Vedshakti, this can be seen from sustainability of Colgate's market share.

12. Affordability of Colgate vedshakti

Data Analysis

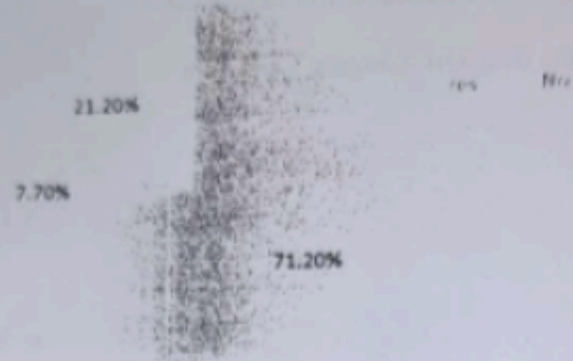


Respondents were asked if 'Colgate Vedshakti' was affordable at ₹ 95 for 200 grams. 72 respondents (69.2%) said that it was affordable, whereas, 22 respondents (21.2%) said that it was not affordable and found it expensive compared to the other herbal toothpastes. 10 respondents (9.6%) had no opinion about the same.

Data Interpretation

One of the major advantages of herbal products is its cost. Herbs cost much less than prescription medications. Most of respondents are finding it reasonable and affordable.

12. Competency of 'Colgate vedshakti' to compete with other herbal toothpaste brand



Data Analysis:

During the survey, people were asked if 'Colgate Vedshakti' was competent enough to compete with other herbal toothpaste brands like HUL, Patanjali, Dabur, etc. Out of the 104 respondents surveyed, 74 respondents (71.2%) agreed on it, 8 respondents (7.7%) didn't agree for it. However, 22 respondents (21.2%) had no opinion about the same.

Data Interpretation:

Colgate has been in the oral health sector for decades and is doing really good for itself. There are many other toothpaste brands that have herbal variants, but still Colgate has done well and has a competitive advantage over others. This is mainly because of the trust that people have on Colgate.

14. Sustainability of 'Colgate Vedshakti' as a variant of 'Colgate' toothpaste in the future



Data Analysis

During the survey, the respondents were asked whether 'Colgate Vedshakti' would sustain as a variant of 'Colgate' toothpaste in the future. A majority of 76 respondents (73.1%) agreed for it whereas, 12 (11.5%) didn't agree for it and 16 respondents (15.4%) were not sure about it.

Data Interpretation

Since its inception, Colgate has been introducing a lot varieties, which have sustained and so will Vedshakti. People have been accepting and purchasing Vedshakti which implies good possibility of its sustainability in long run.

Conclusion

Despite intense competition in the market, Colgate has emerged as a leading competitor. In spite of fall in the market price, loss in basis points, loss in market share, tough competition Colgate has regained its market leadership by introducing Vedshakti in the market. Brand awareness and acceptance are key advantage on which Colgate leveraged and gained market share in herbal product too.

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**IMPACT OF COVID-19 19 ON PERSONAL CARE PRODUCTS IN
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IMPACT OF COVID-19 ON PERSONAL CARE PRODUCTS IN INDIA: A STUDY WITH SPECIAL REFERENCE TO BEAUTY AND COSMETIC PRODUCTS AND PERSONAL HYGIENE PRODUCTS

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ABSTRACT:

The beauty industry across the globe comprising of colour cosmetics, skincare range, fragrances, personal care products, hair care products, etc. has been completely shocked by this global pandemic of COVID-19. The sales of the first quarter was quite weak and widespread closures were witnessed throughout the world. The skincare and cosmetics industry has responded in a very positive manner, with more and more brands switching the process of manufacturing for producing hand sanitizers or some other cleaning agents. The beauty sector globally generates about \$500 billion sales in a year and it accounts for many employees. COVID-19 has had a huge impact on the beauty industry. It is also being expected that the global crisis is fundamentally changing the industry and will continue to do so even in future. This study is empirical in nature and finds that there has been significant downfall in the demand for the beauty and cosmetic products and increase in the demand of personal hygiene products.

KEYWORDS: beauty industry, COVID-19, impact of COVID-19, cosmetic products, personal hygiene products

INTRODUCTION:

The cosmetic companies globally are manufacturing different kind of beauty and skin care products with a mix of chemicals. These products are used globally for improving

the odor and look of the body of these consumers. The factors which are fuelling growth of markets before this global pandemic include improvement in the present lifestyle, increasing disposable income along with a growth in the concerns regarding the looks. Additionally, companies are also using different platforms of social media like YouTube and Instagram for promoting their products and attracting more and more customers. With the help of social media influencers and bloggers, the beauty care companies are displaying their products on different platforms.

According to McKinsey (2020) found that in there has been a fall of 20-30% in the demand of cosmetic products in the world. The pandemic has affected all the countries. The recovery will take at least a year or more. In the US, if there is any reoccurrence of the pandemic situation the demand would go down to 35%. The reports of the cosmetics industry globally are segment based on the type of skincare products, cosmetics, hair care, perfumes, toiletries, oral cosmetics, etc. Almost all segments of this industry have witnessed a similar kind of downfall in terms of sales during COVID-19 because of closing of the offline stores at different locations throughout the world.

In the Indian context it is important to report that the Indian beauty salon industry was estimated to be around Rs.10,000 crores. It is also estimated that the salon and spa business together account for 31% of the total size of the beauty and wellness market. Due to

lockdown, beauty salons were closed and have only just opened (Husain, 2020).

Given the scenario of work from home, wearing mask and physical distancing, wearing makeup as well as fragrance is losing its importance. For prestigious brands, about 55% and 75% decline is being witnessed in the sales of fragrances and cosmetics. When the consumers would return to their office, a lot of them would still continue wearing masks which would slow the recovery of makeup industry further. One exception could be above masks treatments. Recently, Alibaba reported a rise in the sales of eye cosmetic by 150% each month during Feb 18th 2020. In contrast, hair care, bath care, skin care and body care products are enjoying the benefit from the self-care trends. The agencies which are tracking consumer spending have reported that the sale of luxury soaps was up by about 800% in Mar, 2020 in France as it was moving towards lockdown 3. The biggest lifestyle and fashion E-commerce marketplace, Zalando witnessed a boom in self-care products category including aromatherapy, candles, and nail, skin and hair care products by about 300%. The results from the E-commerce giant, Amazon has been consistent for which the sales of makeup in USA are showing a slight decline as compared to same month in the year 2019. While the sale of nail care cosmetics, hair colour products and body and bath care products have gone up. Another trend which is being noticed is a rise in DIY beauty care products. A lot of salons have shut down and even where they have not, people are avoiding visiting them. Also, many consumers are likely to face financial difficulties due to lockdown and the pandemic (Marsidi et al., 2014).

The preventive measures are becoming quite popular as people are looking to shield themselves from COVID-19. The health organisations are requesting people to wash their hands regularly for protecting themselves

from this virus. According to the statistics of Global Data, about 17% people in Australia, 47% in China and 47% in India are demanding more and more cleanliness products as it has changed into assertion from the World Health Organisation. People are understanding the severity of the situation and thus they have started grabbing soaps, sanitizers and other products of hygiene and cleanliness. For instance, protection glasses, hand sanitizers, purifiers as well as wet wipes are being chosen in order to follow the rules of hand hygiene and cleanliness. As an influence, the products of skin care like lotions and hand moisturisers are expected to be prompted keeping the fact in mind that who have sensitive skin might get allergy because of frequent hand washing or they might even suffer from skin peel due to harmful chemicals present in these products. In this regard the product manufacturers have an opportunity of making custom products that might fulfil the wishes and demands of the distinct clients like the anti-bacterial creams, sanitizers meant for sensitive skin, natural ingredients and the products may be labelled differently for kids and adults (Kristina and Kuswahyuning, 2020).

LITERATURE REVIEW:

With more and more economists predicting a future recession for world economy, the otherwise resilient cosmetic industry wouldn't be able to escape its impact. While Lipstick theory is applicable here that the consumers would splurge on costly lipsticks instead of out of the reach luxury items during times of recession, the economic fallout of COVID-19 would have a drastic impact on spending by the consumers. While a lot of personal and skincare products are important, there are also products which are not along with the skincare products and for these the consumers would make alternate decisions. These kind of changes in the

Consumer consumption would impact Kline's outlook directly for the ingredients of skin care and personal care (Hsieh, Pan, and Setiono, 2004).

Kline is expecting that the behaviour of the consumers as well as their spending in 2020 would move even more drastically as compared to last recession in the year 2009. The cosmetic and toiletries industry is moving towards a sharp decline in more than 60 years of the brand with a slight decline of about 5% in the year 2020. During the recession of 2009, the market also fell by about .8%.

The impact of COVID-19 in the personal care industry would cause a reduction by the consumers on the discretionary expenditure on hair care products and fragrances while spending money on the basic necessities will be protected like hand lotions, liquid soaps, etc.

The report of cosmetic industry has been segmented on the basis of type of products of makeup, skincare, perfumes, etc. Almost all segments of cosmetics industry have witnessed a similar type of fall in terms of sales during this pandemic because of offline stores shutting down at different locations throughout the globe (Ahmed, et al., 2018).

The effects of the pandemic on cosmetics industry may be noted everywhere. The lockdown has been on for a very long time according to the Government guidelines. Maximum companies have even laid off the workforce and some have even sent their employees on work-from-home state causing a reduction in the overall rate of production. Also, similar downfall in the cosmetics industry has been experienced everywhere.

The key brands bring affected by this pandemic are Chanel S.A., Estee Lauder Companies INC., Beiersdorf A.G., Johnson Johnson, L'Oreal, etc. The cosmetics companies like P&G are also taking the brunt. One major effect of the pandemic was seen on the supply

chain affected by a halt in the work in industries.

Also, with a rising popularity of the DIY trend, the DIY nail care, skin care and DIY hair colouring in other categories of beauty are attracting more and more customers. Neilson has reported a rise in sale of hair dye as well as hair clippers in April, 2020. The sale of the Madison Reed DIY colours kits rose ten times from middle of March to middle of April. The online sale of luxury brands nail paints has also witnessed double digit rate of growth every week. The surge in the sale of DIY nail care compels people to speculate the present crisis of effect on sale of lipsticks which has an additional dimension.

While the cosmetics industry could be relatively strong as compared to other categories of consumers, the year 2020 has been very poor in terms of sales. However, it is being said that this industry would still remain to be attractive in coming future. The pandemic related crisis would accentuate the trends which shape the market like a rise in use of E-commerce rather than touching a new ground altogether. The consumers throughout the world are showing through their actions that people are still finding comfort in simple pleasures of skin care or a swipe of their favourite lip colour before an online meeting.

Even before COVID-19 hit the planet, definition of "Beauty" was being globalised, intertwined and massive with people having a sense of self care and wellbeing. The pandemic related crisis would change such trends and thus there's some hope.

In wake of the current circumstances, humans offering the advertisers are known to extemporise the current techniques of promotion and help people coming across consolation. All the shapes as well as sizes of the private care and cosmetics suppliers are preferring online notifications regarding

activities which are taken for fighting this global pandemic.

An assessment of the market of anti-ageing cosmetics was done and it was seen that women and clients who earn high are more aware about cosmetics as compared to their colleagues. The attributes of the market of emblem image and influencers regarding the choices in purchasing anti-ageing cosmetics have been stated. Researches show that better products better issues play an important role over different types of elements (Kim K. J., Han H. S., Kim K. J., Han H. S., 2018).

OBJECTIVES OF THE STUDY:

1. To explore the influence of Covid19 Pandemic on sales of Cosmetic products
2. To find the impact on sales of Personal Hygiene products during Covid19 Pandemic

RESEARCH METHODOLOGY:

Research design: The present study is descriptive in nature. As a descriptive study, the paper finds the opinion of vendors / retailers who sell the cosmetic and personal hygiene products. The study investigates that what difficulties the vendors faced during the pandemic situation.

Sample size and Sampling method: The sample size of the study is 180 retail vendors/ retailers who sells both types of the products - Cosmetics and Personal hygiene. The sample of respondents includes the store managers & assistant managers, vendors (who sell on online marketplaces).. Data was collected through a structured questionnaire. The sampling method was convenience sampling

Geographical Area: The geographical area covered was Mumbai. Since the questionnaires were filled through online mode, hence it was

not difficult for the researcher to cover the various locations under Mumbai city.

Analysis and Presentation: The data has been analysed with the help of percentage and presented with the help of Bar Charts.

Limitations of the Study: The study is limited to the Mumbai area and it only covers two types of products - personal hygiene and beauty and cosmetic. Further, since the study is based on the primary data through questionnaire, minor biasness from the respondents may not be avoided.

FINDINGS AND DISCUSSIONS:

Table 1 Impact of COVID-19 on Sales of Cosmetic Products

S. No.	Statements	Average % age Impact
1.	Decrease in demand for Beauty and cosmetic products	31%
2.	Decrease in number of customers buying beauty/ cosmetic products	37%
3.	Decrease in Customers' Total basket size (in monetary terms) for beauty and Cosmetic products	36%
4.	Decrease in Customers' enquiring for new cosmetic products	39%
5.	Decrease in profits from beauty and cosmetic segment	32%

Table 1 shows that there has been a decrease in the overall number of customers buying the beauty and cosmetic products with 31%. The decrease in number of customers were witnessed by respondents was 37%, and decrease in customers' total basket size (in monetary terms) was found to be 39%. Lastly, the decrease in profits was observed by the respondents as 32%.

Impact of Covid on Beauty and Cosmetic Products

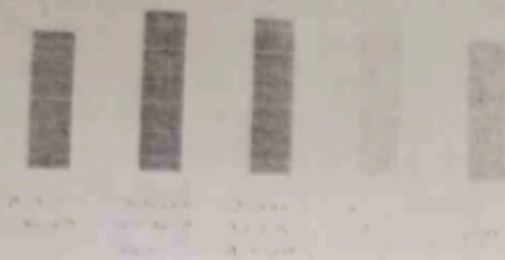


Figure 1 Impact of COVID-19 on Cosmetic and Beauty Products

Impact of Covid on Personal Hygiene Products

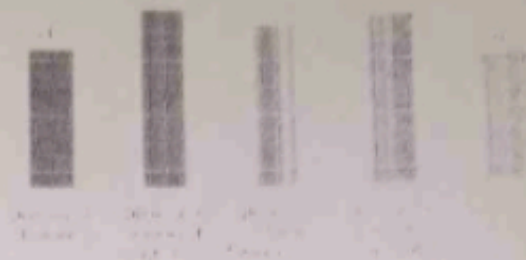


Figure 2 Impact of COVID-19 on Personal Hygiene Products

Table 2 Impact of COVID-19 on Sales of Personal Hygiene Products (Hand Sanitizers, Hand washes etc)

S. No.	Statements	Average % age Impact
1.	Increase in demand for Personal hygiene Products	44%
2.	Increase in number of customers buying Personal hygiene Products	57%
3.	Increase in Customers' Total basket size (in monetary terms) for Personal hygiene Products	52%
4.	Increase in Customers' enquiring for New Personal hygiene Products	55%
5.	Increase in profits from Personal Hygiene products category	41%

Table 2 shows the responses for the Impact of COVID-19 on Sales of Personal Hygiene Products (Hand Sanitizers, Hand washes etc). It is found from the table that in the context of the Personal Hygiene Products there is 44% increase in demand due to the pandemic and at the same time the increase in number of customers is 57%. Similarly, the basket size of the existing customers for these products has increased 52% in the monetary terms. There is 55% increase in the enquiries

for the new products of this category and overall there is an increase of 41% of profits from this category.

CONCLUSION:

Pandemic has changed the lifestyle of People. This study captures the impact of pandemic on the sales of beauty and cosmetic products along with the personal hygiene products. It was found from the study that there has been remarkable decrease in the former category and remarkable increase in the later. This study belongs to the time frame of around first 5 months of the lockdown hence the primary data averages the impact of the pandemic on the mentioned categories, otherwise the situation in the first 2 months of the lockdown was even more intense. The pandemic has changed the mindset of people. However, after the beginning of the unlock process the situation has changed but still people give first priority to the personal safety and personal hygiene and later second priority to the beauty and cosmetic products.

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A Study on Female Buyers' Behaviour towards Gold Jewellery and Satisfaction on Branded Gold Jewellery – with Reference to City of Mumbai

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Abstract:

The use of gold has been in art, religion, medicine, and currency since back centuries and touches almost every known culture. This metal is coveted as one of the precious metals and has been very key part of human being's life.

India is the largest consumer of gold. Post 1990 there has been change in buyers' perception and preference for jewellery. Now there are number of players in branded jewellery market.

The objective of this research paper is to understand female buyers' behaviour towards gold jewellery. Also, to understand the awareness and preference for branded gold jewellery in the market. This research paper is trying to find out the satisfaction level on buying the branded jewellery on different parameters. Research paper is based on primary and secondary data. Primary data was collected from sample size of eighty female respondents based on city of Mumbai. Mode of collecting data was questionnaire.

Keywords: Gold, Jewellery, Brand, Branded outlets

Introduction:

India is the largest market for gold after China. Annual consumption in India is approximately 800 to 900 tonnes of gold. Indians are great accumulators of it. Indian households may have accumulated up to 25,000 tonnes of gold, thereby retaining the tag of the world's largest holders of the metal, according to the World Gold Council (WGC). The value of this holding is roughly about 40% of India's nominal gross domestic product (GDP) in FY19. Kerala is the top consumer state of gold in the country.

As the world's strong-growing economy, millions have been lifted out of poverty and India's has increased. Econometric analysis indicates income growth drives gold demand. But India's gold goes beyond income growth: gold is tangled with India's way of life. India has a rich and memorable history linking to gold. It is one of precious metal and is as old as man. Gold is considered to be auspicious, particularly in Hindu and Jain cultures. Apart from historical religious importance, jewellery is considered as one of the important saving and investment mode in India. Even today in modern times, gold as coined as bride's Streedhan. When a girl gets married, she takes gold along with her.

Gold jewellery is one of preferred jewellery among Indian women. It is also famous among farmers. It is most bought after a good agricultural harvest season. Gold has been important in every stage of Indian citizen's life – at birth, marriage, construction of home, festivals, religious ceremonies, setting of a business, death.

Gold has a significant economic impact in various ways. It provides an economic activity in the economy. Gold as a raw material is converted into different jewellery designs and coins resulting in creating business opportunities and employment. Also, the industry value-chain has a potential capacity for refining and mining, which can further generate jobs in the rural areas. It has substantial impact on trade balance and current account in the Balance of Payments (BoP).

Post 1990s, Indian economy was witnessing the major shift with Liberalization, Privatisation and Globalisation policy. The change could be seen in the Indian jewellery market too. There was a shift in consumers' perceptions of jewellery. Now buyer was not looking buying a gold as only investment or security option but for its aesthetic appeal. The shift was seen in from content to design. Branded jewellery was a key wave into jewellery market. Buyers now had options of branded outlets with traditional jewellers.

Branded players such as Tanishq, Kalyan Jewellers, Oysterbay, Gili and Carbon opened outlets in various parts of the country. The branded outlets wooed the customers with purity guarantee, designs, light weighted jewellery and many more. In the beginning branded outlets had a very small market share in jewellery market. The key reason was the mind set of buyers as they treated gold jewellery as an investment and security. Above that they had trust into local and traditional jewellers. Consequently, the branded jewellery players tried to change the mindset of the people and enticed customers with attractive designs at affordable prices.

Tanishq could place its brand conveniently in minds of buyers as it is backed by Tata group. It got acceptance in the jewellery market easily.

the second largest market of gold. It is witnessing shift in consumers' perception and preference for gold jewellery. Branded players are attracting Indian buyers with its quality, variety, light weighted jewellery with affordable prices, discounts etc. Being accepted and trusted by buyers, now branded outlets are on now expansion mode.

The research paper has tried to find out buyers with reference to female buying behaviour for gold jewellery, awareness on branded outlets and satisfaction on buying the jewellery from branded outlets.

Scope of Study:

- 1) To understand gold and jewellery market in India.
- 2) To understand the growth of branded outlets of gold jewellery.
- 3) To study female buyers' behaviour on buying gold jewellery.
- 4) To understand frequency of buying, spending amount and objective of buying jewellery.
- 5) To find out female buyers' awareness and preference for branded jewellery.
- 6) To find out and analyse the female buyers' satisfaction level on buying gold jewellery from branded outlets.

Objectives of Paper:

- 1) To study female buyers' buying behaviour of gold jewellery.
- 2) To study on the awareness and preference for branded jewellery.
- 3) To understand satisfaction level on buying branded gold jewellery by female buyers.

Research methodology:

This research paper is descriptive in nature considering the facts from articles, journals, annual reports and survey from buyers. Hence it covers both primary and secondary data.

Primary data is collected from female buyers. Data is collected by preparing the questionnaire covering the scope and objectives of study. Sample size is around 80 and area covered is Mumbai.

While selecting the sample of eighty respondents, stratified sampling method was selected based on the age of female buyers. Within each stratified sample, random sampling was undertaken.

Data Analysis:

Simple percentage method is applied to analyse the different parameters of questionnaire. For presenting the data simple frequency tables are used.

Limitation of Study:

1. The study was limited to around 80 female respondents only.
2. The time limit is one of the main factors to conduct the study effectively.
3. The respondent may not be true in filling up the questionnaire.
4. The area of study is Mumbai only.

Data Analysis and Interpretation:**Age of respondents:**

Frequency table:

Age	No. of Respondents	Percentage
Below 25 years	20	25.00%
25-35 years	20	25.00%
35-45 years	18	22.50%
Above 45 years	22	27.50%

The number of respondents in all age group are almost the same. As mentioned in sample design, stratified sampling method based on age has been selected. Within each age group of age random respondents has been selected.

Education of respondents:

Frequency table:

Education	No. of Respondents	Percentage
Up to Higher Secondary	20	25.00%
Graduation	21	26.25%
Post-Graduation/Professional	39	48.75%

Above table indicates 75% of total respondents are graduate and above.

Frequency table:

Family monthly income	No. of Respondents	Percentage
Upto Rs. 20,000	14	17.50%
Rs 20,000-Rs. 50,000	18	22.50%
Rs. 50,000 - Rs. 1,00,000	14	17.50%
Rs. 1,00,000 - Rs. 2,00,000	18	22.50%
Above Rs. 2,00,000	16	20.00%

Above table indicates percentage in interval of Rs. 20,000 – 50,000 and Rs. 1,00,000 -Rs. 2,00,000 is the same and higher than two other intervals of incomes.

Occupation:

Frequency table:

Occupation	No. of Respondents	Percentage
Housewife	25	31.25%
Self - employed	16	20.00%
Working in private sector	18	22.50%
Working in government sector	21	26.25%

Above frequency table indicates higher number of respondents are house wives with percentage of 31.25% of total number of respondents. Then next higher number of females are working in government sector with percentage of 26.25%.

Marital status:

Frequency table:

Marital status	No. of Respondents	Percentage
Married	57	71.25%
Un married	23	28.75%

Table indicates a greater number of females in the sample group of 80 are married. The percentage of married female is 71.25% and un married is 28.75 %.

Frequency table:

Frequency of Buying the Jewellery	No. of Respondents	Percentage
Once in a month	00	2.50%
Once in every six months	02	2.50%
Once in a year	20	25.00%
Only on special occasions	58	72.50%

When asked from respondents on frequency of buying jewellery, most of respondents has replied on buying the jewellery on special occasions and not on time based. The percentage of females buying on special occasions is 72.5% while 25 % i.e., 20 had replied they buy jewellery once in year.

This indicates as gold is expensive, consumers are preferring to buy on special occasions when need arises. Also, people are becoming aware of other investment options.

Awareness of branded jewellery outlets:

Frequency table:

Awareness of Branded jewellery outlets	No. of Respondents	Percentage
Yes	68	85.00%
No	12	15.00%

Out of 80 respondents 68 i.e., 85% have awareness on branded jewellery outlets while remaining 15% have no knowledge on it. The marketing strategies by branded outlets and majority of respondents being minimum graduate can be the good reasons for having awareness about the branded outlets by majority of respondents.

Preference to buy type of jewellery:

Frequency table:

Preference to buy type of jewellery	No. of Respondents	Percentage
Branded	54	67.50%
Non - Branded	26	32.50%

Ever bought jewellery from branded outlets:

Frequency table:

Experience of buying branded jewellery	No. of Respondents	Percentage
Yes	57	71.25%
No	23	28.75%

Out of total respondents, 71.25% have actually experienced the buying of jewellery from branded outlets while around 28.75% haven't.

The higher percentage can be well connected with awareness and preference to buy the branded jewellery.

Awareness on the of branded jewellery outlets:

Frequency table:

Awareness on the brands	No. of Respondents	Percentage
Tanishq	69	86.25%
Kalyan Jewellers	56	70.00%
Orra Jewellers	40	50.00%
PC Jewellers	43	53.75%
Malabar Gold & Diamonds	42	52.50%

From the above we can see around 69 respondents out of 80 i.e 86.25% are aware about Tanishq brand. 70% of respondents know about Kalyan jewellers. For other brands too more than 50% of respondents have awareness on it.

It shows that since Tanishq is promoted by Tata group of companies, it is well placed in minds of buyers. Marketing strategies by Kalyan jewellers like earlier Mr. Amitabh Bachchan and now actress Sonam Kapoor the brand ambassador of Kalyan Jewellers have contributed in creating awareness and preference for branded jewellery in the market.

Frequency table:

Objective of buying jewellery	No. of Respondents	Percentage
Festivals	10	12.50%
Birthday / Weddings	52	65.00%
Fashion	13	16.25%
Investment in paper gold	37	46.25%
Any other	10	12.50%

In the above the respondents could tick more than one option. The table clearly indicates major number of respondents 52 numbers (65%) buy the jewellery on occasion of weddings or birthdays. Then objective of buying as investments in the form of paper gold follows. Around 37 respondents (46.25%) buy it from investment point of view too.

As we saw in frequency of buying the jewellery, majority of female consumers are buying on special occasions. In the above frequency table, we can analyse majority number with 65% prefer to buy on occasions of weddings / birthdays.

As in this primary data, almost 75% of female respondents are graduate and post graduate/ professional. We can find here educated women are better aware about of gold investment in paper form and they prefer to invest in it.

Average yearly amount spent on buying the jewellery:

Frequency Table:

Average yearly amount spent	No. of Respondents	Percentage
Below Rs. 50,000	45	56.25%
Rs. 50,000 - Rs. 2,00,000	30	37.50%
Rs. 2,00,000 - Rs. 3,00,000	5	6.25%
Above Rs. 3,00,000	0	0.00%

Table indicates around 56% of respondents are spending less than Rs. 50,000 yearly. 37.5% spend between range of Rs. 50,000 to Rs. 2,00,000. Only 6.25% of sample size of 80 are buying jewellery between Rs. 2,00,000 to Rs. 3,00,000 and nil for above Rs. 3,00,000.

Though number of respondents falling under different level of income are same but most of respondents have inclination to buy less than Rs. 50,000 yearly. This indicates less spending on gold.

Type of Jewellery	No. of Respondents	Percentage
Rings	33	41.25%
Necklace	15	18.75%
Earrings	48	60.00%
chain	34	42.50%
Bracelet	23	28.75%
Others	23	28.75%

Above table indicates around 60% of the respondents prefer to buy ear rings. 42.50% and 41.25% prefer to buy chain and rings respectively. This shows as majority of respondents spends less than Rs. 50,000 mostly they prefer to buy light weighted jewellery like ear rings, rings and chain.

The above analysis indicates the behaviour of female consumers. We can analyse the major findings like:

1. There is awareness on branded gold jewellery stores among female buyers.
2. Most of female buyers prefers to spend on light weighted jewellery.
3. Spending percentage on jewellery is low and is on special occasions like weddings/birthdays.
4. Spending objectives is extended to investment too. There is awareness on including paper gold in basket of portfolio by female buyers.
5. Brands like Tanishq and Kalyan jewellers are most known brands in the market.

	Highly satisfied		Satisfied		Neutral		Dis -satisfied		Highly dis -satisfied	
	No.	%	No.	%	No.	%	No.	%	No.	%
Quality of services at branded outlets	10	12.50%	46	57.50%	7	8.75%	16	20.00%	1	1.25%
varieties of jewellery at branded outlets	11	13.75%	44	55.00%	5	6.25%	19	23.75%	1	1.25%
Quality of jewellery at branded outlets	20	25.00%	35	43.75%	6	7.50%	18	22.50%	1	1.25%
Discounts provided at branded outlets	4	5.00%	29	36.25%	25	31.25%	18	22.50%	4	5.00%
Shopping as pleasurable and pleasant experience	17	21.25%	37	46.25%	19	23.75%	6	7.50%	1	1.25%
Visit to branded outlets only	11	13.75%	41	51.25%	23	28.75%	5	6.25%	0	0.00%
Purity of gold at branded outlets	26	32.50%	30	37.50%	3	3.75%	20	25.00%	1	1.25%
Attractive gifts and vouchers	6	7.50%	21	26.25%	23	28.75%	25	31.25%	5	6.25%

From the above we can analyse the following:

1. Between 68% to 70% of the respondents are satisfied with quality of services and quality of jewellery at branded outlets. Between 21% to 24% are dissatisfaction on it. Balance have neutral view on it.
2. 68.75% of respondents are satisfied with varieties of jewellery which branded stores keep while 25% are dissatisfied on it. Balance percentage of respondents have no view on it.
3. 41.25% of respondents are satisfied on discounts offers given by outlets while 27.5% are dissatisfied on it. Here we can see lower number of respondents who are happy on discounts provided by them.
4. Around 68% find shopping experience at branded outlets as pleasurable and pleasant experience, while 8.75% are dis satisfied on it. Balance percentage of respondents are not sure about it.
5. 70% of respondents have confidence on purity of gold at branded outlets while 26.25% don't have.

- the major findings from above table regarding satisfaction on buying the jewellery from branded outlets:
1. Between 68% to 70 % of respondents are satisfied on quality of services, varieties, quality and purity of gold at branded outlets.
 2. Around 71% respondents have experienced the buying of jewellery from the branded outlets. It indicates almost who have bought the jewellery from branded outlets are satisfied with services and quality of gold.
 3. On discounts, attractive gifts and vouchers, satisfaction percentage is quite lower than other satisfaction factors.

Conclusions:

The branded outlets have been successful in creating the good market share in the jewellery market. They have gained good confidence from buyers on purity and varieties of gold.

Percentage of spending is on gold jewellery is lower and it is becoming more occasional oriented. The reason can be gold is becoming one of the expensive metals. With these challenges, the branded outlets should come out with more innovative ideas and marketing strategies. To attract more buyers, they should offer more discounts and attractive gifts.

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Study on Health Insurance Sector in India – Impact of COVID-19 on it and its Future Prospects

• Simran R Kalyani

Abstract- Health care sector is a diversified sector. It is core and booming sector in India. Its sub sectors are clinical trials, medical tourism, hospitals, devices, equipment, telemedicine, health insurance and education. It is growing at an incredible speed. India's healthcare sector valued over 140 billion U.S. dollars in 2016 is projected to reach up to 372 billion dollars by 2022. Like every pandemic COVID-19 has affected severely all sectors globally. Health care sector is not exception to it. The pandemic has brought forward health insurance in front seat. Pandemic period has made people to realize the significance of immunity and investment on health and life. People have understood significance of accessibility of quality health care facilities and availability of sufficient finances. This has turned into increasing demand for health insurance. In India health insurance being one of key segment of health care sector is growing sector. Role of private, public and government is making health insurance industry as one of shining sector in India. The objective of research paper is to understand the growth of health insurance industry in India, COVID-19 impact on it, Indian government role in pushing this sector and its future prospects.

Keywords- COVID-19, Health insurance.

Introduction- Health Care sector is one of largest and booming sector in India in terms of revenue and employment. It is a diversified sector comprising of various sub sectors like hospitals, medical instruments and machines, clinical trials, pharmaceutical, medical tourism and diagnostic systems. Each segment is with full of opportunities and bright prospects.

India being the second populated country is expecting to add more millions of household people into middle class group thereby increasing demand for more health care facilities. Increasing awareness on health care, Indian government spending on it, technological developments, participation of private players and many more factors are contributing to exponential growth of health care sector of India.

In 2016 India's healthcare sector was valued at 140 billion U.S. dollars, with projections to reach up to 372 billion dollars by 2022.

Health insurance is one of core segment of health care sector in India. In 2018 it was valued at about 370 billion Indian rupees with future projection of to cross over two trillion rupees by financial year 2030. Increasing income and awareness on health are contributory factors in its growth story. Government is coming up with different various health insurance schemes and same time it is encouraging the participation of population in it.

Objective of Research paper-

- To understand Health care sector and its growth in India
- To understand Health insurance segment, its evolution and growth.
- To analyse the role of Government in it
- To analyse impact of COVID-19 pandemic on health insurance sector of India
- To analyse the future prospects of it.

Research Mythology- This research paper is descriptive in nature. The researcher has tried to analyse the different segment keeping in mind the objective of research paper by referring different articles, reports and research papers. This paper is based on secondary data.

Evolution of Health insurance in India- After independence, health care sector had a considerable improvement. Its history in India can be seen from Indian government initiative of launching of an Employee's state insurance scheme (ESIS) in 1948. It provides health care services through a network of dispensaries and hospitals that impaneled with ESIS.

In 1986, General Insurance Corporation (GIC) launched India's first Mediclaim policy. However, in 1991, a milestone was set in health insurance sector with introduction of the new economic policy and liberalization process and privatization. Passing of bill, "The Insurance Regulatory and Development Authority (IRDA)" in the Indian parliament was another milestone in health sector which boosted the confidence for health insurance in the minds of Indian investors.

Health Insurance growth story in India- Today the health insurance sector is gaining acceptance and becoming as a one of the emerging and fastest sectors in non-life insurance segment in India. In FY 17 health insurance sector had a market share of 24 % in the Indian non-life insurance sector. Growth was observed with a strong double-digit growth of 24%. As per the published records of the financial year 2018-19, general and health insurance companies collected ₹ 44,873 crore as health insurance premium which is 21.2% above the premium collected on this head during the financial year 2017-18. During the years 2014-15 to 2018-19, the growth of health insurance premium is over 20% in each year. As per TECHSCI Research India health insurance market is projected to register a CAGR of 29% during 2021 – 2025. At present picture 52 insurance companies are operating out of which 24 in Life and 28 companies in non-life insurance segment. Non-life insurance sector in India are dominated by motor insurance with market share 43%, followed by health insurance (25%). The strong drivers for robust growth of health insurance are:

- Increasing awareness of health due to the growing healthcare costs
- Increasing income level and standard of living of Indian population
- Availability of schemes for senior citizens and children is making health insurance sector more popularized as it is catering to every segment of population.
- Wide range of products providing varied kind of health covers, customisation as per customers' needs and budget is key factor for its growth

- Medical cost is inflated at more than 15% consequently medical facilities is becoming beyond the reach of poor, needy and low-class people.

Earlier public sector health insurance had dominance over market. Now with the participation of private player the share of public health insurance players is at declining rate. The share of private sector health insurers has marginally increased from 22% in financial year 2014-15 to 24% in the financial year 2018-19. But a remarkable growth has been recorded in the business of stand-alone health insurers whose share in total market gone up from 14% in financial year 2014-15 to 24% in financial year 2018-19. Strong marketing practices of private players, claim settlement ratio, attractive schemes offered by them and increasing public confidence into private companies have contributed to growing market share of private players in health insurance sector of India.

Health Insurance during Pandemic COVID-19- Like every pandemic COVID-19 has affected severely all sectors globally. Health care sector is not exception to it. Despite India is facing various challenges, there are prospects and opportunities to be exploited, and the sector has come into limelight from policymakers. 'Healthy India' is one of the key policies under India's Vision 2030 as the government attempts to cater healthcare needs of the general public and also make it a driver of economic growth.

COVID-19 pandemic has made people to realize the significance of health and investment on it, showing change in mind set of people. During this period, we can see people investing money and time on exercises, meditation, healthy diet, investment planning on life and health insurance policies. With realization of current challenges in health care sector in India, people now have importance for good infrastructure in terms of hospitalization, clinics, well equipped and advanced diagnostic systems and quality health care services. They have begun to invest in individual life and health insurance than depending upon their employers.

The Health insurance industry has seen positive change over the last few months. Firstly, almost 30-40% growth was found in the acceptance in health insurance adoption across industry players. There has been major shift towards digitalisation. During the pandemic period from April to September 2020 large amount of premiums was collected making health insurance a key and valuable segment in non-life insurance sector. According to the General Industry Council, an industry body, in the total premiums collected by non-life insurance in first six months of financial 2020-21, the health insurance sector's share was almost 29.7% and motor insurance came in a close second, with 29% of premiums. In 2014-15, the share of premium collections of health insurance was 23.4% and motor 44.4%. It shows the strong demand and growth of health insurance over the period of time and making it the second-highest growth among these 10 segments of overall health sector of India.

Government Role in Health Insurance Sector in India- Every government has an accountability towards its citizens to provide inexpensive and reachable healthcare. For achieving it, governments unveil

different health insurance services for every common citizen of country. Likewise, the Indian government has also hurred a diversity of health insurance schemes with low premiums and a significant sum insured to make every Indian accessible healthcare facility in India. Introduction of various government health insurance schemes is adding to growth story of insurance sector in India.

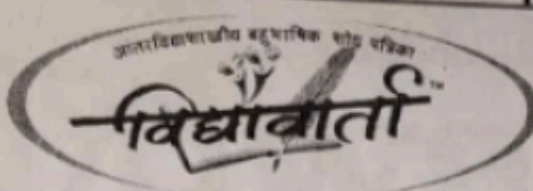
In September 2018 the launch of National Health Protection Scheme under Ayushman Bharat, by Central Government was a significant step for a health insurance sector. The objective of scheme is to provide coverage of up to INR 500,000 (USD 7,723) to more than 100 million vulnerable families. This has resulted in increased penetration of health insurance in India, from nearly 34% to 50%. In 2017-18 about 47.9 million farmers benefitted under Pradhan Mantri Fasal Bima Yojana (PMFBY). Till now almost sixteen government schemes has been infused in economy.

The Road Ahead- In the financial year 2019 almost 472 million people were protected under health insurance schemes comprising the highest number of people covered under government sponsored schemes and low number of people were of individual policies. Urban and rural health insurance coverage stood as 18 per cent and 14.1 per cent of respective population. Overall, the demand of health insurance in India was at just round 35 percent in financial year 2018. This indicates untapping of market and true protentional of growth of this sector in India. This pandemic has kept it on front sear and one of key economic driver but with some challenges. Digitalisation of whole process is one them. Introducing more varied and innovatively designed products in market to cater to every segment and type of customers is the task for private and public players in this sector. Simplification of procedure and terminologies is need of hour to access the health insurance products in far remote and rural areas of India. Insurance companies have challenge of capitalising this pandemic opportunity over the long run of time.

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Commerce, Management and Economics : An Overview of COVID-19
is India Economy" held on Friday, 30th April 2021 (11.00 am onwards) jointly organized by
BBA and PG Section of NSS College of Commerce & Economics, Mumbai and Presented a paper
on the topic "Impact of COVID 19 on Electronic Payment System in India".



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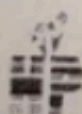
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Impact on COVID 19 on Electronic Payment System in India

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Abstract

With the expected estimate of \$127 billion, fintech has become the fastest developing sectors across the globe, giving employment to thousands of individuals and generating different sources of earnings for countries across the globe. In the year 2020, the significance of the fintech industry has played an important role for curtailing the impact of COVID-19 on businesses. Different measures were taken during lockdown phase for assuring that businesses have continuous access to different modes of payment digitally to an extent that the potential of the infection is curtailed by avoiding flow of cash in the market and by adopting digital modes of payments.

Safeguarding the current trends and pushing the use of digital modes of payment further, the digital modes of payments need to help the advanced countries for weathering the impact of COVID-19. Also, it needs to be combined with the effective efforts for fighting financial crime and assuring protection of the users. A survey was conducted on the sample of 197 respondents to know the impact of Covid 19 on electronic payment system and mean and t test was applied to get the results. The study concludes that there is a significant impact of Covid 19 on the electronic payment system in

India.

Keywords: cashless economy, digital payment system, impact of COVID on business, pandemic related crisis

Impact on COVID 19 on Electronic Payment System in India

Introduction

COVID- 19 has caused protracted and some severe disruptions on the lives of people across the world in the developed as well as the developing nations. The pervasive impact of the pandemic, that has affected each and every aspect of the society, keeps unfolding as this huge crisis progresses. It has left profound marks on the livelihoods of people and also on the economies of the countries which are expected to be there for a long time once the pandemic is over. As a part of global response, the industry of digital finance has played and has been playing an important role for providing and for developing innovations and services which have mitigated the disruptions which have been brought through the pandemic on different aspects of the lives of people. In emerging and developing contexts, significantly, there's been a substantial increase in the interest for sufficient potential that financial technology carries on preserving the businesses as well as livelihoods of people and continues to be immensely threatened by this crisis, thereby sustaining and enabling within the societies, cash flow, flow of credit, investments, and deposits at the regional and national levels. The private and the public sectors response has helped in promoting and accelerating process of inclusion of digital finance in the developing context significantly in different nations where the system was lagging behind as compared to the regional trend (Sowmya and Hebbar, 2020). In terms of demand for digital payments options, the developing as well as the developed nations have witnessed an immense growth in subscription and usage of the financial services since people are now looking for alternate ways

of running and managing the financial aspect of their businesses and lives for surviving the extended lockdowns, social distancing and overall disruptions in the livelihoods. In terms of supply, the traditional finance institutions have been compelled to revise their model of business as well as mechanism of delivery through heavy investment in the digital channels of payments. This has accelerated the process of digitalisation of the financial offer which was in place. From the viewpoint of development, the accelerated shift towards development and use of digital payments option is proving to be a boon for the financial inclusion amidst disruption brought by the pandemic. Before the pandemic, digital finance used to be the fundamental enabler for the financial inclusion for the developing as well as emerging countries especially when it was about reaching the isolated individuals.

In the context of COVID-19, the rapid surge in the interest for digital payments on part of the governments, general public and the businesses there has to be substantial implications of increased potential of the digital payment mechanism (Singh and Misra, 2020).

Literature Review

COVID-19 has put an unprecedented strain on economy of India. The GDP is being expected to shrink by about 4.5% this year. The consumption expenditure mainly accounts for more than 60% of GDP of India and would be amongst some of the worst hit by pandemic. The global adoption of the digital payment systems, helps in facilitating billion of transactions that happen daily. They are being expected to play an important role for minimising an economic fallout of the pandemic (Sahoo and Ashwani, 2020).

The merchants and the consumers are using the instruments of digital payments. They mainly promote social distancing which is why they also help in business continuity while the restriction on movements are being imposed.

India also witnessed an increased usage of the online grocery shops, payment portals and EdTechs for paying the utility bills (Zhou et. al., 2020).

RBI has also urged the consumers for making digital payments in place of cash for facilitating social distancing. With the help of digital payments, even the cost for cash is reduced for an economy, which is increasing now since experts are advising that currency notes should harbour corona virus potentially and they should be sanitised (Khanna et. al., 2020).

For example, the transactions on UPI or Unified Payments Interface has also increased by about 33% since Apr, 2020 to June, 2020. The total cash which has been in circulation in Indian economy has also been high. In July, 2020 total currency worth Rs. 25.8 trillion had been in circulation, and a rise of about 22.9% over the period of Jul, 2019.

The high circulation of cash in the economy is driven mainly through transfers of direct cash from government to the low income merchants and micro households and the tendency amongst the households for using cash during emergencies and uncertainties. As economy is reopening, it's even more imperative to leverage benefits of the digital payments for facilitating resilient recovery of the economy. Addressing the impediments towards the adoption of digital payments and transactions and use entails which may help in resolving frictions (Gopalan and Misra A, 2020).

Repairing poor service, and developing a strong mechanism for redressal is the need of the hour. Such interventions would help in supplementing the efforts that the government is mainly making for promoting adoption of digital payments in the country and formalising the economy. The examples of these kind of efforts include several amendments under Finance Act of 2019 that demands all the businesses having a turnover of more than Rs. 500 million to offer facilities to accept the

payments through only prescribed modes.

Currently, these modes of payment are restricted to the debit cards which are powered by UPI, and RuPay. Similarly, the vision document of RBI for the period of 2019 to 2021 outlines the blueprint for empowerment of exceptional payments experience. It aims at the empowerment of Indians with an access to the wide range of options of E-payments which are considered to be convenient, safe, secure, affordable and quick. India has also been listed amongst the top innovators in the sector. UPI in India is being appraised across the world and also India is one of the few countries to adopt the Chip and Pin innovation method for digital payments.

In June, 2020, ORF or the Observer Research Foundation organised a conference for identifying the main challenges in the current regulatory framework which is preventing the adoption of the digital payments as well as for exploring the potential options of the policy for the decision makers (Singh, Sunuwar and Shah, 2021).

It was discussed that the digital payments mainly serve the diverse needs of users in India. Most of the population resides in the rural areas and they are self-employed. The micro, small and the medium enterprises contribute about 28.9% of the GDP of India and account for about 49% of total exports. Micro merchants constitute about 99% of total MSMEs (Singh et. al., 2020).

Imposing artificial caps on the number of transactions that a consumer can undertake inhibits adoption of electronic payment systems. For instance, several banks limit the number of transactions on Aadhar-enabled payment systems to only one per day. These limits appear to have been imposed because service providers benefit from high-value transactions rather than a high number of low-value transactions. This is dissonant with the needs of low-income households and MSMEs, who require digital

payment platforms to access cash transfers from the government, and who need to withdraw small amounts of cash to service different needs. It is important for industry to contemplate how to create an appetite to service high-volume transactions (Chan et. al., 2020).

Digital payments which were once a tool of convenience have now become necessity in today's times. With most of the sectors contributing towards digital payments in the state of a flux now, it would be still quite early to assure the effect of the pandemic on the digital payments in the long run.

Objective of the study

1. To find the impact of Covid 19 on electronic payment system in India.
2. To find the significance of electronic payment system during Covid 19 in India.

Research Methodology

A sample of 197 respondents was surveyed with the help of structured questionnaire to know the impact of Covid 19 on electronic payment system and significance of electronic payment system during Covid 19 in India. The primary data was collected through random sampling and mean and t-test was applied to get the appropriate result.

Findings of the study

Table 1 Impact of Covid 19 on electronic payment system

Sl. No.	Impact of Covid 19 on electronic payment system	Mean score	t value	Sig.
1.	Electronic payment had assured that businesses have continuous access to different modes of payment digitally	4.30	16.78	0.00
2.	Electronic payment had witnessed an massive growth in subscription and usage of the financial services during Covid 19 pandemic	3.97	12.27	0.00
3.	Electronic payment system had helped in running and managing the financial aspect of the businesses	3.76	10.95	0.00
4.	Covid 19 pandemic had accelerated the process of digitalisation of the financial sector through electronic payment system	4.03	14.01	0.00
5.	Electronic payment system had facilitated billion of transactions and helped the economy to keep on running during Covid 19 pandemic	4.11	13.46	0.00
6.	Covid 19 pandemic had witnessed an increased usage of the online grocery shops, all payment portals for paying the utility bills through electronic payment system	3.90	13.73	0.00
7.	Electronic payment system had played an important role in minimising an economic fallout during Covid 19 pandemic	3.73	9.23	0.00
8.	Electronic payment system had helped the general public to access their money for basic necessity during pandemic	3.90	11.42	0.00
9.	Electronic payment system had rebooted the economy during pandemic and in new normal	4.01	13.74	0.00
10.	Electronic payment system had negatively impacted the businesses in the form of refunds and charge backs during pandemic	4.07	13.16	0.00

Table 1 shows the Impact of Covid 19 on electronic payment system in India. It is found from the table that Electronic payment had assured that businesses have continuous access to different modes of payment digitally with the mean score 4.10 and Electronic payment had witnessed an massive growth in subscription and usage of the financial services during Covid 19 pandemic with the mean score 3.97. Electronic payment system had helped in running and managing the financial aspect of the businesses with the mean score 3.76 and Covid 19 pandemic had accelerated the process of digitalisation of the financial sector through electronic payment system with the mean score 4.03. It is also found from the table that Electronic payment system had facilitated billion of transactions and helped the economy to kept on running during Covid 19 pandemic with the mean score 4.11 and Covid 19 pandemic had witnessed an increased usage of the online grocery shops, ad payment portals for paying the utility bills through electronic payment system with the mean score 3.90. The table also shows that the respondents believe that Electronic payment system had played an important role in minimising an economic fallout during Covid 19 pandemic with the mean score 3.73 and Electronic payment system had helped the general public to access their money for basic necessity during pandemic with the mean score 3.80. Electronic payment system had rebooted the economy during pandemic and in new normal with the mean score 4.01 and Electronic payment system had negatively impacted the businesses in the form of refunds and charge backs during pandemic with the mean score 4.07. In order to test the significance of the statements t test was applied which shows that the value in the significance column for all the statements is less than 0.05 which means that all the statements are significant.

Conclusion

Different policy measures for

encouraging use of the digital modes of payments have been incorporated across the world. Recognising the opportunities which the pandemic presents for improving the access to the digital modes of payment is being considered to be a silver ray of hope for the economies which seek at broadening the financial inclusion. Since these countries are trying to emerge from the effect of the pandemic, the authorities are revising the objectives of their policies for ensuring that fintech industry continues to flourish despite of the effect of pandemic.

The study concludes that there is a significant impact of Covid 19 on the electronic payment system in India as it has assured that businesses to have continuous access, had witnessed an massive growth in financial services, helped in running and managing the financial sectors, accelerated the process of digitalisation of the financial sector, facilitated billion of transactions, played an important role in minimising an economic fallout, had rebooted the economy as it has negatively impacted the businesses in the form of refunds and charge backs also.

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29

Impact of Covid-19 Pandemic on Consumer Behaviour

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Abstract-

The Covid-19 pandemic has fundamentally changed the world as we know it. It has impacted virtually all aspects of our lives. People are living differently, buying differently and in many ways, thinking differently. Consumers are responding in a variety of ways and have differing attitudes, behaviours and purchasing habits. Some feel tense and perturbed, fuelling panic-buying of staples and hygiene products. At the other end, consumers remain unaffected with it. Due to Covid-19 outbreak consumer priorities have become centred on the most basic needs, while non-essential categories flump. E-Commerce has also seen a thrust as new consumers migrate online for shopping- an upsurge that is likely to be sustained post-pandemic. In this pandemic there is a sudden change in consumer behaviour and for an organization to survive and grow, it is essential for it to identify the needs and wants of their consumers. A comprehensive yet meticulous knowledge of consumers and their consumption behaviour is essential for a firm to succeed. This paper highlights, examine and depicts the impact of Covid-19 pandemic on consumer behaviour.

Keywords: Covid-19, Pandemic, Consumer behaviour, Consumers, E-Commerce

Introduction:

Consumer behaviour is the process,

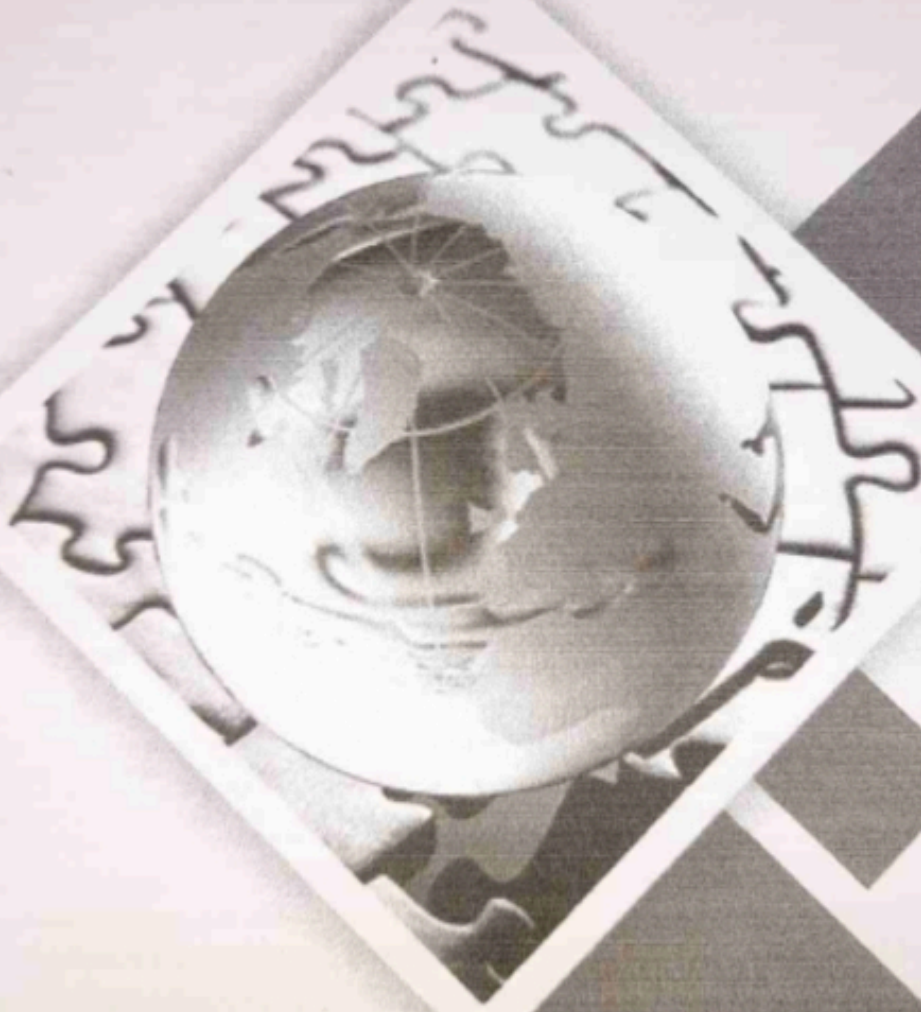
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A STUDY ON AWARENESS AND INVESTMENT IN RETIREMENT PLANNING AMONG INVESTORS WITH REFERENCE TO CITY OF MUMBAI

Mrs. Simran R. Kalyani

ABSTRACT

Among various financial goals, retirement planning is an important and essential. In Indian demographic features, more percentage is of young age. After the number of years, it would shift from youth to more old aged population. With changing lifestyle and culture, Indian joint family concept is diminishing and now there are more nuclear families resulting in one having to be self-reliant in retirement period. Very few organizations are providing the pension shelter to their employees. These factors are bringing out the significance of retirement planning in order to have a decent cash flow of income which helps in facing medical expenses, a good standard of living and other emergencies. The study is done in Mumbai area taking the sample size of around 80 respondents on random convenient basis but covering all age group, income and education level. The objective of research paper is to find out the awareness on pension schemes and retirement planning.

Keywords: Financial Planning, Retirement Planning, Pension Schemes, Medical Expenses, Pension Shelter.

Introduction

Financial planning is a very systemic and disciplined approach to achieve and meet one's financial goals. A good and well-defined financial plan acts as a controller as you move ahead in life. Fundamentally, it helps in controlling of one's income, expenses and investments in a such way that money is managed appropriately and financial goals also can be achieved. Financial planning helps to determine short and long financial goals and create a balanced plan to meet those goals. A well planned and followed financial planning results in more savings, better standard of living, facing emergencies. Financial planning includes the various goals like wealth creation, retirement planning, child's education, saving of taxes, buying the house property, marriage etc.

This study is focusing one of the key and essential part of financial long-term goal the Retirement planning. It is process of determining the retirement income goals and necessary actions to be taken to achieve those goals. While planning for retirement it is important to consider the various important aspects such as identifying the income sources, estimating short term and long-term expenses, managing assets and risk and implementing a saving program. Estimation of future cash flow is key in retirement planning in order to determine the retirement income. This planning actually works when one starts at young age. Not just saving but investing in right instruments which generate the good rate of returns is also very important. Retirement planning help in facing the medical emergencies, inflation, a maintained standard of living and other uncertainties. Planning commenced at delayed period results either in more savings for retirement goals or compromise on well retirement income in future. This study is with objective to analyse on retirement planning and awareness on different pension products among earning people.

Literature Reviews

Sanket Charkha (2018): The objective of research paper titled "A Study of Saving and Investment Pattern of Salaried Class People with Special Reference to Pune City (India)" is to understand the factors influencing investment decisions, pattern of savings and investment, difficulties faced by salaried class of people. The survey is conducted in Pune city. Sample size of 60 salaried class of people is taken in this research paper. The findings in research paper are like there is a significant

relationship between income level and awareness about different avenues available for investment. Both male and female are well aware about investment options. Safety is a key area among investors. They prefer to invest in bank deposits and mutual funds more.

Dr. V. Krishna Kumari (2018): In research paper titled "Impact of Savings and Investment Behaviour of Working Women in Chennai City" study is done on working women in the city of Chennai. The objective of paper was to find the factors affecting on the saving and investment pattern of working salaried class of women. Sample size taken was around 100. It is found that the investment choice is not just only influenced by the income level, education but age is too key factor in affecting the investment decisions.

Swati Modi (2019): In research paper titled "Retirement planning of working individuals in Ahmedabad" the key findings where the working individuals are well aware about the retirement planning and majority agreed that after their retirement, they require a guaranteed source of income. Majority of sample size have agreed to have different options for their retirement planning.

Garg Pantli (2013): The research paper is titled as "Retirement Planning of Female Faculty Members - An Expense or Saving for the Future". The objective of the paper is to find out the awareness level of retirement planning among women faculty avenues. The key findings are that married faculties were more aware about retirement planning avenues than un married. Working females are moderate risk takers and they look for safe investment options.

Bomikazi Zeki (2017): The researcher has found the significant impact of an appropriate retirement planning on adequacy of retirement funding in paper titled "A Review of the factors influencing Retirement funding adequacy: A South African Perspective". The study is conducted with reference to South Africa. Various factors financial literacy, family support system, health status is taken into consideration to show the relationship between mentioned factors and financial planning.

Research Gap

In research paper the surveyed area is not covered yet for conducting research on retirement planning area. The researcher has tried to find out the reasons of not doing retirement planning along with finding the significant relationship of age, income level, and number of dependents with awareness and doing of retirement planning. Most of studies on retirement planning is done on salaried class of people and female gender. The study does not only cover salaried class of private and government sectors but business and professional self-employed class of people and of all age group are taken for study on retirement planning.

Objectives of Study

- To understand investment pattern of investors.
- To analyze the investors' awareness on different retirement pension schemes available in financial markets.
- To understand investment options chosen for retirement planning
- To analyze the reasons for not doing the retirement planning.

Hypothesis

- H_0 : There is no significant relationship between age and retirement planning.
 H_1 : There is a significant relationship between age and retirement planning.
 H_0 : There is no significant relationship between income and retirement planning.
 H_1 : There is a significant relationship between income and retirement planning.
 H_0 : There is no significant relationship between education and awareness on different pension schemes.
 H_1 : There is a significant relationship between education and awareness on different pension schemes.

Scope of Study

This study is focusing only on retirement planning and awareness on different pension schemes across all age group, income group and education level in the city of Mumbai.

Need of Study

The Indian economic growth and open economy have resulted in increasing awareness and tendency of investing in different financial avenues among investor as per their risk appetite. Among various financial goals to achieve, it is too significant to save and invest for sufficient corpus for

retirement. Very small percentage of population is covered under pensions schemes by employers. With changing in Indian culture, lifestyle and from joint family to nuclear family system, it is need of time to focus on one's retirement planning in order to be self-reliant even after retirement age. The study has tried to find awareness on different pension products and retirement planning.

Sample Size and Area Selected

Around 82-85 respondents are included in sample size. Random convenient sampling method is used while selecting the respondents. Mumbai area is selected for study purpose.

Data Collection Methods

For research purpose, primary data and secondary data both methods are applied. For secondary data, the past research papers, NSDL, financial companies' website, journals, articles and webs have been studied. For primary data, closed ended questionnaire through google doc was used to collect the data on different objectives from respondents of Mumbai.

Statistical Tools Applied

For data analysis the tables, percentage, pie diagram and Chi -Square are used.

Testing of Hypothesis

For Hypothesis 1: Relationship between age and retirement planning

	Yes	No	Total
Below 25	1	13	14
26 - 30	1	15	16
31 - 40	8	12	20
41 - 50	12	8	20
50 Above	5	7	12
Total	27	55	82

Statistical tool: Chi square test

Degree of Freedom: 4

Level of significance: 0.05

Our calculated Chi-squared score comes 16.8757 and at level of significance with above degree of freedom, the value is 9.488. As Chi-squared score is a greater value hence the null hypothesis is rejected and alternative hypothesis is accepted. It indicates there is a significant relationship between age and retirement planning.

For Hypothesis 2: Relationship between income and retirement planning

Rs.	Yes	No	Total
Below 50,000	3	32	35
51,000 - 1,00,000	12	18	30
1,01,000 - 2,00,000	5	2	7
2,00,000 - 4,00,000	4	2	6
Above 4,00,000	3	1	4
Total	27	55	82

Statistical tool: Chi square test

Degree of Freedom: 4

Level of significance: 0.05

Our calculated Chi-squared score comes 21.0776 and at level of significance with above degree of freedom, the value is 9.488. As Chi-squared score is a greater value hence the null hypothesis is rejected and alternative hypothesis is accepted. It indicates there is a significant relationship between income level and retirement planning.

For Hypothesis 3: Relationship between education and awareness on different pension schemes.

	Yes	No	Total
Below 12TH STD	2	16	18
Graduate	8	19	27
Post - Graduate	13	7	20
Professional	13	4	17
Total	36	46	82

Statistical tool: Chi square test

Degree of Freedom: 3

Level of significance: 0.05

Our calculated Chi-squared score comes 21.0283 and at level of significance with above degree of freedom, the value is 7.815. As Chi-squared score is a greater value hence the null hypothesis is rejected and alternative hypothesis is accepted. It indicates there is a significant relationship between education level and awareness on pension plans and schemes.

Data Analysis and Interpretation

Demographic features of respondents of sample taken:

- Out of 82 total respondents, 42 are male and 40 are female
- In age section, 17.1% of respondents are below 25 years, 19.5% between 26-30 years, 24.4% between 31-40 years, 24.4% between 41-50 years, 14.6% lies above 50 years of age group.
- In marital status, 57.3% of respondents are married, 29.3% unmarried, 13.4% single for reasons of divorce or for being widow.
- In monthly income, 42.7% of respondents are below the income of Rs. 50,000, 36.6% between the income level of Rs. 51,000-1,00,000, 8.5% between Rs. 1,01,000 – Rs. 2,00,000, 7.3% between Rs. 2,01,000 – Rs. 4,00,000 and 4.9% lies in income level of above Rs. 4,00,000.
- In education, 22% of respondents are below 12th standard, 32.9% being graduate, 24.4% post-graduate and 20.7% professional degrees.
- In occupation, 30.5% of respondents are in business class, 22% self-employed as professional, 31.7% service in private sector, 15.9% service in government sector.
- In number of dependents, 9.8% of respondents has no dependents, 14.6% one dependent, 29.3% two dependents, 35.4% three dependents, 11% four dependents.

Findings

- In a question with an objective to understand the investment pattern, respondents could tick more than one option. Hence total responds are more than total number of sample size. 86.6% are investing in fixed deposits/PPF, 22% in real estate, 73.2% in gold, 43.9% in mutual funds, 36.6% in insurance products, 3.7% in debt instruments, 24.4% in chit funds, 11% no savings. More of investors are investing in fixed deposits, PPF, gold and mutual funds. This shows the investors are moderate risk takers.
- On asking, the age they want to retire, followings are findings:

At what age do you want to retire?

82 respondents



Around 40% of respondents wants to retire before age of 55 years, 26.8% at the age of 60 years, balance 32.9% at age of 65 and above.

- On asking whether respondents have done the retirement planning, 27 i.e., 32.9% of respondents have said and balance 55 i.e., 67.1% have not done any retirement planning.
- This indicates, majority of respondents are not investing for their retirement planning point of view.
- Those respondents who have done retirement planning had to share the avenues chosen for retirement planning. 73.3% of 27 respondents have chosen pension schemes, 16.7% in real estate, 40% in shares, 60% in mutual funds, 66.7% in PPF and 13.3% in others. Here the respondents could choose more than one option.

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A Study of the Consumers' Brand Awareness of Herbal Personal Care Products with reference to City of Mumbai

• Rita Kumari

•• Simran Kalyani

Abstract- The value of Indian personal care and beauty industry was valued of Rs. 54, 550 Crore in 2020. The estimated growth CAGR rate is 12% during the period between 2021-2026 (expertmarketresearch.com). Personal care products are consisting of Hair care, Skin care, Oral care and Cosmetics. Personal care industry is the key component of fast-moving consumer goods industry in India which itself is on high growth ride. In recent years, there has been shift in consumers' preferences to herbal personal care products. Consumers are becoming aware about the effects of harmful chemicals used in synthetic products in long run. There are the various herbal brands in Indian market since years which are gaining good attention now. New ventures and brands are introduced in herbal personal care products market. In this research paper, research has tried to find out the consumers' awareness on different herbal personal care products brands available in Indian market. The study is done on Mumbai City with sample size of around 90 consumers.

Keywords- Herbal Personal care products, Synthetic products, Harmful chemicals etc.

Introduction- Fast moving consumer good (FMCG) which is the key sector of India has three main sub-sectors – food and beverages occupying almost 19 per cent of the sector, healthcare accounting for 31 per cent and household and personal care occupying the remaining part of 50% (ibef. org) The FMCG is the fourth largest sector of Indian economy. Changing lifestyle, increasing of standard of living, technological advancement, digital payment and easily accessibility of products and services are the key reasons of growth of this sector.

The FMCG sector was valued in 2011 at US\$ 31.6 billion and in 2017- 2018 at US\$ 52.75 billion. The sector is further expected to reach US\$ 220 billion by 2025. This sector is witnessing the high growth rate every year. The revenue in the Cosmetics and Personal care products market was estimated at US\$14,443m in 2018.

The personal-care products industry includes skin care, hair care, oral care and cosmetics. It manufactures and sells like cosmetics, toothpastes, sun screen, razors, shaving cream, deodorant, soaps and other products for bathing, hair care products, skin care products, nail and cuticle care products, and many more products.

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In recent years we can see shift of consumers towards more natural, herbal and organic products when it comes to skin care, hair care, cosmetics and food. In 2016 when Patanjali launched the herbal personal care products in The Indian market that turned to be out the real game changer for Indian personal care product market.

Use of various of herbs for beauty, skin and hair care, food is rooted in our Indian culture. Consumers are becoming aware about the harmful chemicals used in preparation of non-herbal personal care products. Rising income level, social media use, e-commerce is contributing factors to increase of herbal personal care products sales.

Review of Literature

Banu Rekha M., Gokila K. (2015)- The researcher in paper titled "A Study on Consumer awareness, attitude and preference towards herbal cosmetic products with special reference to Coimbatore city" has tried to find the consumer awareness on herbal cosmetics. Factors influencing on herbal products buy has too been studied. The survey is done 50 consumers of Coimbatore city. Income level is the key factor affecting on spending of herbal cosmetics. As herbal products are looked up as natural, safe and chemical free products hence quality is another key factor which considered while buying the herbal products. Another key finding was that use of herbal products is need of time.

Sundari., Murgun (2011) in their studies on "A Study on Factors Influencing Post-Purchase Behaviour of Personal care Products in Chennai City" have tried to find the brand consciousness among women for personal care products. Study was done on almost 500 respondents in Chennai city. It has been studied that factors that effect on purchase decision of personal care products are key factors like price, quality and quantity. After key factory, the other factors which influence the buying decisions are ingredients, the purpose of the product, product brand image and certification of product.

Asiya Faisal Khan, Mohd. Faisal Khan (2013)- Researchers in their paper titled "A Study on the Awareness of Product Ingredients among Women Skin care users in State of Madhya Pradesh" have tried to find the ingredients awareness in skin care products among women users. The sample size is around 250. The findings of the study showed that women users have awareness on presence of ingredients in skin care products. Consumers are most concern on the quality of products. It is most important that manufacturers should invest on research to bring out most natural ingredients to make products safe and effective.

Phillip Kotler (1931)- Author has emphasised that consumers are the base and beginning point for all business activities. So, it is very significant to understand target consumers' needs, expectations. Consumer behavior is a complete study which covers activities of buyers' selection, purchase, consumption and dispose the products. It has shown factors affecting the buyer pre, during and post purchase.

Statement of the Problem- Growth in the demand of herbal products is inducing manufacturers to launch herbal products and increase the focus

and investment on research and development. Indian Herbal personal care products have various brands like herbal brands like Forest Essentials, Biotique, Himalaya Herbals, Blossom Kochhar, VLCC, Dabur, Lotus, Jovees, Kama Ayurveda, Patanjali, Just Herbs, and many more. Even foreign brands have inclined to introduce the natural ingredient products. The economy is witnessing the various new launch and start up in this segment of industry.

The study is with special reference to brands sold by some of popular companies like Dabur Ltd., Patanjali Ayurved Ltd., Himalaya Ltd., Biotique Pvt. Ltd, Lotus Herbal, Mamaearth, Wow Skin Science, Ayur Herbals and more. The study has tried to find the brand awareness across all age groups.

Objectives of the Study-

1. To study the growth of herbal personal care products in India.
2. To analyze consumers' brand awareness of different herbal personal care products in Mumbai City.

Research Methodology- Some specific methods will be taken for collection and analysis of data. These methods include:

Methods of Data Collection-

Primary Data- The primary data is collected from the consumers of the city of Mumbai. Data is collected through structured questionnaire covering the demographic features of consumers and objectives of study.

Secondary Data- Secondary data are those which have been collected by someone else and which already have been passed through statistical process. Secondary data is taken from books on herbalism, chemical used in non-herbal products, product repositioning, internet, newspaper, magazines and companies web sites, research journals and articles published, reports etc.

Population of study- This study is conducted in the Mumbai City, Maharashtra. The sample size will be around 90 consumers using personal care products. Questionnaire includes various demographic variables like age, gender, income groups and marital status. It covers the questions on different brand awareness. Sampling method selected is non-probability sampling based on convenience sampling.

Tools for Data analysis- Percentage method and Chi-square test are used in analysis of data collected.

Statement of Hypothesis-

Hypothesis 1

H0: There is no significant relationship between the gender and brand awareness of herbal personal care products.

H1: There is a significant relationship between the gender and brand awareness of herbal personal care products.

Hypothesis 2

H0: There is no significant relationship between age of consumer and brand awareness of newly launched herbal personal care product in Indian market.

H1: There is a significant relationship between age of consumer and brand awareness of newly launched herbal personal care product in Indian market.

Data Interpretation and Analysis-

1. Out of sample size of 90, number of females was 54 consisting of 60% and male 36 consisting of 40% of sample.
2. Age:

Age	16-25	26-30	31-35	36-40	41-45	46-50	Above 50 years
Number	12	13	4	6	5	15	15
%	35.56%	14.44%	4.44%	6.67%	5.55%	16.67%	16.67%

3. Out of 90 sample size, 5 (5.55%) do not use herbal personal products, 67 (74.45%) use the herbal personal care products and balance 18 (20%) use herbal personal care products sometimes.
4. In sample of 90 consumers, 41 are married, 43 unmarried and remaining 6 are single due to divorce/widow ship.
5. Following findings shows the number and percentage of consumers who are aware about different brands of herbal personal care products in Indian market.

Name of the Brand	Dabur	Patanjali	Himalaya Herbals	Mama earth	Lotus Herbals
No. of consumers	88	90	89	62	65
%	97.78%	100%	98.89%	68.88%	72.22%

Name of the Brand	Wow Skin Science	Biotique	Khadi Naturals	Ayur Herbals	VLCC	Forest Essentials
No. of consumers	48	63	60	54	68	48
%	53.33%	70%	66.67%	60%	75.56%	53.33%

6. Consumers were asked question which was Likert based on how he/she was well aware about different herbal brands. Following are the findings.

I am well aware about different herbal products	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Male	7	16	3	10	0	36
Female	26	17	7	4	0	54

Hypothesis testing- While testing hypothesis 1 that there is not a significant relationship between gender and brand awareness of herbal personal care products, Chi-square test was applied. The data of total number of male and female and data received on Likert scale from strongly agree to strongly disagree was considered. Chi-squared score at degree of freedom of 4 was 12.0220 which is greater than 9.488 at Level of significance of 5%. Therefore, alternative hypothesis failed to reject.

Hence female consumers found to be more aware about various herbal personal care products. For testing the hypothesis 2 that there is not a significant relationship between age of consumer and awareness about newly launched herbal brands in market, Chi-square test was applied. Wow Skin Science and Mamaearth brands are taken into testing purpose as both are recent launched herbal brands in Indian market. The data on different age groups and number of consumer aware on recent launched brands of Wow Skin science and Mamaearth are considered. Following is table showing

brand awareness of Mama earth and Wow Skin Science over the different age groups.

Age groups	Mama earth	Wow skin science	Total
16 – 25	30	16	46
26 – 30	20	10	30
31 – 35	8	9	17
36 – 40	2	3	5
41 – 45	0	5	5
46 – 50	1	3	4
Above 50	1	2	3
Total	62	48	110

The calculated Chi-squared score at degree of freedom of 6 was 12.6088 which is greater than score of 12.592 at Level of significance of 5%. Hence, Alternative hypothesis failed to reject. Younger age group of population are aware about recent launched brands as compared to older age group of consumers.

Findings- Females as compared to males' consumers have more awareness on different herbal products. Females are found to be more sensitive and concerned on skin, hair and oral care for themselves and families. Regarding newly launched products, younger aged group have better updates than older aged group of consumers. The reason is younger aged group of people are more connected with different social media platforms and are better acquainted with knowledge and use of e-commerce.

Conclusion- With rise in demand for herbal personal care products, various new products, ventures and starts up are launched into Indian market. Where there is easy acceptance of natural and chemical free products, it becomes responsibility of manufacturer to take quality at priority level and also to market their product on different social media, Television advertisements etc to create brand awareness across all the age groups.

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Constantly moving, relentlessly seeking, furiously exploring
Paromita Chakrabarti



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Constantly moving, relentlessly seeking, furiously exploring

Padma Bhushan Devaki Jain's *The Brass Notebook: A Memoir* published at age 87, seems to have been waiting to burst forth on the literary scene for decades. The memoir contains so much history, so many facets and such numerous details of a life lived well, lived intensely; it is no surprise that one had to wait this long for her story to be brought to us, her readers. Devaki Jain's life is no ordinary woman's life. Born in 1933 in an upper caste Mysore family of considerable privilege, Jain displayed an indomitable spirit that resisted being shackled to a traditional life of a woman and embraced independence and rebellion to forge her own path in newly independent

India. To put down her life in her own words as an octogenarian reveals how much there was to tell and how much to live. *The Brass Notebook* is an earnest attempt to make sense of what it means to be a woman at the forefront of change both at home and the world; to arrive at an understanding of her own interiority in terms of her personal relationships with people, both common and extraordinary; to reveal a personality: public/political and intimate, with unflinching honesty and undaunting courage.

The Brass Notebook begins with a foreword by Nobel Laureate Amartya Sen who gushes over her memoir and lavishes praise on her brilliance as a student and as a feminist who had deep “insights on the place of women in society, particularly on the reach of inequalities based on gender.” He alludes to the friendship they shared and the vivacity of her intellectual companionship. He also mentions how Devaki Jain’s life was enriched by the extraordinary public figures of prominence she had close contacts with, prominent among them being Oxford intellectuals, writers, feminists, political leaders of great stature such as Nelson Mandela and Desmond Tutu. His Foreword sets the tone for a very vibrant, intellectually rewarding and no-holds barred memoir that splendidly recounts the life of a very remarkable woman.

The Foreword is followed by a very candid Author’s Note in which she gives her reasons for writing the memoir and lets the reader know some details of the structure and narrative that was employed in penning down seven decades of adult life. She mentions how her inspiration of the memoir came from Doris Lessing’s *The Golden Notebook* (1962) and a conversation she had with the writer in 1958 who was at that time working on her pioneering novel. With the publication of *The Brass Notebook*, Devaki Jain proudly affirms her conviction that freedom to be is her most important search and her story with all the contours of a lived life, with all the attendant risks of writing about one’s past as a woman, shall be one more attempt at liberating the soul from the burden of bonds that constrain. She tells us that the title of her memoir *The Brass Notebook* is a reflection of her imperfections and frailties, it reflects her love for the ordinary in the extraordinary, her preference for utility and her desire for earthly, everyday experiences that make us human.

The memoir is divided into seven parts starting with the memories of her childhood from birth to growing up years and ending with a reflection on death and loss, spanning life’s arc in a recollection that is riveting, challenging and beautifully written in a language devoid of archaism, circumlocution and verbosity. Part One: “Where I Come From” has four distinct chapters dividing phases of her early life. Chapter One: “An Extraordinary Man” is an attempt to etch out the character of her father Mandayam Ananthampillai Sreenivasan who comes across as an orthodox Brahmin yet liberated enough to encourage his daughters to study and engage in outdoor activities that was befitting of an administrative officer in colonial India. However, this chapter also traces the deeply patriarchal structure of the family and the stranglehold of traditions governing women’s bodies. Jain is critical of such rituals that operate on the bodies of women (particularly menstruating women) and is candid about the brouhaha around marriage for women who had just reached puberty.

The first part goes into reminiscing about growing up in a very privileged setting, her father’s ministerial association with the State of Mysore in colonial India, convent schooling details,

being chided as a British bootlicker by her classmates, and her gradual awakening of political consciousness amidst the rising anti-colonial movements of 1942. Part Two ends with her awareness of the Indian freedom movement and her induction into the deeply spiritual connections with Gandhian thought, ethos and way of life. In the subsequent parts of her memoir, she charts out her journey into the world. A lot of time is devoted to recounting her days at Oxford, her adventures in Europe and her romantic dalliances. The highlight of this part is the sense of boundless energy and taste of freedom that she experiences and how that sense of being unbounded excites and transforms her. She begins Part Three with a quote from Albert Camus: “The only way to deal with an unfree world is to become so absolutely free that your existence is an act of rebellion”, amply testifying her undying zeal to always put personal freedom, emancipation as a woman, above all else. Her memoir clearly indicates that her life has been a quest for both freedom and emancipation, a search for exciting encounters and an exploration of love and longing that went far beyond the social context of her time and age.

Some of the most interesting chapters of her memoir are those in which she bares her soul and with unflinching honesty talks about her love life, her romantic affairs, her physical relationships. Her deep love for her husband Lakshmi Jain constitutes some of the most moving passages of the memoir. Their inter-caste marriage after elopement, their struggles as a newly married couple also battling family, caste and class prejudices are recorded vividly. Her husband, another important political figure and a Gandhian social activist, is described as a public personality who contributed immensely towards community upliftment with his work; yet there are flashes of resentment that Devaki reveals when she is left at home after childbirth and feels her life curtailed by domestic responsibilities. However, the readers sense that theirs is a rare match; a meeting of kindred souls, a meeting of minds. Here is an explosive, passionate partnership, based on friendship and tied together with similar political and social interests.

In Part Four of her memoir Devaki Jain exposes the dark, ugly, hidden secrets that traumatised her as a child and as an adult woman in the world of predators. She reveals two specific episodes of sexual assault one by a family member when she was ten years old and the other by a renowned Swedish economist at Oxford where she was working as his research assistant. Incidents of sexual assault, as she confesses left her humiliated, destroying her self-worth and confidence for a long time. She mentions how with no MeToo campaign at that time, the feeling of isolation was real; how freedom and self-reliance came with some amount of risk for a woman who wanted to live life on her own terms.

Another significant aspect of her memoir is her incredibly fortunate linkages with stalwarts and great personalities and intellectual giants of our times. Her time as an academician and as a feminist economist also makes for very interesting reading. Her work on gender economics put the spotlight on women’s struggle in independent India for a more egalitarian, more humane and more just society. Breaking stereotypes and challenging conventions Devaki Jain became one of the first women economists to understand poverty and women’s work and contributed greatly to a deeper understanding of gender in the context of livelihood, dispossession and exploitation of women in modern India.

This memoir is an important work not simply because it sheds intimate light on a public figure

who founded several important institutions such as the Development Alternatives for Women for a New Era (DAWN), but also because it reveals in depth the extent of Devaki Jain's engagement with and contribution towards social and economic justice for women of her country. Although her work many times did not translate into real policy for change as she sadly remembers in spite of being on several policy making boards both in India and abroad, there is a sense of personal achievement that is unmistakable. In one of her chapters "Upturning Hierarchies" she rues the fact that the global North and South divide was a real threat to understanding and progress and later in the chapter "Claiming Histories, Claiming the South" she enthuses about and celebrates her connections with the countries in Global South and Cuba. There are important geo-political insights to be gained from these chapters in Part Six which detail her travel to various corners of the decolonized world.

Constantly moving, relentlessly seeking, furiously exploring, Devaki Jain's life is a story of not just a woman coming into her own as a feminist and developmental activist but also a story of a nation making its way into the world as a socialist, secular, democratic republic. This is a memoir that will interest all those who want to know of the early stages of feminist history, women's contribution in the field of economics and social justice after India's independence, and of the initial phases of India's struggle to understand inequality and discrimination. *The Brass Notebook* shall no doubt catch the attention of readers who are interested in women's personal stories and would be an inspiring read for those who want to know more about a pioneering gender and social activist of modern India.

♣♣♣END♣♣♣



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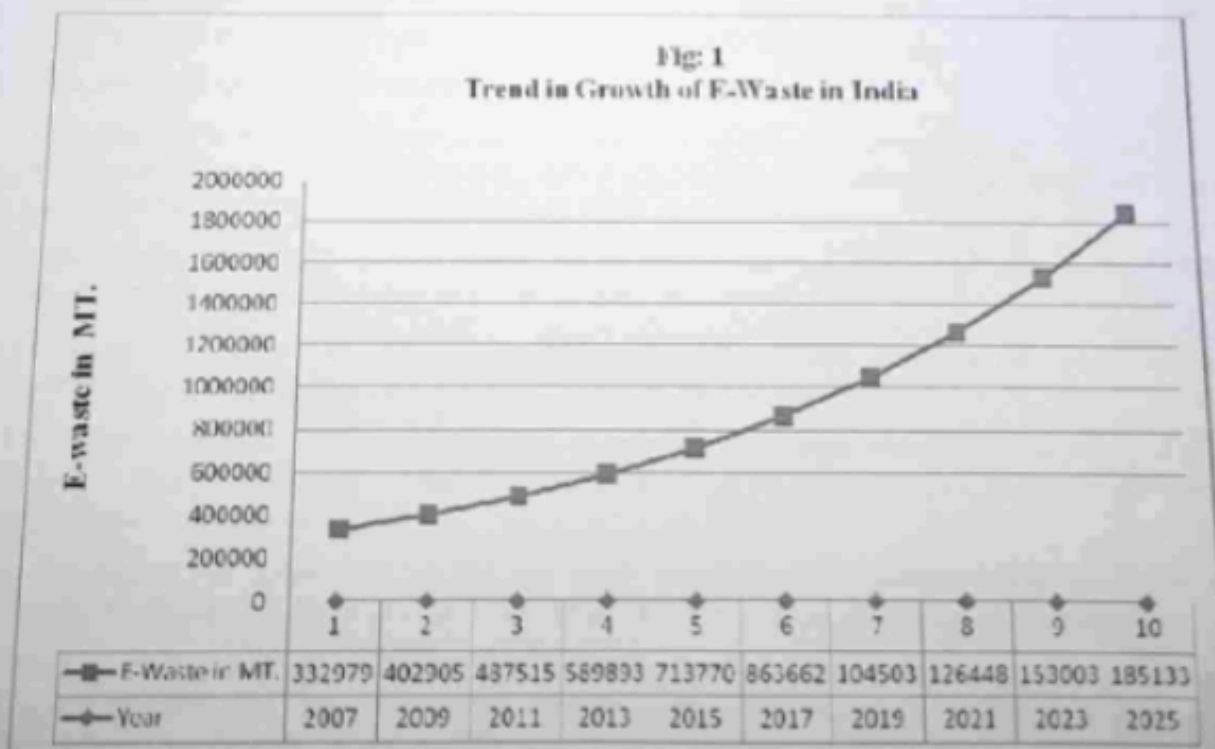
ABSTRACT

Computers have become an integral part of our lives. Technological revolution has brought about a tremendous change in the way we live; the use of electronic items has increased, resulting in carbon emission, global warming, and climate change. These environmental issues have to be solved. To create a better environment, we need to move towards Green computing. The goals of green computing are to reduce the use of hazardous materials, maximize energy efficiency during the product's lifetime and promote recyclability or biodegradability of defunct products and electronic waste. This paper highlights the impact of green computing on our environment.

Keywords: green computing, technology, environment.

INTRODUCTION:

The impact of Technological revolution in the society is more than Agricultural and Industrial Revolution. Technology plays an important role in our lives. The advent of Internet and the World Wide Web has turned the world into a global village. Technological revolution has brought about changes in every field be it education, health services, transportation, communication system as well as agriculture. In each and every field we use computers so that we can complete our work fast and efficiently. The requirement of computers, laptops are increasing day by day. As long as we are using computers they require electricity to run, not only that they generate heat which requires cooling mechanisms which too requires electricity not only that it is responsible for the production of a relevant portion of overall CO₂ emission, as well as greenhouse gases which are thus released into our atmosphere. We live in a tech savvy environment. More and more products are coming into the market. As newer products come into the market people buy these new products and throw the old products. Because of the rapid growth of technology, the problem that we face today is the disposability of e-waste, some part of these products are not recyclable if left they emit harmful radioactive rays which results in major environmental health hazards. These affect the nature, its greenery, and other species. Here the need of green computing comes into the scenario. Green computing is the utmost requirement to protect our environment and save energy along with operational expenses in today's increasingly competitive world. The following graph shows the trend in E-waste growth in India. The E-waste is clearly shows an increasing trend.



Source: Researchgate.net

LITERATURE REVIEW:

Companies are manufacturing computer devices are more efficient, fast and accurate but they are at the same time consuming more energy and having toxic, dangerous gases and chemicals such as lead, mercury, cadmium etc. which results in increase in pollution rapidly (Farzana Parveen et al., 2015). Green computing is the use of environmentally responsible use of computers and other resources. Which include the implementation of energy-efficient CPUs, servers and other Peripheral devices as well as reduced resource consumption and proper disposal of e-waste

(Chowdhury S N et al., 2015). Going green is not only a fashion statement, it is a real movement that begun back in 1992 with "The Energy Star program" (Brandrick, 2009). Green computing should address environmental sustainability primarily by focusing on design, manufacture, use and disposal of computer and other related devices in an eco-friendly way (Murugesan, San. 2008).

GREEN COMPUTING:

Green computing is an effective study in which disposing, recycling and manufacturing of computers and electronic devices is taken into consideration. The goal of green computing is to lower down the use of hazardous materials, maximize energy efficiency and popularize biodegradability or recyclability of out-dated products and factory waste.

Green computing is the practice of using computing resources efficiently. Modern IT systems rely upon a complicated mix of people, networks, and hardware. A green computing initiative must be systematic in nature and address increasingly sophisticated problems. The main topic of concern in green technology is to reduce the environmental impact of industrial processes. Basically, the efficient use of computers and computing is what green computing is all about. Social responsibility, economic viability and the impact on the environment is also considered. The massive production of computers worldwide has a direct impact on environmental issues, and scientists are conducting numerous studies to reduce the negative impact of computing technology on our natural resources. In Industry initiatives in India one is the Climate Savers Computing Initiative (CSCI) is an effort to reduce the electric power consumption of PCs in active and inactive mode. The CSCI provides a catalog of green products from its member organizations and information for reducing PC power consumption. It was started on 2007-06-12.

SIMPLE STEPS TO GO GREEN:

- Simple initiative like setting the power options on one's computer or phones to switch to sleep mode when it's not active. Setting your PC to stand-by mode and turning off the monitor when you're going to be away from your PC for more than a few minutes, will save a huge amount of energy.
- Producers/ manufactures should take the feedback of the consumer and address their needs by manufacturing products which include natural or eco-friendly materials.
- As a consumer, one has to demand more eco-friendly products.
- Virtualization is one of the most effective tools for cost-effective, greener-energy efficient computing where each server is divided into multiple virtual machines that run different applications and in this way companies can increase their server utilization rates.
- More-efficient processors are also critical energy-saving elements, companies such as Intel, Advanced Micro Devices, and Sun Microsystems have adopted this concept.
- Flat panel monitors use less energy than traditional CRT monitors. Avoiding the use of screen savers contributes to energy savings by allowing a monitor to enter in stand-by mode.
- Use of toxic materials like lead can be replaced by silver and copper which make recycling of computers (which is expensive and time consuming at present) easier as we can recycle computer parts separately with an option of reuse or resale.
- A central point of research is to test and apply alternative nonhazardous materials in the products manufacturing process. The idea is to make computers from beginning to end a green product.
- Manufacturer has to produce electronic components, laptops, Desktops and associated components with energy -efficient and environmentally friendly components which will have minimal impact on environment. Restoration and reuse of Old devices and care has to take for proper recycling of old devices and other electronic parts.

- One of the VIA Technologies ideas is to reduce the "carbon footprint" of users — the amount of greenhouse gases produced, measured in units of carbon dioxide (CO₂). Greenhouse gases naturally blanket the Earth and are responsible for its stable temperature. An increase in the concentration of the main greenhouse gases — carbon dioxide, methane, nitrous oxide, and fluorocarbons — is believed to be responsible for Earth's increasing temperature, which could lead to severe floods and droughts, rising sea levels, and other environmental effects, affecting both life and the world's economy

COMPANIES IMPLEMENTING GREEN TECHNOLOGY:

It is important to study about what kind of energy gains and operational gains one can achieve. Hence, analysis of the gap between what we have today and what we'll have to do is essential in order to achieve the benefits of green computing. Currently we are in that stage. Computers are the modern world's most sought-after tool. The features of a green computer of tomorrow are: it should be efficient, recyclable and self-powering. Green computers will be one of the major contributions, which will break down the 'digital divide' - the electronic gulf that separates the information rich from the information poor.

The following major companies are taking initiatives in this direction:

- HP - Programs to reduce GHG and Toxic wastes in their products and supply chains.
- Dell - Carbon Neutral, Headquarters uses 100% Renewable energy, computer products use 25% less power (by 2010).
- Intel - focus is on increasing speed while reducing energy usage in their products.
- IBM - Has had formal Environmental policies since 1971, and requires all employees to have environmental awareness training.
- Cisco Systems - 80% of their European companies use renewable energy, while 32% of their US companies do.
- Sun Microsystems - Requires environment management accreditation from suppliers and posts information about their energy uses and greenhouse consumption on their website.
- Adobe Systems - Offset all carbon emissions for their Northern California sites (42% of their total carbon emissions) and are redesigning their software packages to be more environmentally friendly.
- AMD - Reducing their GHG and PFC emissions and debuting halogen free products (with lead free products coming next).
- Microsoft - New design of Windows uses less energy. Also includes the use of virtualization technologies.
- AutoDesk - Makes software products incorporating minimal waste, reduced energy use, and green building design.

CONCLUSION:

The time has come to think about the efficient use of the computer along with its speed and memory capacity. It is not easy to be green, but it's possible. It requires some planning and investment like using gadgets for a longer period of time, if it is necessary then buy a new one. Companies can benefit by taking these challenges as strategic opportunities. The IT sector and its users must develop a positive attitude toward addressing environmental concerns and adopt forward-looking, green-friendly policies and practices.

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TO STUDY THE AWARENESS AND ADOPTION OF VIRTUAL INTERNSHIP IN MUMBAI

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Preeti Salecha**

ABSTRACT

With the rise in the digital technology, Virtual Internship have become an important system to bridge the gap between students, companies and academics especially in this lockdown period caused due to COVID-19 pandemic attack affected all over the world. Virtual internship is a platform where the participants also called interns are allowed to gain work experiences and explore to various opportunity to acquire professional skill by working on project online. It's an attempt to create a connection between industry and academic during the learning process of students. It also aims to promote globalization and help the students and employees worldwide to easily access each other. The purpose of this paper is to discuss the emergence of adoption of this virtual internship, its motivational factor and possible pitfalls that may be faced. It also focuses on awareness and adoption of virtual internship among the students in this era.

Keywords: Digital technology, Virtual Internship, COVID-19, students

INTRODUCTION

As the job market has become more competitive in today economic situation due to COVID 19, attending virtual internships is more important than ever, as they help students to take the first steps in their career and explore themselves in a challenging economic environment. Unlike the conventional internship, students called interns in virtual internships work remotely from a location of their choosing, communicating with professionals through E-Commerce. It provides various opportunities to the students to develop both technical and soft skills. As the popularity of online education

continues to increase, both universities and employers have turned to technology to look for more effective and modern means of improving the internship process by way of virtual Internships.

VIRTUAL INTERNSHIP

Due to technological upgradation it's no surprise to hear that many employees are working remotely from home instead of the office. A virtual internship is just like that. These internships allow participants or interns, to gains experience while working in a remote professional setting and is not physically present at the job location.

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Generally, virtual internships are taken by students and graduates to help them gain and develop their skills in the career sector they want to pursue. It's consider as a great opportunity to explore an industry or role that you might not be 100% committed to yet or aware about. It allows them to get the first-hand experience with companies on a global scale while working from the comfort of their desired location.

A rise has been reported in virtual internships in lockdown period all over India due to COVID-19 pandemic attack. The most common virtual internships are available in the stream such as software development, information technology, social media, marketing, research, journalism, writing, media, video creation and editing, pre- and post-event planning, human resources, search engine optimization and marketing, graphic design, political internships, non-profits and government internships, public relations internships, engineering internships and many more.

Virtual internship represents as a great opportunity for students as well as employers.

BENEFITS FOR EMPLOYERS

- ❖ Completion of designated projects or "deliverables" for employer
- ❖ stimulate the Interest in a particular company or industry among future generations of employees
- ❖ Enlargement of a potential candidates from qualified applicants.
- ❖ Space and equipment saving.
- ❖ Eliminate the number of unproductive employees and paid hours of work
- ❖ Improvement in corporate image

- ❖ An opportunity to collect new outlook and project from interns regarding organizational branding, procedure and more

BENEFITS FOR STUDENTS

- ❖ Convenience
- ❖ Valuable professional experience
- ❖ Global exposure
- ❖ Opportunity to work in Virtual manner which offers flexibility
- ❖ Gain experience and can understand how their chosen field work
- ❖ Networking with professional people
- ❖ Learning opportunities
- ❖ Certificate of experience
- ❖ Monetary rewards

CHALLENGES OF VIRTUAL INTERNSHIP

Depending on your stream of study or the type of career students hope to establish, a virtual internship might not be a good fit. In the humanities and social sciences, for example, interacting face-to-face is often a defining feature of the job which may not be possible in Virtual Internship. While not universally true, many customer oriented skills can be difficult to build up if you spend most of your time communicating with others through E-commerce such as email or video chat resulting into communication problems ad misunderstanding.

Similarly, working remotely can be challenging if and when you need assistance with a project. In traditional way of interns are surrounded by professionals who can provide guidance and support at a moment's notice which may not be possible resulting into difficulty level in transferring knowledge via virtual. At a same

time, virtual interns would likely to miss out on gaining first-hand experience with the pace and environment of a company or organization. Lack of social interaction, Lack of physical access (internet, equipment, etc.) and different time zones may also result into challenging.

Finally, these positions require considerable organizational skills and the ability to self-motivate. A person who is not comfortable working self-sufficiently, or who just prefers working under direct supervision or group in that case such type of virtual internship might not be beneficial and it may possibly be counter-productive. However, this aspect can also work in your favor if one of your objectives is to develop the skills necessary to work independently. As compare to the formal employees the expectation of an intern will be somewhat less, which can allow for the space to make mistakes and build the skills to self-direct within moderation.

NEED FOR THE STUDY

Doing internships is no longer an option but a necessity for college students. A large number of universities and colleges across India have made internships a part of their curriculum resulting into providing more opportunities for the students to develop their soft skills and gain experience. However, the internship scenario in India is highly inclined towards that of traditional internship options. College students in India were unwilling to accept the idea of virtual internships. But, if considered at a global level virtual internships have gained a lot of popularity. A probability to work with international company and gain global exposure is an attractive opportunity for many students to set their career. Also due to COVID-19 pandemic attack which resulted into lock down all over India currently Virtual Internships

gained a lot encouragement among college students.

OBJECTIVES OF THE STUDY

1. To understand the concept of virtual Internship
2. To study the motivational factors and challenges in Virtual Internship.
3. To understand the awareness level of virtual internship among the students.
4. To evaluate the adoption of Virtual internship among the students.

REVIEW OF LITERATURE

(Vriens, Mariet & Op de Beeck, Ilse & Gruyter, Johannes & Petegem, Wim, 2010) in their paper "Virtual Placements: improving the international work experience of students." Described about the global exposure provided to students through virtual internship as compared to the movement of students through traditional form of physical mobility. Virtual Internship prove to be more beneficial. The paper also explained the various opportunities and challenges in implementation of Virtual Internship.

(Hasan Ali, Ahsan M. Sayad, 2013) in their research paper "Increasing Virtual Education Effectiveness by Quantifying Student Learning Trajectories and Virtual Internships" have explained about the importance of virtual internship in development of a student learning. It helps to formulate and understand practices to be inculcated by teachers and institution for promotion of virtual University programs.

(Cortese, Marta & Alessandro, Elia & Medeiros, Ana, 2015) in their research paper "Using Virtual Internships as an innovative learning technique" have discussed about the importance of Virtual Internship for students. It also describes as a new learning form in

European Engineering Education (EEE), Board of European Students of Technology (BEST) and the role they play in development of Virtual internships in Europe.

SIGNIFICANCE OF THE STUDY

The study will result to be of a great help to the employer of various company in the Mumbai city. The result of the study will reveal the importance, awareness level and adoption of Virtual internship amongst the student, colleges and various academic institution in Mumbai.

RESEARCH METHODOLOGY

The study aimed to know the awareness and adoption level of students of Mumbai city and hence the research design of the study is descriptive in nature.

DATA COLLECTION

The first hand data are collected directly from the respondents with the help of

DATA ANALYSIS AND INTERPRETATION

questionnaire as an instrument for the study. The secondary data were collected from sources such as various journals, research papers, newsletters and websites.

Population: Students of Mumbai city.

Sampling Technique: The researchers have used convenience sampling and selected 97 respondents from Mumbai city.

RESEARCH LIMITATIONS

Mumbai is one of the most significant city of the country and lakhs of student's study in Mumbai. The study limits to 97 samples selected from the city, however it cannot be considered as a complete representation of Mumbai.

However, the objective of the survey was to verify the student's awareness and adoption of Virtual Internship with regards to digital upgradation.

Are you aware about Virtual Internship?
97 responses

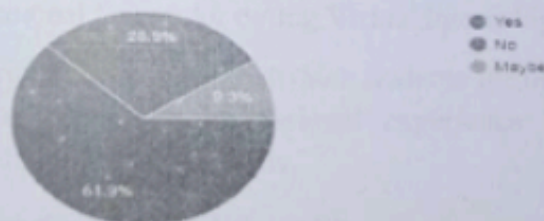


Chart 1.1 Awareness about Virtual internship among students.

The above chart depicts that 61.9% of the sample are aware about the virtual internship while 28.9% are completely unaware about it.

Are you currently doing any Virtual Internship?

97 responses

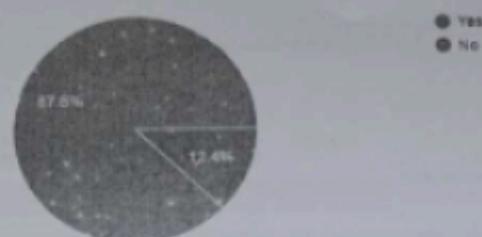


Chart 1.2 Adoption of virtual Internship among students

The above chart depicts that 12.4% of the sample are doing virtual internship while 87.6% are hesitant in adopting it.

What motivates you to opt for virtual internship?

87 responses

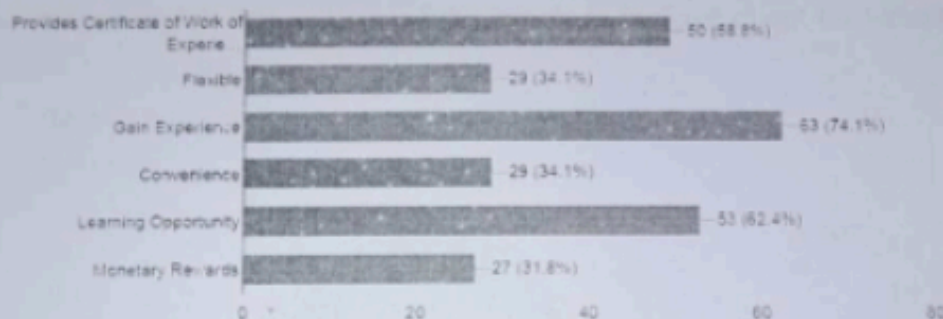


Chart 1.3 Motivational factors for opting Virtual internship

The above chart represents various factors that motivates students for opting virtual internship whereby the maximum weightage is driven by professional experience followed by learning opportunities, certification, flexibility and monetary rewards.

If no, what are the reasons for not doing any Virtual Internship?

51 responses

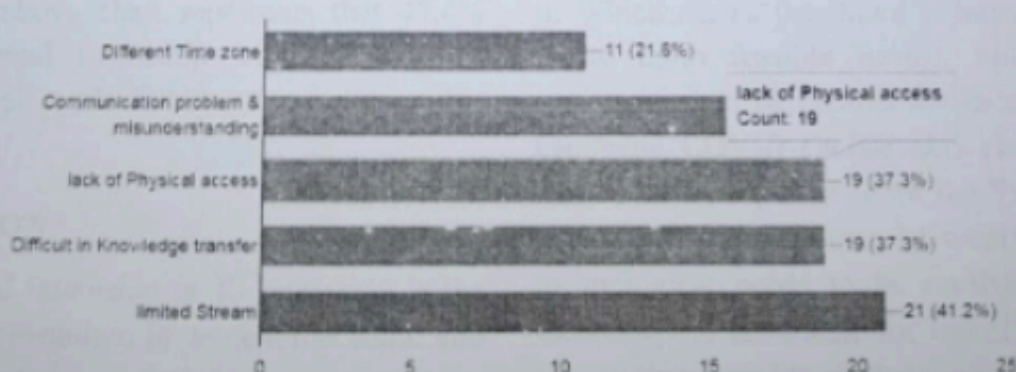


Chart 1.4 Challenges in Virtual Internship

The above chart depicts that the major reasons for unadapting of Virtual Internship are lack of limited field, inadequate knowledge transfer, difficulties in communication leading to misunderstanding and inappropriate time zone.

If no, what are the reasons for not doing any Virtual Internship?

51 responses

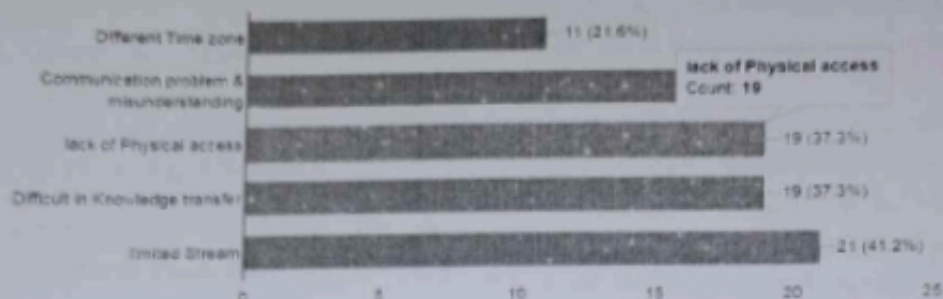


Chart 1.5 Future preference of students for Virtual Internship

The above chart depicts that majority of the sample is inclined to opt for virtual internship in future.

Does your college placement cell provide any Virtual Internship?

97 responses



Chart 1.6 Adoption of virtual internship among colleges.

The above chart represents that 47.4% provides virtual internship with the help of placements cell while 52.6% are yet to adopt this mechanism.

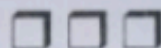
CONCLUSION

Virtual internship or E- internship is the new form of revolution in work force. More and more students are getting aware to these phenomena. However, only 12.8% have adopted

it. Which shows that there is immense need to create more feasible means, more favorable environment to be created for its adoption. The pandemic COVID-19 has also created shift in mind set of people to adopt the Virtual form in place of traditional form of working. However technological needs to be resolved to make a technological advantage for India. The data also proves that majority of them would prefer to do virtual internship in future changing and boosting Indian landscape of "Digital India".

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Research misconduct: types and measures to overcome

Shweta Singh

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Abstract: - Ethics is pervasive and applicable in all spheres of our lives. Ethics in research is much talked topic these days. Researcher in this paper has tried to cover an overview on the types of ethical misconduct, reasons behind it and few measures to overcome the unethical practices. This research is based on the secondary data.

Keywords: - Authority, fabrication, falsification, plagiarism, peer reviewed, research frauds

Introduction: Ethics has been derived from the Latin term "Ethicus" and Greek word "Ethikos" which are guidelines for a right conduct in a particular field. In simple terms ethics distinguish between right and wrong or it is a norm that distinguishes acceptable to non - acceptable. Foundation of ethics is laid down in individuals at home, school, educational and religious institutions at their early age. Ethics is followed in various disciplines, institutions and at the Organizational level. In the Organization, ethics is followed in marketing, finance, human resource department and other functional departments. Researcher should follow certain ethical principles which should be laid down by the institution, like at any given time participants should not be harmed in any way be it physically, psychologically, financially. By all means the anonymity and confidentiality of the participant should be maintained. Researcher should be sensitive towards the participants and should take care of their likes and dislikes. Whenever there is a requirement to share the information, researcher should follow the principle of consent from the participant. Under no grounds researcher should take decision to share the information of participants unless permitted. Principle of providing right to withdraw where participants have full right to withdraw from the research process at any given time. In addition to these principle of honesty, transparency, openness, respect to privacy, intellectual property, social responsibility and legality should be maintained to adhere the research ethics. Since research in every field is gaining so much of relevance and number of researchers are increasing relatively year by year, few repercussions have been seen as a result of which has caused researchers to follow certain unethical practices intentionally and un-intentionally leading to research misconduct. Research misconduct can be defined as "It is the process of identifying and reporting unethical or unsound research"

Research misconduct is done intentionally by researchers due to many reasons. One of the primary reasons amongst all for misconduct is that researchers get tempted by the grant funded by the public authorities. Other reasons for research misconduct are that most of the institutions have become research oriented; there are lot of incentives offered by the institutes to the researchers, institutional pressure, career ambitions and competitive environment. There is a rise in the research misconduct also due to the improvement of technology and easily availability and accessibility of the content.

Consequences faced due to unethical misconduct done intentionally or unintentionally are the same. It affects the reputation of the researcher, reviewer, author, and publisher and holistically it tarnishes the brand image of the institution. Hence, researcher intends to cover this holistic picture by reviewing articles, research papers, journals and books on ethics in research and have collated few most commonly followed unfair practices and have also given suggestions and measures to overcome the same. It has been researched that earlier there were more research problems which had scientific errors but now since the importance

of relevance has increased and it has become mandatory in most of the institutions, more unfair practices has been noticed and reported due to which there no real or pure research is seen these days.

Unfair ethical practices in research

Authorship: - This is a kind of research misconduct when it is not decided that whose name should come in as an author and co – author, this comes as an issue since many research papers are written under collaboration. It is a misconduct when people names are put even if they have done a very little contribution towards the research. It is unintentional, when there are more authors and the names are written in the alphabetical order so researcher/person's name written at first automatically is considered as the first author. At time it is observed that in the research paper when the author has not made a significant contribution but still his / her name is put to add up on the publication list. This terminology in authorship is called as gift author. It is expected that same would be done by others for the author in their publication.

Plagiarism: - "is the reproduction or paraphrasing, without acknowledgement, from public or private (ie: unpublished) material (including material downloaded from the internet) attributable to, or which is the intellectual property of, another including the work of students." Plagiarism is another type of research misconduct which is to steal the idea or writing of others and not putting the acknowledgement. At times plagiarism comes unintentional when the researcher is not able to provide the source or submit it by claiming its work. Alternatively, plagiarism is reported when the researcher has copied word by word of the author's work without acknowledging the original author. Very common type of misconduct in plagiarism is patch writing, when researcher tends to replace only few words with its synonyms and keep rest of the sentence as it is.

Falsification and Fabrication:

"Falsification is the changing or omission of research results (data) to support claims, hypotheses, other data, etc." It is done when the real answers received from the respondents are tempered.

Fabrication is the construction and/or addition of data, observations, or characterizations that never occurred in the gathering of data or running of experiments. Research misconduct is done when imaginary respondents are created in a survey

Peer reviewed:- is when authors submit their articles and it is reviewed by the experts and journal editors. The misconduct could take place when experts have their own known people whose papers have come for the review to them and they would be giving more weight age to the known ones

Resubmission: - At times it is seen that manuscript is resubmitted or few of the researchers make minor changes and re- submit it that counts to unethical research ethics

Data Management: - Errors or unethical practices are followed in data collection when data is not recorded properly and there is no authenticity that data would not be leaked or shared or retained. Every institution has formulated certain ethical norms so the researchers do not flout the rules of ethics in research. Ethical norms helps promoting aim of research which explains that no unfair practices (falsification, fabrication, plagiarism, data miss management, resubmission) should be followed. Ethical norms promote the culture of

collaboration across various institutions. Ethical norms followed by the institutions have public support i.e Ethical norms at any given time monitors dos and don'ts of the researcher. Ethical norms serve research process to be seamless. Unethical practices are called as research frauds. Research fraud is reported as when data is not really collected or false report has been submitted. We can call it as a scientific misconduct also when researcher distorts the data and plagiarizes by claiming it as its own work.

There is ethical concern working with the quantitative and qualitative data both.

Ethical concern working with the qualitative data is that it very difficult to maintain the objectivity of the research, data collection is time consuming and lot of chances of biased can influence. Ethical concern working with quantitative data is that it is difficult to control the environment researcher gets a very limited answers since most of the questions are close ended. Researcher at the start has mentioned the unethical research misconduct types and now would like to present certain ways to overcome the unethical misconduct in the research in the terms mentioned above:

Authority:- To avoid authorship misconduct, it is very essential to decide the authority of the research. Discussion should start on the entitlement, when there are more authors for a publication then authorship agreement needs to be signed before hand. In case the name of the person reflects in the journal unwilling, he / she can appeal to the owner of the journal to withdraw the name of the person from the paper. Authors are asked to mention the amount of content contribution they have given to the paper which gets easier to authorize as main author or co-author. Each person who is named as author has to be part in the research and writing both and should be able to take complete responsibility of the contents mentioned in the research.

In the research, people should participate voluntary and should not be forced to participate. Researcher should only go ahead with the research if participants give their consent. Participants should be informed about both the benefits and risks involved in being the part of research.

Plagiarism:- To avoid plagiarism, researcher must write the original source If any given time he or she has taken it as a reference. Acknowledgement should be given to the author. Use quotation marks for some other work, proper citation should be mentioned if quotes are used. Content should be read properly and paraphrased in researchers own language. Ideally researcher at the first should read the entire article and then should phrase it in its own language rather than conversion of each single line which does not puts down the risk of plagiarism.

Peer reviewed, the authorities / reviewers should not be aware about the name of the researchers. Editors should rely on the decision of the reviewers. Foot notes should be written and the source should be mentioned. Some publishers in order to correct the plagiarism ask the authors to only write the affected text in their own language.

Data management is a very essential so few things should be clear like: who would be collecting the data, how the data would be protected and how the intellectual property rights will be maintained. Research data should be well stored for at least 3 years

Resubmission:- Manuscript should only be published in the single publication. Resubmission should be prohibited

Peer review: To maintain the ethical research, reviewer should not know about the author details whom they are reviewing. At any point of time no person involved in this process should disclose the information mentioned in the journal.

Measures: - Institutional Review Board (IRB) is a panel of experts that take care that the ethical issues of the researcher, organization and institutions are protected. Every researcher should present the research plan in front of the research review committee. The role of the review committee is to analyze the research design, sample size, methods of data collection and to ensure that the ethical standards are met. Sample groups should be diverse in quantitative methodology so it helps in generalizing. There are many free plagiarism detection software to name a few are: plagiarism checker, viper, quetext etc. Since few researchers are funded by the public institutions and public money funds are involved, the agencies in order to maintain high ethical standards in research can take the researchers to the court for flouting any norms or principles of research ethics. Also in few cases it is seen that the researcher's doctorate title is cancelled due to unfair research practices.

Suggestions: - Given the importance of ethics for the conduct of research, it should come as no surprise that many different professional associations, government agencies, and universities have adopted specific codes, rules, and policies relating to research ethics. Researcher after reviewing different journals and articles feels that certain board on ethics definitely would take adequate measures to manage ethics, at the same time institutions should provide training in ethics which would surely reduce ethical dilemma or provide guidelines to follow ethical practices. A course on ethics should be introduced as a core subject in the institutions and students should be mandatorily made to attend. To make it more acceptable additional credit should be granted to the researcher for the completion of the course.

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Accelerating digitalization during lockdown : challenges and opportunities

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Abstract: COVID - 19 has changed the lives of each and every individual across the world. Due to increase in the cases, lockdown was initiated and due to which businesses and economy have shrieked majorly in the past few months. Extreme challenges and financial crises are faced by the businesses and individuals during this pandemic. Many Organizations had to re look and rework on their operational structure and processes and are further required to rethink on their business models to meet the volatile and unpredictable situation. During this unprecedented time, technology is playing key role in the Business continuity planning and operations. Working remotely has become the new normal. This article majorly covers the current challenges faced by the businesses and explains how digitalization can convert these challenges into opportunities.

Key words: Digitalization, Business Continuity Planning, The New Normal

Introduction: - It's been really difficult to manage the situation the way positive cases of COVID- 19 are spiking at an alarming rate in India and other parts of world. To control this pandemic India's Prime Minister Mr. Narendra Modi installed lockdown from March 22, 2020. In response to this, Organizations have moved to remote working methodologies and it has become the New Normal. The sooner they embrace these changes the better they will survive these times and come out successfully. Digital platforms are helping managers to track the performances of the employees and enable seamless collaboration and business continuity during this time.

Challenges in Education field:-Few challenges students are facing is to strike a balance of life physically and mentally Work from home has its own challenges, There are times when an important office meeting is lined up and at the same time employee has to go to the grocery shop as during lock down the shops are open only for limited hours. It has not only impacted the employees but their family members too. Children had started their fresh sessions on virtual modes. Not all the family members would have dedicated laptops or mobile phones at their disposal and have to juggle between the gadgets. Kids lecture timings are same as their parents important meeting hours, it gets difficult for parents to assist for online classes especially small kids in case they need any help for getting connected. The middle - upper class groups can manage well with their WI-FI and data connections but the major difficulty comes for lower classes. Even they have children going to school but due to this urgent lockdown announced these kids are suffering as they would not have a smart phone and other connecting devices. Recently, a young girl child in Kerala of Std IX committed suicide because her parents could not afford smart phone and she had to miss her school lectures. Irrespective to connecting or taking lectures via online classes, kids screen time has increased. This is one of the biggest inevitable challenge as schools do not want the kids to suffer so they have extensively started conducting classes and that has adversely impacted to more eye strain and mental anxiety. Since kids earlier have never been so much exposed to online classes running 6 to 7 hours per day. It's taking a toll on their mental health. Due to long screen time kids get blank and are not too clear what is been taught to them. New York times have reported that they have move 1,800 public

schools online. Out of which 114,000 children live in houses which does not have a provision of internet facilities. According to Pew's internet and broadband fact sheet, 1 out of 10 American does not have an internet connection. According to the surveys done recently, teachers are facing major burn outs due to the sudden pressure and requirement of taking lecture online and at the same time managing house chores.

Challenges in Retail:- Due to lockdown and better digital technologies the manufacturer has started delivering the products directly to the consumers and that has created problem for the intermediaries.

Challenges to the farmers:- Lockdown has broken the supply chain where crops are cultivated but are not reaching to the required destinations. Crops are getting destroyed and not utilized.

Challenges in real estate:- Due to COVID the requirements and specifications of the customers are changing. Properties will have to be promoted digitally which will not give comfort to the buyers.

Challenges in tourism:- Zero tourism means zero income. Due to COVID outbreak the travel and tourism business has come to halt.

Challenges faced by Banks, IT and ITES most of the client requirement was that 50 % employees had to go to the office rather than 33% (percentage as per the Government notification). Since digitalization is still evolving there are few departments which cannot work from home as data could be insecured or hacked easily through home network.

Challenges to the restaurants and hotels : From June 8, restaurants and hotels were allowed to open however the response is not good due to 9 pm curfew. Due to low customer footfall and high electricity costs, rents and staff wages 20-30 percent of restaurants and hotels are closing again.

Most of the organization were not ready for remote working and had to face many challenges of operation. During lock down Organization faced one of the major challenges like to arrange laptops, smart phones and functional servers at the nth hour. Not all the offices are affected due to lock down, offices which had embraced digitalization on time have been seamlessly operating their business. But majority of them were in their process of digitalization and were not geared to operate during these exigencies. Organizations are not fully prepared for the Business Continuity Plan (BCP). Employees are been laid off in masses, there are major pay and bonus cuts. Our Prime Minister Shri. Narendra Modi had asked the Organization not to lay off or cut salaries of the employees. But unfortunately most of the Organization are not able to follow this due to loss in their operating costs. Uber laid off 3,700 employees over the Zoom call in order to reduce their operating costs. Other organizations to name few Swiggy, Udaan, OYO, Landmark group and many other retail institutions have followed the same. Major Challenges faced at home for the employees is for few Gen X and Baby Boomers since they had not been using digital tools and always had office routine Metro cities where houses are small it could be difficult for the employees to have a assigned place where they could work effectively.

Challenges in connectivity itself : - Giants like Google, Cisco, Wipro have their tools but other than that there are few private vendors who have collaboration tools to offer.

Zoom app is continuously in scanner during the lock down due to certain security issues. Employees working in essential service like Banks, Manufacturing Plants, Retail Chains have to step out in the market and are exposed to high risk. This is one of the biggest challenge faced by the essential services employers.

Reengineering the office: Traditional Organizations which had never thought of moving digitally have no choice left but to embrace digitalization. It has paid premium to the Organization which were already on their move on the digital platforms.

Converting challenges to opportunities through digitalization

Vistara CHRO mentioned that they are concerned about the livelihood of their employees and want to preserve their jobs. Employers who have been able to retain the jobs of their employees and have successfully taken the well being of the employees will be later look up to having loyal and dedicated employees. Organization collaborate through various modes like teams, hangouts and now Government has come up with the collaboration tool named "Namaste" to replace Chinese digital tools. One of the Software Organization to keep the staff engaged and their morale high has taken an initiative like CHAI Pe CHARCHA where employees connect virtually over a cup of tea in the evening similarly they used to connect in the evening when they were in office. Organizations are arranging regular webinars to up skill the employees, regular yoga, dance and meditation sessions are organized to reduce the anxiety and stress levels of the employees Companies are coming up with initiatives like virtual coffee sessions, DJ nights, musical evening, online tambola etc.

Microsoft has a dedicated 24/7 COVID-19 Medical Advisory Helpline for their employees and their families. This helpline can be used as a virtually for consulting with medical practitioner to discuss on the COVID symptoms if there are any and get medical guidance. Microsoft Cares takes care of the emotional and mental well being of the employees from time to time.

Zoho an organization has asked the employees to Work from home till the month of December. Kissflow SAS organization, have proposed hybrid remote working model in which employees need to come to the office only once a week in a month. Not only that Twitter, Face book, Tata Consultancy Services has announced that their employees can work from home forever. Companies are launching chat bots and AI which will be very soon checking the emotional health of the employees

GE has suggested that more cross functional communication and collaboration needs to be conducted. Cross functional teams can be helpful during the exigencies.

Nike office has installed plexi- glasses in between the work station to follow the re engineering of office post lock down.

SBI's new mantra for employees amid pandemic: Work from anywhere article in Live mint, SBI main focus in this difficult time is to rapidly adopt digitalization. The focus is also now on risk assessment and giving flexibility to the employees to Work from Anywhere not only Work from Home. Government action on the migrants who have moved to their home towns will be to use these workers for the infrastructure projects and provide them livelihood.

Learnings :- What we have learnt from this situation , that the Organization should not only be prepared on the exigencies related to business competition in the environment but also need to work proactively on the unexpected medical exigencies . It has made the people think proactively. Embracing digitalization has given employees opportunity to learn new skills and upgrade themselves. In this lockdown time, Organizations are hosting many webinars to create their brand awareness .Many of the Organization have donated a major chunk of money to the hospitals and NGO's for the treatment of COVID patients. Time has come that employees are not only engaged on the practices that Organization follow for them but also it is based on the empathy factor that they have for employees. Keeping the employees mental well being in this situation is more important. Role of CEO and CHRO has increased , now they are just not expected to be only in touch with the employees but also required to check their well being time to time . Office work is happening in a smooth manner Future is shaping up and employees are trained in skills which are required to make them super successful in the future. Organizations are getting more innovative and discovering new business models. Crisis is a time when new business models come up and thrive .

Initiative Atmanirbhar by PM emphasize to reduce dependency on China and due to which industry like pharma, FMCG , Health , Logistics and e commerce will pick up after lock down and will open more job opportunities for people . However , travel, tourism, hospitality real estate and entertainment will take some time to get back. Government is coming up with many more skills development programme like Pradhan Mantri Kaushal vikas Yojana , India Skills and Rozgar Yojana under Prime Minister Skill India Mission. As the lockdown is getting released gradually employees have started or very soon will start physically going to office .We will not have the same comfort . Things will be totally different, experience of joining back will not be the same as there will anxiety and fear in the employees of not catching COVID which would surely affect their productivity and efficiency. This lock down has given a learning opportunity for business to change forever.

Future challenge is that Organization need to freeze new work model and that is modalities of working from home. However, working from home reduced the transportation cost and cut down on operating cost, horizon of the business would widen and the employee can be associated with the Organization from any part of the world. In coming times there will be no boundaries on the geographies or territories. Skills, talent and experience would be given the utmost consideration and importance as they will be accessible from anywhere. But at the same time biggest challenge an Organization will have is to maintain the standard culture. At the same time there arises a big question that wills this work from home option is sustainable? Immediate challenge, post lockdown, is to have less people on the factory floor in compliance with the social distancing norms. According to Johns Hopkins Medicine, staying at least six feet away from one another reduces the chances of catching covid-19. This implies factory-floor modifications with lifting and shifting of machinery. It is easier said than done when the lockdown is still in force. Companies have made their online virtual stores and they have made a conversational marketing . Even automobile industries are launching their new models Since companies are not able to put exhibitions and trade shows they are taking the call to use that money in investing in digital advertising.

Suggestions: Organization should come up with revised policies like providing them with more flexibility and freedom at their own terms and conditions , most important would be pandemic leave policy , where someone wants to be away from work for a

day or two in order to refresh themselves. Post pandemic work will be high tech and low touch. COVID 19 has accelerated the digital agenda says Eugene Chan Associate Director - Korn Ferry . More remote inclusive culture will be enforced and the meetings will be conducted online. Learning and up skilling is going to take a lot of importance since employees are required to use different mode of collaboration. Digitalization plays a very important role over here in connecting the people. After lockdown if at all people look out for a job they will be looking for the Organization which takes care of the employee's physical, mental and emotional well being. Also on the flexibility and the medical benefits. Even when lockdown is over the Organization should have work from home mandates for once or twice a week for the employees without informing them so they are prepared for the exigency. As per Mr. Anand Mahindra , This lock down "down time " can be used to Reboot, Reinvent and Reignite by disruptive technologies IOT, Cloud, AI, Mobile Internet, design thinking. Convergence of Exponential technologies when come together is magical. One of the best way judging the team performance is through sociometer. It is a Artificial intelligence tool which helps in decoding human interactions and part of predicting human interactions by face to face and gestures. It will help predicting the engagement levels of employees. One thing will remain common in these unprecedented time is that the leader of any businesses should be humble and by not keeping much business profit in mind, they should keep their employees physical, mental and emotional well being into consideration. HR needs to think building engagement in digital remote working environment. No one is aware that when COVID situation would normalize, still the role of employers is to see that the most important thing i.e networking should not suffer in the virtual world. It is important to understand which jobs can be done remotely and which cannot be.

Conclusion:- Lockdown has accelerated the transformation of work place. Organizations which had been due to change from conventional work place practices have been forced to embrace the changes. COVID has made employers realized that work from home is one of the best option specially for the employees staying in metros which would make them rid of exhaustive travels and that efforts can be very well utilized in improving the work efficiency and productivity. It also saves the space of accommodating employees which is too expensive in metros. Whether working in the future has to be in office, home, co- working space or a café the entire goal should be to make it collaborative, creative, innovative and engaging. This crises has given time to mother nature to heal. Cities air pollution levels have come down, air has become relatively clean .Water pollution was the major concern for the past few years , since lock down it has been seen that holy Ganga water has been so clean . This pandemic has been an eye- opener for the businesses in the true sense, things which they have never imagined could be managed from home are getting managed due to the use of digital tools. COVID 19 has provided an opportunity to the Organization to move their businesses to the next level where future lies in AI, automation and use of digital technologies. Remote working hours will help the employees to stay online and dedicated to their tasks . However, Managers should not dictate the style of working or leadership styles to be followed.

In the Nutshell, we can say that the world is going to experience a paradigm shift in the ways of working. Work from Home or "*Living at Work*" and Virtual Business Management would become the "New Normal".

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AN INTERNATIONAL BILINGUAL PEER REVIEWED REFEREED RESEARCH JOURNAL

DECODING CHINA'S MASTER PLAN

□ Dr. Tasneem Razmi*
Dhruvi Sanghvi**

ABSTRACT

If we Indians keep appeasing China because of our addiction to trade with them and overlook everything else for our benefit then, Indians have a chance of repeating history. Just the way in the late 1930s, the British government led by Chamberlain kept appeasing Hitler and giving into its demands, it eventually led to the Second World War. If Indians continue on the same path then, we might either be leading the world to a Third World War or a World dominated and colonized by China. If this be the case then we, the citizens of the World should use our wallet judiciously and hit China where it hurts most, the Economy i.e., defeat China not through war but by not being a victim of their economic progress. If the entire world decides not to sponsor this regime then that will see the China's worst nightmare coming true. China wants to emerge out victorious and make a mark which highlights them forever. In this unfortunate scenario, India should support our Hon. Prime Minister Shri. Narendra Modi by becoming self-subsistent and curb out China from our economy. This paper basically is an attempt of self-awareness as well as an action put forward to become self-reliant.

Keywords: Boycott Chinese Products, China's Masterplan, Economy, Indo-China conflict, Covid-19.

Introduction:

The Economy of India currently is what is going to destroy us and not Covid-19 or nukes. A lot of questions have been arising now in our minds which earlier had been overlooked. In March 2020, the Indian navy had found 12 underwater drones in IOR coming all the way from Beijing. Presently, the entire world is fighting against the unfortunate Covid-19; in such a situation China is pushing its borders against Japan, Australia, Vietnam and even India. In the middle of this health crisis, China is becoming political. The Indo-China conflict has been existing since several years now as China openly claims Ladakh and Arunachal Pradesh to be its own territory. But, since the last couple of days, there have been several problems constantly occurring at our border. This is the worst time for India to go to war with China as the biggest weapon in

this war shall be the Economy. The President of China Xi Jinping has publicly told its military to start preparing for war.

Aims & Objectives:

1. To understand the severity of the Economy of India currently due to the COVID-19.
2. To understand China's Masterplan.
3. To understand the strategy to make India Self-reliant.

Research Methodology:

For this research paper, the information has been collected using secondary sources including newspaper, articles, websites and magazines available online. Also, a survey had been conducted with 700 individuals. The analysis presented is solely based on the references mentioned for this paper.

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Data Interpretation/ Analysis: -

1. **Ground realities** - Trade figures suggest that India is the biggest importer of Chinese consumer goods. India imports approximately seven times more from China than it exports to it. India has a huge trade deficit with China – its largest with any country. In the year 2018-19, India's exports to China were mere \$16.7 billion, while imports were \$70.3 billion, leaving a trade deficit of \$53.6 billion. The range of goods that we import from China is quite massive; consumer durables such as electronic goods, smartphones, industrial goods, vehicles, solar cells, and essential pharmaceutical products including tuberculosis and leprosy drugs and antibiotics, among many others.
2. **Quality goods is compromised:** - In 1949, Chinese communists took control of China. Since the 1980s, Chinese leaders have made economic development as one of their first priorities. Chinese businesses quite often produce goods tailored to market expectations; therefore, Chinese products may not be high in quality when consumers prefer to pay a low price. Overpopulation in China is a possible reason for manufacturing low-quality products. Some firms cannot find enough of the needed raw materials to produce goods that serve the customer requirements, producing instead various versions made with cheaper or low-quality material. At this point in time, many companies and businesses might also lack capital, industry expertise, and marketing power, leading to counterfeit products. Many unethical companies produced hoax goods to earn more benefits. At times, products of famous corporations like Apple, Hyatt and Starbucks are copied.
3. **Human Rights Violation:** - Human Rights Violations have spurred support for the movement, forced/arranged marriage, the massacre of Tiananmen Square in 1989, single child policy, Falun Gong organ harvesting, the invasion of Tibet, Child workers, abusive working conditions throughout China's production processes, abuse in re-education camps and the escalating and ongoing conflict and military presence in Hong Kong in which Human Rights violations are being broken e.g. the right to peacefully protest, police brutality (kidnapping and associated organ harvesting then execution, excessive force, attempted vehicular homicide, etc.
4. **Overstating of its bills:** - Hydroxychloroquine is a drug used to cure Malaria and research shows that it can prove to be useful against Covid-19 as well. India is the largest manufacturer of this drug and we recently exported 50 million pills to the US. But the raw material for this drug comes from China and during this pandemic, China suddenly raised its prices. China is playing smart by improving its Economy by undertaking such horrendous steps. Efforts by an Indian agency to procure rapid antibody coronavirus test kits from China have come to naught, with the Indian government deciding to withdraw the "faulty" test kits from use and cancelling all procurement orders. The controversy around the efficacy and pricing of the rapid tests is set to change the way India now tests for the novel Coronavirus.
5. **Debt Diplomacy:** - Asia and Africa have a lot of countries that require financial help. But to take a loan from the IMF or World Bank, the country needs to meet certain strict criteria. In such a scenario, China is helping them. China is building a highway in Pakistan, it is funding a port named Hambantota Port in Sri Lanka and many other projects in countries like Myanmar, Maldives and even Nepal. The problem that arises is that these countries may not be able to pay China back and that's where China's Debt Diplomacy begins. Pakistan owes

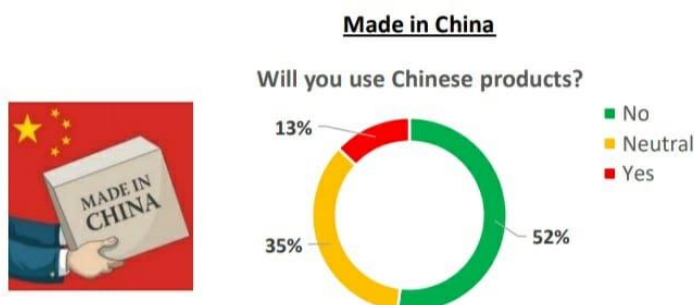
more money to China than any other financial institution in the world. Recently, Pakistan unearthed a scam of \$630 million regarding two Chinese companies that supplied power to China Pakistan Economic Corridor. It takes time for a country to repay the money borrowed as with passing time the loan piles on hence the interest also increases. This is when China comes into action and states that they should have complete power over that area so that they can operate the way they want to. This is how the Chinese population increases in that area or country. In case of war, China can easily convert these trade bases into military bases.

6. Strategic Investments in countries to surround India: - Djibouti is a small African country and China practically owns it as it has created a military set up there. Like-wise it has invested in other countries as well like Myanmar, Bangladesh, Sri Lanka, Maldives, Pakistan, Africa, Cambodia, Hong Kong, etc., which surround India from all possible areas hence becomes easy for them to activate these areas for an attack in India at anytime. This

is China's 'String of Pearls' using the Economy to surround India and stay prepared. In case of war, chances are that the attack won't be from one side but from multiple sides.

Analysis of the Survey:

1. A sample survey had been conducted where we collected approx. 700 responses. This survey had been conducted during the mid-May. Sample profile is as follows:
 - 53% of the responders were male whereas 47% of them were females
 - 49% of them were students, 37% of them belonged from the working-class sector, 14% others.
 - 54% of the responders were under the age of 30, 39% were under the age of 60 and the rest 7% were above the age of 60.
2. We asked the responders whether they shall be using Made in China products after being aware of the China's masterplan as well as their scams.



Observations and Suggestions: -

- India is depended upon China because it receives majority of its raw materials as well as finished goods from China as it is the cheapest available there. Indians

need to find an alternative for maximum products which we receive from China like toys, gadgets, electronics, consumer able items, etc.

- Indians need to be self-reliant enough and need to start incorporating Made in India products and goods in their day to day life so that we are not depended upon China made goods. Though being a little slight expensive than the Chinese products, we should not stop ourselves from buying Made in India products as the quality of China made goods are usually compromised unlike most Made in India goods.
- In the last 2 months, a new industry worth Rs. 10,000 crores is born in India. The textile industry had to close down due to the Covid-19. But, even during these tough times, Indians found an opportunity. Rather than shutting down factories, they started making PPE kits. One private company had started it, then many joined and today India makes 450,000 kits per day. In these 2 months, India has now become the world's second largest supplier of PPE kits. This new industry shall be worth \$60,000,000,000 by 2025. All of this happened in less than 60 days.
- The Mahua flower from Chhattisgarh is used to make local liquor. The tribal women in Chhattisgarh used this flower to make alcohol which is the base product used in hand sanitizers when India was scrambling to get enough supply of hand sanitizers. A tribal solution saved lives.
- "India looks to lure more than 1000 American companies out of China"- *The Economic Times*. Around 300 companies have already given their confirmation on paper. These companies will not manufacture in

big metropolitan cities but in small cities, in the interiors. Luxembourg is a country in Europe, India offers land twice Luxembourg's size to firms leaving China and settling in India.

- India has a long way to go and Indians cannot boycott China in one day. It is a fact that we don't have electricity, infrastructure and even skilled labour for that matter. But it is also a fact that we have a lot of untapped potential.
- In 2014, India had only 2 mobile manufacturing units. Today, we have 268 factories including Samsung's largest factory in the world. This is the best time for India to work on its negatives and take a step forward in becoming self-reliant or else it shall lose a big opportunity towards making a mark of success.

Conclusion: -

China is using Economy to boost its politics and military. China has created a situation for India where Indians cannot afford a war because, in case of a conflict in the future, then tackling it only by force is not an option for India anymore. Because with the money power, China has its allies all around us. So if we cannot use 'Bullet force' then let's use 'Wallet force' rightly said by Mr. Sonam Wangchuk (China's People's Liberation Army, Indian engineer, educator and innovator). If Economy is a weapon, then Indians itself are its distributors. Indians have to boycott Chinese products. Mr. Sonam Wangchuk stated that Indians should remove Chinese software from their phones in a week and Chinese hardware in a year. 8/10 items in an Indian's house is made in China; if so then throwing them away makes no sense. This is an unrealistic and foolish expectation. Instead, while purchasing something from the next time, make sure to check whether there is a local alternative

available. If each citizen actually starts implementing on this then, in a span of 5 years' time, Indians shall be depended on China only for a few essential products. India is not in the China's Debt Diplomacy trap yet unlike countries like Pakistan, Sri Lanka and Bangladesh. Its yet not too late to make a change and implement on the necessity. In this Covid-19 situation, our government has realised how dangerous China could be hence, India notifies FDI policy change mandating prior nod for border sharing countries. This is done so that in this crisis, no Indian company becomes a Chinese puppet. Great historical progress always happens after major disasters. This is the time when India has to prove itself to its countrymen as well as the world. Whenever the country hits rock bottom, it is the people of that country who bring the light back to life.

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The Opportunities and Challenges of Edutech in the the Digital Era. Understanding

Atul Sathe*

ABSTRACT

In the modern world of technology, not only Business and commercial activities have gone under tremendous change, but it has its impact on Education sector also. The paper deals with Opportunities and challenges in EduTech. The Unit of Analysis is Users of EduTech facilities. The characteristic of Interest is opportunities and challenges in field of edutech. The objectives of the research methodology are To discover new opportunities in the field of EduTech, To know about the major aspects to be tackled for getting EduTech to rural India, To know about importance of EduTech for students, To ascertain the impact of affordability factor in EduTech, To know if edutech is providing the support of teamwork in schools, To know about the benefits and drawbacks of EduTech for its users. The Methodological Approach of this research is the quantitative approach by conducted Survey. The Sources of Data of this report is based on primary data; Primary source of data used is the questionnaire. Also secondary sources of data have been used like the references of various Google scholar articles and some articles from newspaper. Data collected was analytical, tabulated and percentages were calculated by using pie charts for the purpose of easy understanding. Sample method was Convenient sampling method Sampling units was customers of EduTech portals and Sample size was 40-50. The Research instruments were Structured Questionnaire is used as an instrument, to collect valid primary data. The implication seen that the major users of EduTech are from the age group 20-25. There are still many drawbacks of EduTech which need to be taken care of. The next big opportunity is taking EduTech to the rural areas of India. But this will take as there are a lot many hurdles to be considered while planning the move for this opportunity. But at the same time they are hoping for various improvements.

Keywords : Education, Technology, Digital, Cloud computing, Virtual Reality

INTRODUCTION

Education Technology is an ethical practice for facilitating learning and better performance by creating, using and managing appropriate technological processes and resources. Although this field may sound highly specialized, its potential implications are far-reaching and affect many segments of the population.

Services like Byju's and Unacademy provide solutions for teachers and schools. Upon its development and correct application, educational technology can truly be an industry-changing experience for educators in streamlining lesson planning, reporting, and record-

keeping which is time consuming and simplifying communication.

Successful development of EduTech will help improve the future. Accessible and effective solutions for superior education empower students and teachers to focus on the aspect of learning and understanding. They can do much more with the resources they have, for example, improving the quality of education available to youth around the world and better equipping them for the future.

VARIOUS SERVICES PROVIDED BY EDUCATION TECHNOLOGIES

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SPECIAL ISSUE - 1

1. Customized Learning Experiences

Learning methodologies and experiences are never be the same for everyone, as every student is different ; but the earlier education systems could never accommodate for the required custom learning experience as there were too many limitations. Modern technology in education facilitates customized teaching and learning methodologies. For example, a junior surgeon now can seek guidance for a critical procedure during the operation right through his mobile app.

2. Cloud Computing

Cloud computing has impacted high technology education in a big way. It helps to store data of students on clouds. The anytime-anywhere accessibility of information stored in remote cloud servers of the apps has made it possible to access courseware and educational materials from any device and from anywhere

3. Speech-To-Text Options

A vast majority of devices and app platforms are providing features like Samsung's Bixby. Such smart assistants respond to voice commands and make things easier for learning.

4. Virtual and Augmented Learning Experiences

Virtual Reality and Augmented Reality is a big boost to Edtech. If you want to learn about space objects just by running a 3D space video on your VR headgear, you can float in space while a background voice continues depicting you the Milky Way in detail. Real-time broadcasting of critical surgical operations allows medical students to learn through a more immersive experience.

5. 3D Printing

3D printing, which is also known as prototyping, allows students to learn with a more tangible and physical

experience. A student can easily shape his idea of an object thanks to 3D printers.

6. Learning Analytics

The huge volume of education information and data give birth to learning analytics, as it is increasingly important to assess and evaluate student engagement, traction, and learning output.

RESEARCH METHODOLOGY

RESEARCH PROBLEM

Understanding the opportunities and challenges of EduTech in the digital era.

Problem Statement – Opportunities and challenges in EduTech.

Unit of Analysis – Users of EduTech facilities

Characteristic of Interest – opportunities and challenges in field of EduTech

METHODOLOGICAL APPROACH

In this report we used the quantitative approach by conducted Survey.

SOURCES OF DATA

- This report is based on primary data.
- Primary source of data used is the questionnaire.
- Also secondary sources of data have been used like the references of various Google scholar articles and some articles from newspaper.

TOOLS USED FOR DATA ANALYSIS

Data collected was analytical, tabulated and percentages were calculated by using pie charts for the purpose of easy understanding.

Sample method- Convenient sampling method

Sampling units- customers of EduTech portals

Sample size- 40-50

Research instruments- Structured Questionnaire is used as an instrument, to collect valid primary data.

ANALYSIS

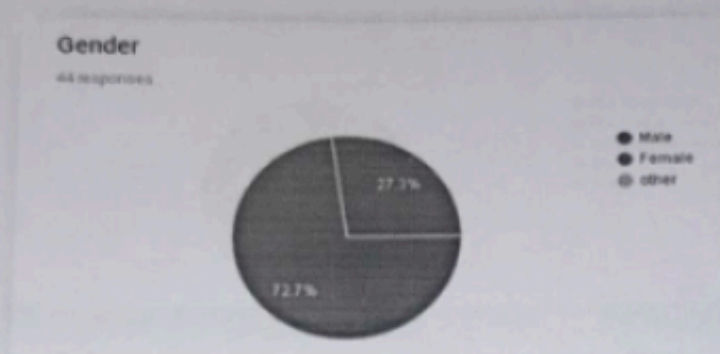
1. Age



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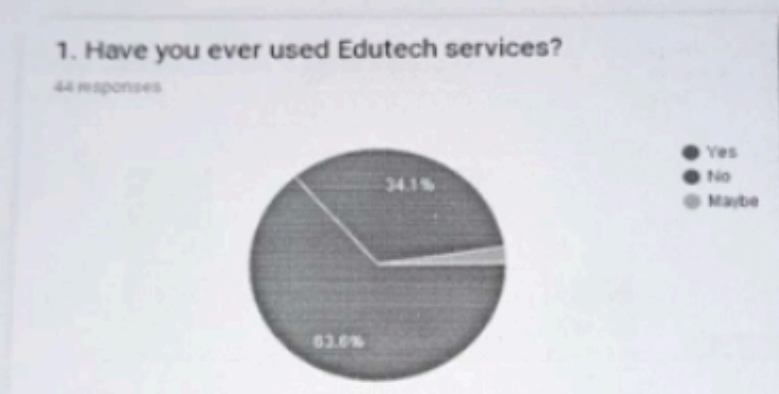
As seen in the chart above, edutech services are often used by the age group 20-25.

2. Gender



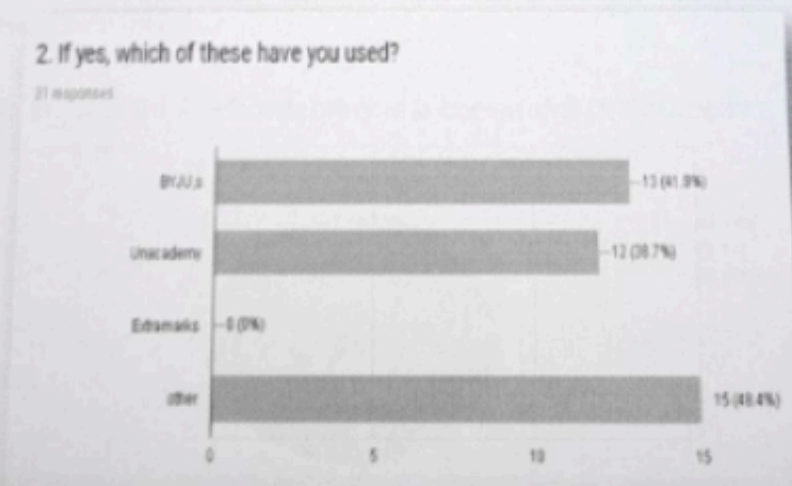
Males are the dominant users of the services.

3. Users of edutech services



About 64% of the sample has used edtech services.

4. Applications used



Most number of respondents has used BYJU's.

5. Most useful for these subject

3. Which subjects do you think is EduTech the most useful for?

44 responses

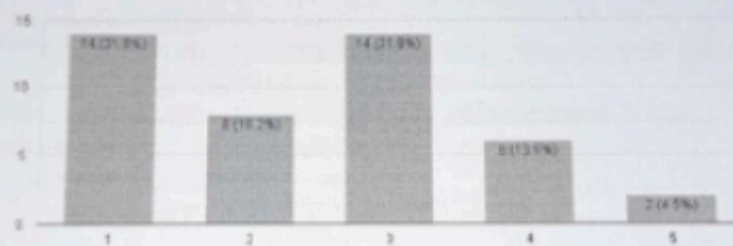


Most people are of the opinion that edutech services are useful for all kinds of subjects, be it theory or practical.

6. Usefulness

4. How useful is EduTech to you as a student?

44 responses



There are an equal number of respondents who voted for neutral and very useful.

7. Affordability being a constraint

5. Do you think affordability is a constraint in Edutech?

44 responses

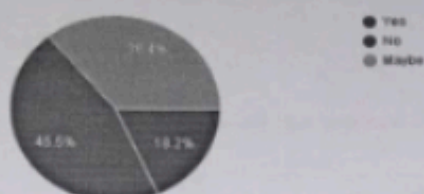


There are equal number of respondents who aren't think that it is a constraint. sure about affordability being a constraint and those who

8. EduTech supporting teamwork

6. Can EduTech support teamwork, which is major quality taught in schools?

44 responses

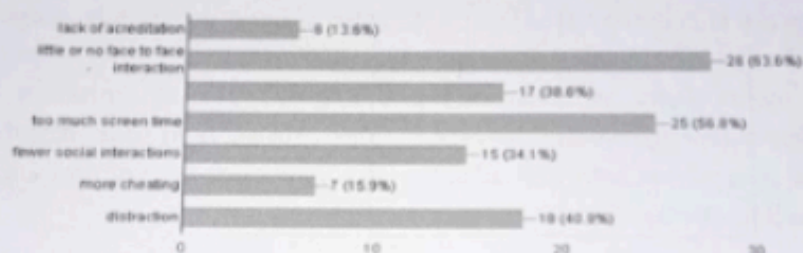


A large portion of the sample size is of the mindset that edutech can affect the quality of teamwork.

9. Major drawbacks

7. What are the drawbacks of such technology?

44 responses



Most people have said that the major disadvantage is that there is little or no face to face interaction, along with an increased amount of screen time. Also there is a

lot of distraction when studying through devices because of various games and chat options available on the device.

10. Pros of Edutech making it up for the cons of traditional education system

8. Do you think the pros of EduTech can make up for the cons of traditional teaching methods?

44 responses

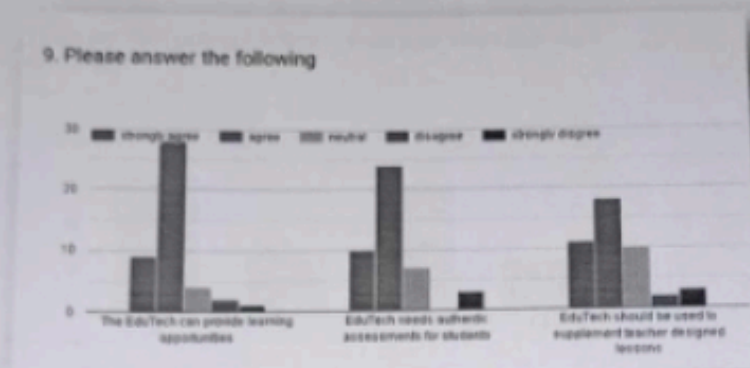


SPECIAL ISSUE - 1

Almost 46% of the sample opines that the advantages and various features of the edutech services

can make it up for the cons of the traditional education system that has been followed for the past decades and can together come up as an excellent teaching tool.

11. Degree of agreeableness on various questions



The first question is regarding the better opportunities edutech can provide, and a high percentage of the sample size agrees that it can provide better opportunities.

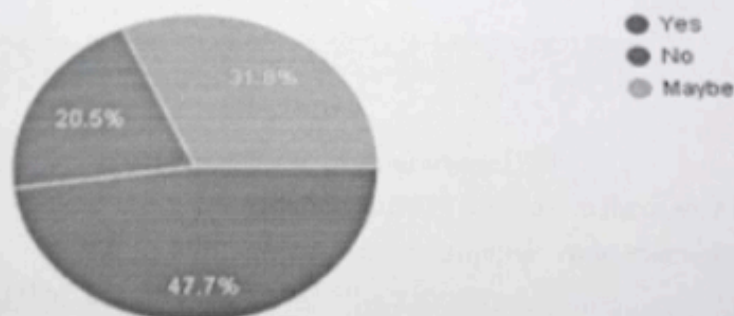
The second question is regarding the improvements in edutech and if it needs better assessments for students who use the facilities. Again

most people agree with the idea that improvements are needed.

The last question in this section is if people think that edutech should be independently used by students or if it should be supplemented with teacher designed lessons. Here the opinions are quite spread out but again the highest votes are for people agreeing that it should supplement teacher designed lessons.

10. Are you content with EduTech?

44 responses



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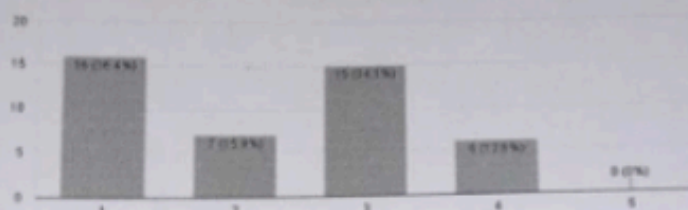
12. Satisfaction regarding edutech

Most people are content with edutech and its overall services.

13. Getting Edutech to Rural India a challenge

11. Do you think getting EduTech to Rural India would be a major challenge?

44 responses



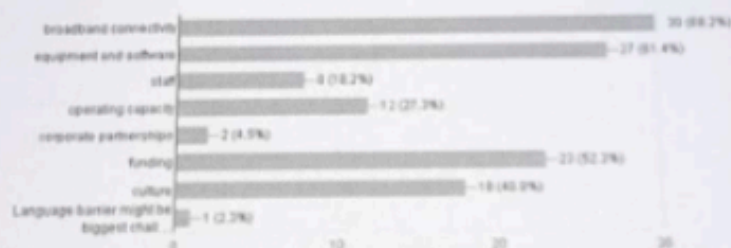
Most people agree that taking edutech to the rural villages of India would not be an easy task as there are a

lot of hurdles in the way, which are listed in the next question.

14. Major challenges in taking edutech to rural India.

12. What would be the major aspects to be tackled for getting EduTech to rural India?

44 responses



Broadband, equipment and software would come as major challenges in the task.

CONCLUSION

- It is seen that that major users of EduTech are from the age group 20-25.
- There are still many drawbacks of EduTech which need to be taken care of.
- The next big opportunity is taking EduTech to the

rural areas of India.

- But this will take as there are a lot many hurdles to be considered while planning the move for this opportunity.
- Still most people are content with EduTech.
- But at the same time they are hoping for various improvements.
- These include improving the assessment tests

SPECIAL ISSUE - 1

which can be made to be based on past question papers or the current affairs, with respect to the subject.

- Another improvement can be well trained batches of staff which can help the students learn better by

supplementing the technological services with their knowledge of the subject.

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**ANALYSIS OF RESPONSIVENESS OF RESIDENTS' OF MUMBAI CITY TOWARDS
APPROACHES AND PROSPECTS OF SPIRITUAL TOURISM IN INDIA**

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Abstract

Spiritual tourism is becoming a key prospect in Indian tourism industry with not only Indians but foreign nationals too opting to visit popular Indian cities for pilgrimage. The globalization and exposure created by cautious efforts to popularize Indian culture and ethos have led to increase in spiritual tourism leading to need for all round development for such tourist cases. The study aims at evaluating approaches and prospects in spiritual tourism in India through analysis of perceptions and willingness of Indian tourists. It also explores the potential of spiritual tourism in India. The structured questionnaire was circulated using random sample technique to collect primary data from respondents. The study shows that if required policies decisions are taken and if there are collaborative efforts made for creating infrastructure and facilities, then spiritual tourism can lead to a significant contributor in Indian economy's growth.

Keywords – Spiritual Tourism, Approaches, Prospects, Pilgrimage

INTRODUCTION:

Spiritual tourism is becoming a major heightening area of the Indian travel market with more Indians opting to go on pilgrimage across the India. Spiritual tourism is one of the biggest unexplored markets for domestic travel, it has been observed that nearly 60% of domestic tourism in India is religion-based. It is fascinating to see that youngsters along with adults are showing quite a high propensity towards exploring indigenous cultural experiences in our country. One of the key perceived factors of spiritual tourism is that it is formed out of the desire for some form of change and the belief which can be found at the pilgrimage site. Over the years travel to spiritual place have increased, believe is spirituality has inspired people to travel even with poor infrastructure, communication and travelling.

There has been abundant manifest dotted across the country that Spirituality has been the Despite the destruction made by the attacker from the other countries, the spiritual icons of the country were able to resuscitate themselves and procure back their original glory and fame. cornerstone of India and it was patronized by all the King's through different centuries.

India is a pivot for Spiritual tourism

Since the classical times, India has been known as the pivot of several religions and practices. Jainism, Hinduism, Christianity, Islam, Sikhism are the most popular religions in India. There have been remarkable centers for all these religions which are the places for the community worship and social harmony. The Kings who had been reigning the different parts of the country were very keen in patronizing the worship place in their region and ensuring that gradual augmentation and developments are being done over the decade. From the paleontology engraving it can be seen that The Kings have contributed huge areas of lands and the proceeds from the lands are to be used for the uninterrupted services to the temple and the divinity.

You can never find in any part of the world, the kind of structured arrangements for safeguarding and maintaining the holy centers which are considered to play an essential role in the people lives and the society. Several Mutts Monasteries and Ashrams, are being run where the religious and educational institutions are sprint to benefit the society.

Spiritual Tourism in India

Spiritual tourism in India focuses on the strategic destinations of the country where you can traverse the essence of spirituality and try to experience the intramural peace. The temples irrespective of any religion is constructed so magnificently to symbolize the ideology of life's uncertainty and the need to surrender to God to get relieved from the cycles of birth and death.

In a comprehensive perspective, it can be also noticed that the majority of the tourists are attracted and driven by the religious belief and value, on the other side it has also been remark that spiritual tourism only seeks the essence of spiritual experiences without any religious references. Although spiritual tourism is an immense form of religious tourism through which tourists experience more than their expectation.

Preferred destinations for spiritual tour in India

Though India has plenty of holy centers thronged by devotees round the year, few of them have been considered as the liveliest and spiritually powerful destinations. The list is inclusive of Bodhgaya, Golden temple in Amritsar, Varanasi, Sarnath Stupa, Dilwara temples in Rajasthan, Rishikesh and Kedarnath temples, which are some of the most popularly visited temples in North India. Brihadishwara temple at Tanjore, Ekambareswarar temple in Kanchipuram, Meenakshi Amman temple at Madurai, Annamalaiyar temple in Tiruvannamalai, Ramanathaswamy temple in Rameshwaram and Nataraja temple in Chidambaram are the most popular temples in South India.

STATEMENT OF PROBLEM:

Tourism has been recognized as one of the major industry contributing in a state's revenue of many countries. Many countries are known for their spiritual legacy. Thus, although there has been an encouraging trend in the recent time, sufficient compositions on spiritual tourism is yet to be generated. Feasible effect on number of inbound and outbound tourist to different spiritual places and its economic inference needs to be explore. Such scrutinize could be case specific as different spiritual places are located at different geographic locations in India.

REVIEW OF LITERATURE:

(N. R. Vembu, 2017) in their paper "Spiritual tourism and identification of satisfaction among pilgrims - An empirical study" had examine the pilgrim's perception towards selected temples in Kanchipuram town with the help of the Primary data. The researcher Enlightened the need of proactive monitoring of Municipality in Kanchipuram temples for the provision of water and rest room facilities, proper guide with relevant language and slang, maintenance of neat and hygienic, waiting rooms especially breast-feeding mothers, reasonable cost for prasatham to ensure the satisfaction of pilgrims.

(Banerjee, 2015) in her paper "Spiritual Tourism: A tool for Socio-Cultural and Sustainable Development" had presented a way of healthy life by way of spirituality and control social crime, and also suggested how the responsible and sustainable use of natural and cultural assets in the development of spiritual tourism can create generate income, alleviate poverty, employment opportunities, prompt product diversification, restrain rural flight migration and bring up a sense of pride among communities and destinations.

(S. Vargheese Antony Jesurajan, 2012) in their paper "Dimensions of Spiritual Tourism in Tuticorin District of Tamil Nadu in India - A critical analysis" based on secondary data has investigated pilgrimage tourism and its issue and challenges and its cultural importance and socio economic development through pilgrimage tourism and also it analysis the basic infrastructure issues in pilgrimage sites.

OBJECTIVES:

After detailed review of literature including books, articles, research papers and journals, researchers have identified following objectives for the study.

1. To study current positioning of spiritual tourism industry.
2. To review the trends in tourists' responsiveness towards spiritual tourism industry
3. To analyze the perception of tourists towards spiritual tourism industry.
4. To predict the potentials of spiritual tourism industry for future.

HYPOTHESIS:

Researchers have decided to form following hypothesis based on objectives formulated for the study

1. H0: the satisfaction level about public utility services at Spiritual Tourist places does not affect the decision of visiting the place
2. H0: Non - religious factors do not affect decision of visiting Spiritual Tourist places
3. H0: There is no correlation between Age and Amount willing to spend on Spiritual Places

RESEARCH METHODOLOGY

This study aims to critically evaluate the approaches and prospects of Spiritual Tourism of India in Mumbai. Hence the Research Design of the study is exploratory research design. The first hand data are collected directly from the respondents with the help of questionnaire as an instrument for the study. The secondary data were collected from sources such as various journals, research papers, newsletters, books and websites. Statistical Technique is used with the help of SPSS software.

DATA ANALYSIS AND INTERPRETATION

A structured questionnaire was sent to Students, salaried group, professionals, self-employed and homemakers in Mumbai city via email for response on their approaches and prospects towards spiritual tourism of India. A sample size 101 respondents is considered for collecting primary data.

1. Relationship between already visit/ willingness to visit in spiritual place and satisfaction level for various public utility services.

a) Transport

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.992 ^a	3	.409
Likelihood Ratio	2.565	3	.464
Linear-by-Linear Association	.993	1	.319
N of Valid Cases	101		

Table 1.1

From the chi square output table, we see that a significance level of 0.409 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

b) Drinking water

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.468 ^a	4	.033
Likelihood Ratio	9.818	4	.044
Linear-by-Linear Association	1.612	1	.204
N of Valid Cases	101		

Table 1.2

From the chi square output table, we see that a significance level of 0.033 which is less than 0.05 (Pearson). Hence we reject the null hypothesis, which means that chi square test is showing a significant association between the above two variables.

c) Cleanliness and Hygiene

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.461 ^a	4	.652
Likelihood Ratio	2.428	4	.658
Linear-by-Linear Association	.255	1	.614
N of Valid Cases	101		

Table 1.3

From the chi square output table, we see that a significance level of 0.652 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

d) Restrooms

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.593 ^a	4	.159
Likelihood Ratio	6.082	4	.193
Linear-by-Linear Association	.000	1	.998
N of Valid Cases	101		

Table 1.4

From the chi square output table, we see that a significance level of 0.159 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

e) Local eateries

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.176 ^a	4	.529
Likelihood Ratio	3.476	4	.481
Linear-by-Linear Association	.253	1	.615
N of Valid Cases	101		

Table 1.5

From the chi square output table, we see that a significance level of 0.529 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

f) Accommodations

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.794 ^a	3	.851
Likelihood Ratio	.789	3	.852
Linear-by-Linear Association	.735	1	.391
N of Valid Cases	101		

Table 1.6

From the chi square output table, we see that a significance level of 0.851 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

2. Relation between Non - religious factors and decision of visiting spiritual tourist places.

a) Local Transport

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.590 ^a	4	.072
Likelihood Ratio	7.756	4	.101
Linear-by-Linear Association	.882	1	.348
N of Valid Cases	101		

Table 2.1

From the chi square output table, we see that a significance level of 0.072 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

b) Private Transport

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.539 ^a	3	.910
Likelihood Ratio	.797	3	.850
Linear-by-Linear Association	.173	1	.677
N of Valid Cases	101		

Table 2.2

From the chi square output table, we see that a significance level of 0.910 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

c) Shopkeepers and vendors

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.289 ^a	3	.732
Likelihood Ratio	1.257	3	.739
Linear-by-Linear Association	.312	1	.576
N of Valid Cases	101		

Table 2.3

From the chi square output table, we see that a significance level of 0.732 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

d) Entertainments

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.033 ^a	4	.284
Likelihood Ratio	6.471	4	.167
Linear-by-Linear Association	2.326	1	.127
N of Valid Cases	101		

Table 2.4

From the chi square output table, we see that a significance level of 0.284 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

e) Other tourist attraction

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.547 ^a	3	.467
Likelihood Ratio	2.186	3	.535
Linear-by-Linear Association	.699	1	.403
N of Valid Cases	101		

Table 2.5

From the chi square output table, we see that a significance level of 0.497 which is more than 0.05 (Pearson). Hence we accept the null hypothesis, which means that chi square test is showing a non-significant association between the above two variables.

3. Correlations between age and amount willing to spend on spiritual place in India

Correlations

		Age	How much you are willing to spend on spiritual place in India ?
Age	Pearson Correlation	1	-.211
	Sig. (2-tailed)		.034
	N	101	101
How much you are willing to spend on spiritual place in India ?	Pearson Correlation	-.211	1
	Sig. (2-tailed)	.034	
	N	101	101

Table 3

From the above correlation test output table, we see a significant level of 0.211 which is more than 0.05 and hence we accept the null hypothesis. This means there is no correlation between the two variables.

4. Significance test of two variables i.e. Annual Income and travel plan by way of T-Test

Group Statistics

Do you Prefer to travel on your own or through a Tourist Company ?	N	Mean	Std. Deviation	Std. Error Mean
Annual Income own	79	2.15	1.051	.116
Tourist Company	22	1.86	.889	.190

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Annual Income	Equal variances assumed	2.198	.141	1.174	99	.243	.298	.246	-.199	.796
	Equal variances not assumed			1.290	38.951	.204	.298	.223	-.164	.760

Table 4

From the above T-Test output table, we see significant level of 0.141 which is more than 0.05, hence we accept the null hypothesis. Significant value of two tailed indicates there is no major difference in lower and upper interval.

CONCLUSION

India has become global leader in Spiritual Tourism with rising exposure to Yoga and meditation globally. As country we have immense potential to attract domestic as well as foreign tourists. The challenges in terms of public utilities and infrastructure could be obstacle for future growth. Cautious efforts taken by Government in policies and Public Private Partnerships can make spiritual tourism as valued industry.

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A STUDY OF CONSUMER RESPONSIVENESS TOWARDS READY TO EAT FOOD INDUSTRY FOR MUMBAI AND THANE DISTRICTS

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ABSTRACT

The rapid pace of organization, the changing work culture and increasing trend of nuclear families have resulted into changing food habits of people in 21 st century. Traditionally in India home cooked and fresh food consumption has been part of the culture but, as modern solution to modern issues, ready to eat food industry has evolved. The trend of using ready to eat products confined to elite class has been dripping to other sections. The paper aims at assessing the perception of people in Mumbai and Thane District about consumption, reliability and accessibility of ready to eat food products. It also attempts to explore potentials of the market for such products. The structured questionnaire was circulated on random sampling basis and researchers have analyzed the responses of 158 samples on various parameters. The study shows that there is immense potential for this industry to grow as factors having positive co-relation are on rise.

Keywords – Ready to Eat Food Industry, Consumer Perception, Potential, Buying Trends.

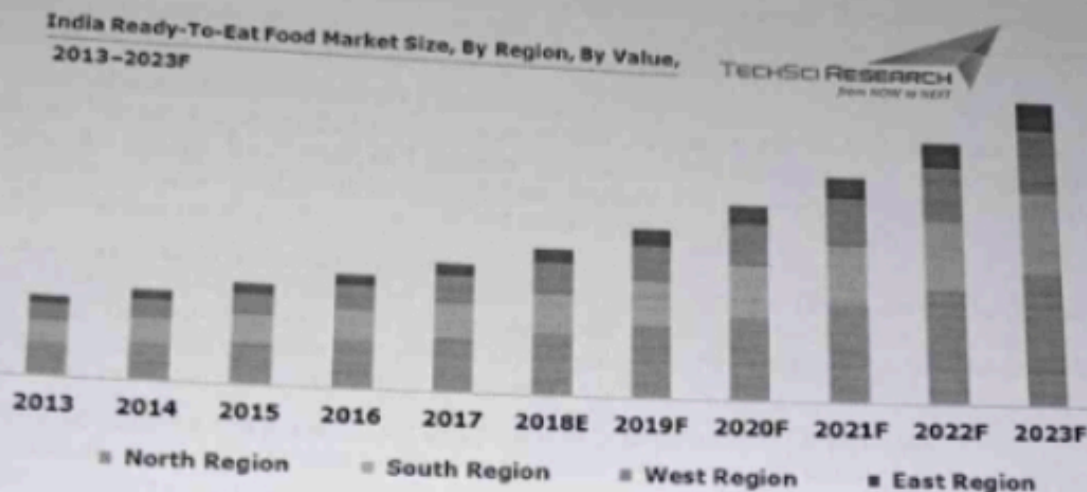
INTRODUCTION

Ready-to-eat, instant food mix or heat and serve food – regardless of what you call it, there is no denying that ready-to-eat meals are the most convenient food products present in the market today.

Ready-to-eat (RTE) foods are a group of food products that are pre-cleaned, precooked, mostly packaged and ready for consumption without prior preparation or cooking. According to the 2009 US Food code (FDA, 2009), RTE foods should be in an edible form without an additional preparation step to achieve food safety. They can be refrigerated, shelf-stable, require minimal heating or are served hot. Ready to eat foods have specific guidelines to ensure that there is no contamination or chance of bacteria forming after the foods have already been prepared. The study "Flavors of Incredible India-Opportunities in the Food Industry" carried on by FICCI –Ernst & Young notes that the Indian Food industry is a significant part of the Indian Economy with food constituting about 30% of the consumer wallet.

India ready-to-eat food market stood at \$ 261 million in 2017 and is projected to grow at a CAGR of over 16% during 2018-2023 to reach \$ 647 million by 2023. Anticipated growth in the market can be attributed to rising urbanization, increasing disposable income of middle-class population and changing taste preferences of Indian consumers. Moreover, growing demand for quick food and presence of freshness and high nutritional value in these foods is further aiding growth of India ready-to-eat food market. Demand for ready-to-eat food products is recording high growth in metros where a lot of working people don't get enough time to cook proper meals. Additionally, longer shelf life and easy availability of ready-to-eat food products is further pushing their demand across the country. The most popular ready-to-eat items include preparations of paneer, chana masala, rajma masala, pavbhaji, etc. Rise in demand for ready-to-eat food products has created the interest among many companies to enter this space which is likely to contribute to the growth of the market in the coming years. Furthermore, innovation in products offerings, sustainable packaging, preference of single serving frozen products, aggressive marketing & promotional strategies would steer growth in the market during forecast period.

The following graph indicates the growth



Source: TechSci Research

Some of the major players operating in the India ready-to-eat food market are McCain Foods India Pvt. Ltd., MTR Foods Pvt Limited, fortune Food Products Pvt Ltd., Haldiram Snacks Pvt. Ltd., kissan Limited, balaji Foods Pvt. Ltd., disano Foods Limited etc

Consumer behavior is a study of how a customer selects, buys, uses, and disposes ideas, goods, and services to satisfy his needs and wants. RTE food products are those offered to the customer after being washed, cooked, frozen and processed, and yet consumed after heating. The reason that drives us for this research is that there are around 80% of the people consume ready-to-eat food.

Growth drivers and challenges faced by RTE food products in India



Source: netscribes.com/ready-to-eat-market-in-india

Growth drivers

1. Surge in per capita income and average consumption

Aside from the rise in per capita income, many women have joined the workforce. This allows an increase in the number of earning members in a family, raising per capita spending capacity.

2. Rapid urbanization

Cities and urban settlements have more employment opportunities than villages, leading to a growing exodus of people leaving rural settlements for urban ones. The fast-paced urban lifestyle for working professionals and students living away from home has catalyzed the demand for ready-to-eat food.

3. The advent of numerous food delivery mobile apps

An on-the-go lifestyle has compelled many Indians to rely on ready-to-eat products that can be ordered via mobile apps like Swiggy, Foodpanda, and Zomato. This has led to a visible growth in the consumption of a wide range of ready-to-eat food products through these channels. It's no surprise why the online food delivery sector is expected to grow to a value worth INR 162 billion (USD 2.2 billion) by 2021.

4. Growth in retail marketing of frozen foods

There has been a significant proliferation of retail outlets, especially in the country's tier I and II cities. Shopping malls and supermarkets have become significant points of sale for RTE and frozen food items, accounting for nearly 75% of frozen food sales. They are doing this through promotional campaigns that inform customers about exclusive stores where their products are available.

5. Attractive advertising and promotional campaigns help popularize RTE products

Players within this field offer similar products, with minor distinctions in terms of taste, price, and quality, leading the aggressive competition within the market. Hence, companies are always looking for ways to make their promotional campaigns as attractive as possible, especially in tier I, tier II cities and rural markets, battling over consumer mindshare and recall value.

CHALLENGES

1. Lack of effective product distribution system

The RTE market in India is largely composed of unbranded products. As a result, the supply chain contains many small stakeholders like raw material producers, research and quality testing units, suppliers of RTE manufacturers among others. Many such siloed units are making the food distribution system a complex one. Also, lack of proper storage facilities end up in considerable food wastage.

2. Negative perception affecting consumer behavior adversely

It is noticed that most of the aged city dwellers are under the impression that the food-preservatives used in the RTE products reduce their nutritional value. As a result, they prohibit the younger generation from consuming the packaged ready-to-consume food products, hampering overall RTE product sales in India.

3. Increased health concern

Many health experts state that frequent consumption of RTE food products might lead to high blood pressure and cholesterol. Also, such food items develop hypertension, diabetes and heart diseases. This deters health conscious consumers from purchasing such food products. Indians often consider that packaged ready-to-consume food items contain a high concentration of salt, sugar, and fat. These beliefs deter them from consuming such products.

LITERATURE REVIEW

Sundaram, vijaybhaskar (2012) in their study titled 'A MARKET STUDY ON KEY DETERMINANTS OF READY-TOEAT/COOK PRODUCTS WITH RESPECT TO TIER-I CITIES IN SOUTHERN INDIA' have used survey based model targeting age group 25 to 40 for their research. The results of their study have shown the ready-to-eat market segment is defined by high growth in middle class section peoples and their life style changes due to job factors. This study shows that there is a greater demand for ready-to-eat food segments and the major attraction for these products are convenience, availability and less time consumption to cook. Customers in this study are surveyed in shopping malls but in order to understand general consumer perception it is also important to study consumer behavior from all sections of society.

Chaurasiya, Pandey et al (2020) in the study titled 'Consumer Behavior towards Ready-to-Eat (RTE) Market: A Study of MTR Foods' found out that MTR Foods is not a well-known brand in Malaysia, yet considered as popular brand in India. Most of the respondents in this study purchase or prefer the MTR Foods Ready-to Eat meals on the criteria of taste and nutrition, convenience and pricing. The respondents were most likely satisfied with MTR Foods. Few of the respondents were highly satisfied with the products. Our study focuses on RTE in general rather than a particular brand.

Nirmalraj R.J.T. (2012): This study reveal the factors that are affected consumer buying behavior of "Ready to Eat Foods in India" A descriptive study was conducted to attain an insight in to customer's perception about the

ready to eat foods. Findings of this study suggest that Indian companies must focus on creating awareness towards ready to eat food products so that potential growth chances can be maximized for ready to eat companies.

SIGNIFICANCE OF THE STUDY

This study will be an immense help to understand the Indian market for RTE food products. Also Indian consumers opinion on RTE foods and their concerns regarding the same.

OBJECTIVES:

After detailed review of literature including books, articles, research papers and journals, researchers have identified following objectives for the study.

1. To study current positioning of ready to eat food industry
2. To review the trends in consumer responsiveness towards ready to eat food industry
3. To analyze the perception of consumers towards ready to eat industry products
4. To predict the potentials of ready to eat industry for future

METHODOLOGY

An empirical investigation has been done to study the determinants of market potential of Ready-to-eat consumption in thane and Mumbai region using reliable data sources. The literature reviews are done based on the secondary information's available in the well known articles from good publishers and internet sources. Secondary data are collected from journals, magazine, and websites of marketing management.

Sample Size

Sample size of 158 respondents through filling questionnaire as primary data is taken for the research.

Sampling Procedure

The researchers adopted convenient sampling method for collection of primary data through the questionnaire designed. Online surveys are conducted to arrive at the result. Our questionnaire was created using Google Forms.

Data Analysis

Profile of respondents

A. on the basis of age

15 to 25 – 40.5%

26 to 35 – 21.5%

36 to 45 – 32.3%

46 and above – 5.7%

B. on the basis of gender

Male – 24.7 %

Female - 75.3%

C. occupation of respondents

Student – 31.6 %

Professional – 30.4%

Business – 1.9%

Homemaker – 4.4 %

Service – 30.4%

Others- 1.3%

D. relationship status of respondents

Married- 43.7 %

Unmarried- 54.4%

Others- 1.9%

E. respondents who consume RTE food products
Consume- 74.1%

Do not consume- 25.9%

F. on the basis of monthly income (in rupees)
0 to 20,000- 35%

21,000 to 50,000- 24.8%

50,001 to 2,00,000- 32.5%

2,00,001 and above- 7.7%

FINDINGS


- Out of total respondents, only 74.1% consume RTE food products.
- Of the 74.1% respondents who consume, we noticed that only 1.7% consume RTE food on daily basis, mostly people consume it on weekly and monthly basis.
- When food is not cooked at home, 67.5% people order food online whereas only 12.8% actually consume RTE foods.
- People prefer RTE foods for breakfast(37.6%) and dinner (57.3%)
- 82.9% of the respondents spend less than 10 percent of their income on RTE foods
- Major reasons for buying RTE foods are time saving, availability, easy to use, clean and hygienic
- The concerns with RTE foods are
 - a. freshly cooked food is healthier
 - b. contains large amount of preservatives
 - c. less nutritional value
 - d. leads to weight gain because of high salt and sugar content
- 41.9% believe that their purchase of RTE foods has been reduced during the pandemic.
- Since 67.5% people order food online, this could be the reason why during pandemic there was not much increase in sales of RTE foods, because people prefer freshly cooked food.

CONCLUSIONS

Since 67.5% people order food online, this could be the reason why during pandemic there was not much increase in sales of RTE foods, because people prefer freshly cooked food. Out of total respondents, only 74.1% consume RTE products, which mean the producers still need to attract the rest towards their products. The concerns raised in this study can be addressed by the producers in order to change consumers perception towards RTE foods.

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 NO ACCESS

The emerging mutual fund industry in India: an impact analysis of investors' awareness on investment behaviour

Sodi Jasbir Kaur and Jehangir Bharucha

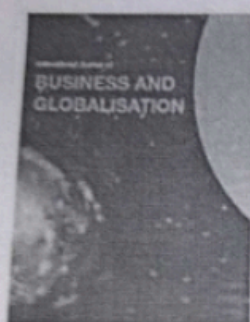
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ABOUT

Abstract

India has more than 1.2 billion people, yet, a mere 3.5% are mutual fund unit investors. This study attempts to explore investors' awareness, perception and experiences towards mutual funds in the Indian city of Indore. The sample size covered 300 investors in Indore who were spread throughout the city and its suburbs. A series of chi square tests were conducted on the data. Out of the respondents, 68 are not even aware of mutual funds and of the 196 respondents who are aware of mutual funds, only 68 (34.69%) have invested in mutual funds. The fixed deposits of banks are the most preferred channel of investment. This study has shown that investment in mutual funds is more often influenced by qualifications, occupation and income. The issue of low penetration of mutual funds can be by increasing the level of financial literacy of Indian investors.



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Natural ingredients for a bacteria-free library collection

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Abstract

Fumigation is widely used for getting rid of pests. This treatment makes use of chemicals. However, if repeated applications are not made, the insects and pests tend to breed again. This treatment also does not take care of the growth of microorganisms that feed on organic substances. India has a warm and humid climate that encourages the growth of microorganisms. Indian tradition makes use of various herbs and spices to preserve reading materials. This study was therefore undertaken to view the effect of locally available herbs and spices on paper. Experiments were carried out in a college laboratory. This was done with the objective of studying the inhibitory action of neem, cinnamon, cloves, pepper and a mixture of all of these herbs and spices.

Keywords

Library preservation, microbial contamination, natural preservatives

Introduction

Most of the insect species that are likely to infest paper collections are attracted to paper because of its size and the adhesives and starches that are used, which all provide food for various insects. Many chemical methods are used regularly to control pests such as silverfish, firebrats, psocids (also known as booklice) and cockroaches. However, paper, being organic in nature, can also be a feeding ground for microorganisms. Moreover, packed bookshelves may obstruct airflow and allow airborne microorganisms to settle and grow on books. Countries like India have a warm and humid climate, which encourages the growth of microorganisms that degrade paper.

The control of these microorganisms is a challenging task as they do not respond to the regular cleaning and pest-control methods of a library. The library environment offers optimal conditions for the proliferation of microorganisms, and this contamination not only has adverse effects on the life of books, but can also affect the health of users along with the air quality of the library.

A study was undertaken to identify the microorganisms growing on paper that had been put through

regular biannual pest control. Based on the presence of microorganisms, the action of naturally occurring substances on these microorganisms was studied.

Need for the study

Various library studies carried out across the world have found the existence of bacteria-contaminated collections, despite all the precautions taken against this [AQ5]. Such contamination can also have adverse effects on the health of library users. Hence, the researchers were interested in verifying the bacterial contamination found in a library collection and studying the impact of various natural ingredients on these microorganisms. For this study, commonly occurring substances such as pepper powder, cinnamon powder, neem oil, clove powder and a mixture of all of these were used to study their inhibitory effects.

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Table 1. [AQ11]

Box number	1	2	3	4	5
[AQ12]	Wheat flour + cinnamon powder	Wheat flour + pepper powder	Wheat flour + neem powder [AQ13]	Wheat flour + clove powder	Wheat flour + a mixture of all the herbs and spices
p value	.033947	.008919	.249982	.386154	.157923

Method and observation

The researchers have backgrounds in analytical and medicinal chemistry and organic chemistry, respectively, and were keen to undertake the present study. They sought guidance and support from the Biotechnology Department at the SIES College of Arts, Science and Commerce, which is the parent body of one of the researchers. The college is located in the heart of Mumbai, India, and known as a well-respected institution that has served the ever-growing educational needs of students from the north and central Mumbai suburbs since 1960. The Biotechnology Department was established in 2002 and offers courses for undergraduate, postgraduate and PhD students; it is equipped with a state-of-the-art laboratory and other required facilities (such as PCR [AQ6] and a spectrophotometer). The Biotechnology Department was used to conduct the tests as the materials and instruments required for this study were readily available. The late Dr Rajalaxmi Amudan, an experienced biotechnologist and faculty member of the SIES College of Arts, Science and Commerce, mentored the experimental study.

All of the books selected for the study were subjected to chemical pest control three times a year. However, the samples collected from these books showed the presence of microorganisms. These microorganisms were identified as belonging to the *Bacillus* species by 16S ribosomal RNA tests. The subsequent step was to try and inhibit the growth of these microorganisms with the available resources. Naturally occurring substances like neem, cinnamon, cloves and pepper are readily available and used in day-to-day life. Further, they are known for their medicinal properties. It was therefore decided to study the inhibitory effects of these substances.

To study the effect of naturally occurring substances like neem, cinnamon, cloves and pepper, books belonging to different accession numbers were selected with the view that older books may have more contamination compared to newly acquired books. A ditch-plate method was used to check the inhibitory action of neem powder [AQ7], cinnamon powder, clove powder and pepper powder. This

method consisted of preparing a ditch in a sterile nutrient agar plate. The ditch was then filled with the substance mixed in nutrient agar and set [AQ8]. The organisms were streaked evenly across the ditch and incubated for 24 [AQ9] at 37°C. The observed zones of inhibition provided the measurable sensitivity of the bacteria to the antimicrobial substance. The entire procedure was done under sterile conditions to prevent contamination.

A microbial inhibitory count for neem oil was performed in order to confirm its inhibitory action by using slants (5 ml) of nutrient broth and neem oil (1 ml to 3 ml). It was observed that 3 ml of neem oil had the maximum inhibitory effect. Further, to confirm inhibitory action, pellets were made of an equal proportion of wheat flour and cinnamon powder, wheat flour and pepper powder, wheat flour and neem oil, wheat flour and clove powder, and wheat flour and a mixture of all of the above. These pellets were put in boxes containing eight books each, and a standard without any inhibitory agent was also maintained. Swabs were taken before placing the pellets in their respective boxes and after 1 day and 23 days. The microbial counts were compared, and it was observed that [AQ10].

The results of a paired *t* test to test for a significant drop in the number of microorganisms for all five methods are shown in Table 1.

All of the boxes showed a reduction in the number of microorganisms. However, Box 1 and Box 2 – that is, wheat flour + cinnamon powder and wheat flour + pepper powder – showed the greatest reduction in the number of microorganisms over the 1–23-day period. The box without any inhibitory agent showed an increase (matlike appearance) in the number of microorganisms.

Findings and suggestions

Even though neem, cinnamon, cloves and pepper all exhibited inhibitory properties, neem powder [AQ14] was the most effective. However, a dusting of neem powder on books would leave a residue and stick to the hands of users. Neem oil exhibited the greatest effect on microorganisms [AQ15]. Neem oil

could therefore be mixed with methanol and placed in small bottles on bookshelves; being volatile, it would evaporate and inhibit the growth of microorganisms. A mixture of neem oil and methanol in the proportion of 3:2 could be sprayed on shelves or cotton-wool balls dipped in neem oil could be placed on shelves. A further detailed study is required to determine the best method of application.

Components such as cinnamon powder, pepper powder and clove powder, and a mixture of all four herbs and spices, displayed a considerable reduction in microbial activity. Hence, placing pellets made by mixing equal proportions of wheat flour with cinnamon powder, pepper powder, clove powder or a mixture of all four herbs and spices (and water, and then drying them) among book stacks can restrict the growth of microorganisms.


Declaration of conflicting interests

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Author biographies

[AQ1]

Pandemic Impact on Education Sector

Madhuri V. Tikam

How is the education sector dealing with the scenario?

The nation of education sector in the home country was raised. Even the declared countries started to deal with the crisis. Former secretary of education for Maharashtra, Prof. S. S. Chavan, said that there is a need for a

Introduction

The novel Coronavirus disease 2019 (COVID-19) was first identified in December 2019 in Wuhan, China. It has since spread globally so rapidly that World Health Organization confirmed it as pandemic on 11 March 2020. It has affected 225 countries and territories with over 27,36,979 reported cases and 1,92,125 deaths up till April 24, 2020 (Wikipedia, 2020). Most countries have implemented social distancing measures to curb the spread of infection and minimise the impact of the virus. Closure of educational institutes was part of the preventive measures followed by 191 countries. As of 24 April 2020, approximately 1,579,634,506 learners have been affected due to school closures in response to the pandemic (UNESCO, 2020).

How is the education sector dealing with the scenario?

The reaction of education sector to this novel scenario was mixed. Even the developed countries fumbled in dealing with this crisis. Former secretary of education for Massachusetts, Paul Reville approved that there is a need for a backup online learning system while dealing with such crisis which is missing in majority of educational institutions. Educational institutions were equipped with

technological infrastructure to a varied extent. Management Information System (MIS) is used widely in administrative and management system of educational institutions. In teaching learning process, the use of technology is limited and in supportive role. Full-fledged formal online delivery of education with appropriate assessment and evaluation technique was rarely observed in most of the schools, colleges and universities worldwide.

Realising this situation, many experts in the field came forward to support educational sector.

UNESCO launched a global education coalition programme on March 26, 2020. It aims to support countries in scaling up their best distance learning practices with the help of private sector, philanthropic and non-profit organizations. Microsoft, GSMA, Weidong, Google, Facebook, Zoom, KPMG, Coursera, Khan Academy, Dubai Cares, Profuturo and Sesame Street joined the coalition. They agreed to contribute their resources, services and expertise around technology to support schools, teachers, parents and learners during this time of unparalleled educational disruption. Companies using learner and educational data have committed to uphold ethical standards.

The education ministries and educational institutions worldwide have begun using various distance education methods. Educational resources are made available to learners via open educational resources and digital repositories. Various online courses are made available to students and teachers. Teachers continued their teaching work with the help of various online solutions such as Google classroom, Google hangout, G-suit, YouTube, Moodle, Skype, Blackboard, Office 365, Ted Ed, Zoom. Many countries where availability of infrastructure and internet is a challenge have adopted traditional modes of broadcasting lectures via television and Radio. Countries like Argentina, Fiji, Kenya, Korea, Malaysia, Maldives, Nigeria, Peru have started training via radio to reach the maximum learners. Many countries like Argentina, Bhutan, Bulgaria, India, Indonesia, Japan, Libya, Malaysia, Mexico have incorporated television broadcast of educational content.

Hindering Blocks

The pandemic hit the world and the educational sector unexpectedly. Online delivery of education which was additional feature of education system suddenly became the core. It affected all the stakeholders of the education system. The major obstacles were preparedness of stakeholders, infrastructure and timely availability of necessary guidance and support.

Preparedness of the stakeholders

Educational Institutions: Many educational institutions do not have online access to students' data, educational resources and expertise to generate online content. Lack of guidance by the education authorities regarding delivery, assessment and evaluation framework added further to ambiguity.

Teachers: Majority of teaching faculty were not familiar with the technical aspects of online delivery. Lack of technical expertise, scarce infrastructure, unfamiliarity with effective online delivery techniques of educational content became obvious, though many experts came forward to offer training and solutions, the crucial time of teachers is being spent in getting familiarised and learning the online education delivery channels rather than actual online delivery of education. In addition, online teaching is different than traditional face to face teaching. The teachers are yet to discover the required skills and techniques to engage the students by creating supportive online learning environment.

Students: Similar to teachers, majority of students are exposed to online training mode to such a great extent for the first time. Students who were familiar with face to face learning means are missing social contact. They are experiencing low engagement in the online learning mode. When the researcher talked with around 100 school and college students found that lack of appropriate learning atmosphere, low speed of internet, technical hitches and a plenty of other diversions are some of the reasons for this low attainment. Absence of practical hands-on training is adding to the difficulty level of current learning process.

Parents: During this 'learn from home' setting, educational institutions and teachers are expecting contribution from parents to keep learning process on. However, parents worldwide are finding this overburdening. Reasons are many. To name a few - Parents themselves are stressed. They have so many other obligations. They are not educated enough to guide the children. They don't have required skills. Parents observe that being away from their friends and schools and current situation are causing stress among the children and hence they do not want to add to their children's stress level by forcing home schooling. No access to books, school supplies, smart gadgets, Wi-Fi and libraries are limiting the parents - especially the low-income families. Inadequate access mechanism, multiple children and disturbed learning schedule are making the home-schooling experience ineffective. As per Los Angeles Times poll, 89% of parents are concerned about ensuring their children do not fall behind academically during school closures, and 79% are worried about their children's mental well-being while at home (Kohli 2020).

Infrastructure

Educational resources: For online delivery of education, teachers and learners need educational resources like books, journals, reports, etc. Most of the schools, college and universities don't have online content of the required material. A few institutions, which have their own digital repositories offers the access only on the campus due to copyright aspects. Open education resources may not meet the specific requirements of the teaching learning community. Distribution of free PDFs of copyrighted material is making the publishers uncomfortable. Notably a number of publishers responded to the need of the time and made their resources freely available to all for the limited time.

Internet access: Speed of internet access, cost of data transfer and privacy of participants data are issues of concern. An obvious example is Zoom - a video meeting service. It became popular worldwide for educational lectures, business meetings and webinars. Daily meeting participants on the platform surged from 10 million in December to 200 million in March, and 300 million in April. But this

enhanced popularity of zoom attracted hackers and caused privacy risk to users- from built-in attention-tracking features to recent upticks in "Zoom bombing" (in which uninvited attendees break into and disrupt meetings, often with hate-filled or pornographic content). This is an issue of concern, especially for educational institutes where the data of young children who are unaware about digital security aspects is shared (Hodge 2020).

Equipment and learning environment: In a house, there might be more than one learning child, but the household might not have sufficient smart phones or computers for every student. During the lockdown almost all the family members are stuck at home. Daily life problems, financial crunches and uncertainty of future are leading to psychological disturbance in students and parents equally. This is affecting the learning environment.

Guidance and Support

In this time, all the stakeholders need timely, easily accessible guidance and support for their varied doubts. Educational institutions want guidance on how to cope up with changing needs, teachers need to learn about various online teaching learning platforms, students want somebody to answer their queries and solve their problems regarding syllabi and its access mechanism. Parents require tips to keep the students motivated and on education track. Psychological help and solutions for anxiety are required. Some organisations are offering such help mechanisms but the efforts are scattered and hence the degree of quality differs.

Best Practices adopted by various countries

Every country is trying their best to keep learning on during the pandemic. World Bank has compiled the activities carried out by various countries. Here is a summary of some best practices worth imitating by others for the betterment of teaching learning community. It was observed that involvement of Ministry

of Education in broadcasting the coursework, hosting the digital repository and publishing the schedule for students made things much easier for the education stakeholders.

Delivery Mode:

- In Argentina, Ministry of Education and the Secretariat of Media and Public Communication, began broadcasting 14 hours a day of television and 7 hours a day of radio educational content. The television broadcasts premiered on the public channels and are also broadcast by private, provincial, university, cooperative and community channels. Radio broadcasts via National and its 49 subsidiaries throughout the country. For students without access to technology or connectivity, this television and radio programming is supplemented with 'notebooks' packed with learning resources that have been delivered to homes of these students.
- UNICEF Bhutan is working with the education ministry to ensure that education continuity is implemented in the current emergency context, through the national broadcaster.
- Mexico government is using television for education since 1968. It is capitalizing on the existing educational television to provide remote learning opportunities to students.
- Saudi Arabia - the Ministry of Education (MOE) is utilizing TV and social media to broadcast nationally daily lessons for all grades in 112 educational subjects through 19 TV channels (broadcasting). Students are offered five options for virtual learning by the ministry.

Resources for self-learning:

- Argentina makes available a collection of on-demand digital educational

materials and resources organized by educational level and subject area on the ministry of education website. The platform includes self-learning resources, virtual reality educational content, suggestions for families and teachers, films, interviews, educational and communication proposals through social networks and videoconferencing tools, agendas for online events as well as proposals for free time for students.

- A content platform is developed by the Ministry of Education, Austria and hosted on its website. It offers large number of content and free resources by numerous publishers and schoolbooks providers. It also offers learning and exercise material from private providers for students of all school levels to practise at home.
- In Belize, their Caribbean Examinations Council (CXC) has developed an e-Learning Hub for high-quality resources for learners, educators, parents and employers.
- The Ministry of Education and Science of Bulgaria has launched an e-learning system on its website offering free resources by numerous publishers.
- Ministry of Human Resource Development of India also made available e-resources such as e-textbooks for school children and e-content of 87 undergraduate courses. Online courses are made accessible with the help of e portals like SWAYAM, UG/PG MOOCs, and Spoken tutorials. Online lectures for all level of students are provided via e-PG Pathshala and UGC-CEC You tube channel. National Digital Library of India (NDLI), Shodhganga and e-shodhsindhu offers digital repository for academic content, Indian theses and dissertations and e-journals. Virtual Labs (Vlabs), e-Yantra simulation software and FOSSEE (Free/Libre and Open Source Software for Education) project are aiding the academia and research during the lockdown.
- To supplement television programming for students, digital copies of all textbooks across all subjects and levels of education have been made freely available on the Government of Mexico website in text as well as Braille format.

Schedule of Teaching Learning:

- Argentina's 'the class of the day', section of education ministry's website provides a comprehensive daily proposal for student learning in combination with the educational television program and a series of printed notebooks.
- The Ministry of Education, Youth, Sports and Culture, Belize hosts detailed daily schedules and resources for students. The resources include video lessons of teachers teaching along with lesson plans, questions for parents to ask children, worksheets, assignments, learning activities for younger students involving their family members, as well as further self-paced interactive videos for older students.
- Ministry of Human Resource Development of India released an alternative academic calendar for school students. It has to be followed by the teachers, students and parents to cover the syllabus during the lockdown. The alternative academic calendar is developed by NCERT to help in keeping the students busy and at the same time maintain continuity of their learning during the lockdown period.

Guidance and Support:

- The Bhutan Ministry of Education presented its 'guidelines for curriculum implementation plan for education in emergency (EiE)' related to the implementation of e-Learning in school education, roles and responsibility of different stakeholders, early childhood care and development and special education needs, non-formal education, reaching the unreached through print media, and volunteer teachers of Bhutan.
- Ministry of Human Resource Development of India started webinars for school teachers especially under Project NISHTHA. It also made available the database of experts in various fields to all. Education minister himself

held a webinar to answer the doubts and queries of parents regarding their wards' future. For psychological support dedicated helplines are provided. Government also launched video tutorials and arogya setu app for health related issues during the COVID 19.

- The Ministry of Education Russia has put out guidelines for the implementation of distance learning technologies across all levels of education. It has launched a hotline to support regional ministries, schools, and tertiary education institutions in organizing distance learning. Guidance has been provided to educational leaders and staff on how to cope with the pandemic at the psychological level. The Ministry holds regular online translation on its YouTube channel and organizes webinars for universities. It has also launched a hotline and a website for universities with methodological support and free online courses on its website. Universities are motivated to share their experience in the educational process online on a dedicated telegram channel. The Ministry is currently piloting a new service for school graduates so that they can apply to the university programs online, using a state portal.
- Belize's CXC Learning Hub enable the teachers to create virtual classrooms where they can interact directly with students, in real time, incorporating content available on the CXC Learning Hub as well as their own content developed to support teaching and learning.
- Mexico uses its television for education system for training and supporting teachers with 'digital education and training' using Massive Open Online Courses (MOOCs), online nano courses and online conferences.
- Bulgaria began "telephone e-education" service to answer questions and provide suggestions related to the education.

Network and Technology:

- Argentina ministry made its education portal zero-rated to ensure equity in access to the learning resources by all students. That means browsing the digital platform will be free of charge, it will not consume data.
- In China, the Ministry of Education partnered with the Ministry of Industry and Information Technology upgraded the bandwidth of major online education service platforms, especially the capacity of the National Cloud-Platform for Educational Resources and Public Service in serving millions of visitors simultaneously especially for the under-served regions.
- The Paraguay Government signed an agreement with Microsoft to cover the e-learning needs of 60,000 teachers and 1,200,000 students at zero cost.
- Boston, United states has bought 20,000 Chrome books and is creating hotspots around the city where children and families can go to get internet access.

What next?

This pandemic surely disturbed the smooth working of educational institutions, but at the same time it gave a chance to reimagine and redesign the education sector. On a fire fighting level all the stakeholders tried to learn new skills and techniques to keep the teaching learning on-going. Yet it's not over and there is a lot to do and achieve. There are some issues of concern which need to be resolved.

Lack of protocols in education, varied syllabi, and different exam patterns are some of the challenges one needs to deal with. It is essential to develop more open and flexible education systems for the future. There is a need to train the trainers and keep them upgraded continuously to use the latest technology and effective education delivery via various channels. Online accesses to student

and institutional data, digital resources, alternative assessment mechanisms are must to deal with such situations in future.

This situation will further pose issues like how to deal with digital divide, infrastructural and copyright issues. Such conditions may trigger public-private educational partnership in future. But, there is a danger that this may handover concentrated power to big tech having profit as a priority and lack of awareness of requirements of the education sector. All the stakeholders should be trained to protect their own and others privacy and rights. Students should be equipped with ability to process the information. There is a need to concentrate on low tech solutions as alternative educational delivery channels to balance the variable impact on different strata of learners and to reach to maximum student population.

Such global calamity can adversely affect the funding of educational institutions. A recent example is the request made by Education Ministry of US to wealthy educational institutions for rejecting the stimulation funding which is provided for assisting students' travel and living expenses and aiding their transition to online learning. Similar cuts might be common on a global level. Lack of funding may affect the upgradation of educational institutions. In addition, this pandemic may keep foreign students at bay. There are chances of increased dropout rate from financially affected low-income families. The education sector has to pay attention to survival, outcome and dropout of students post COVID19 attack.

Conclusion

Lectures cancelled, exams postponed, practicals are on a standstill, uncertainty about reopening dates of educational institutions and dubiety about the outcomes – this is the current picture of education sector throughout the world. But there is a silver lining – all the education sectors came together to deal with the situation. Teachers are learning new skills to reach out to their students. A never before bonding is being developed among the education stakeholders. A healthy sharing of knowledge and resources is going on. The intellectual community have

got a unified goal to deal and if all come together with positivity then there is no doubt about a better future for education and the entire humankind.

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Students Perspective of Mobile learning in Higher Education

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Abstract:

Education creates ample opportunity and paves the path to success. The present condition wants everyone to be a continuous learner, have technological skills and communication skills. Advance in technology in all areas has brought changes in the education system. Learners are now able to increase their knowledge and skillsets by opting for courses taught by the renowned professors of the prestigious universities. As an enhancement of skill is expected, the standard for better grades, better job opportunities, makes more and more people opting for online courses as it can be accessed anytime anywhere. There are many apps with which one can enhance his knowledge. People in remote areas can not only access the online classes but they can overcome the problem of lack of educational resources. To access these materials, they need a laptop, desktop, or a simple handheld device like mobile. Internet is available everywhere and mobile has multiple features and is essential for everyone. This paper analyses the purpose of students using mobile phones, the number of hours they are spending to access the educational information, and the effect of it on their performance level.

Keywords: Education, Mobile technology, online courses, APPs

Introduction:

The main purpose of education is to facilitate learning. The advancement in technology enables learning can happen anytime, anywhere. Education via digital platforms making its path into our education system. Presently there is lot of online educational portals providing educational

facilities in almost all subjects, catering to the needs of students of all level from schools, colleges to working professionals. These platforms can take learning resources, instructional materials such as videos, notes, examination preparation material, examination into the vicinity of learners wherever he is using digital technology. Thus, learners across the globe and any age group can acquire the knowledge and skills they want. Learners living in remote areas and cannot attend proper educational Institutions can opt for online learning platform. Government e-pathshala enables students, parents, educators to access resources (textbooks, audio, video) via any digital device. In India Tata Interactive Systems, Educomp Solutions, NIIT etc. are providing innovative and cost-effective digital learning solutions. People from the rural areas who are deprived of world-class education can enroll in these online courses for free or for a nominal fee which is affordable to many. They can connect to these courses through their computer, laptop, iPad, mobiles. Of these mobiles is commonly owned by everyone. Nearly all students nowadays own mobile devices and more than half own more than one. People can access these courses through their mobile connected to the internet. So, the future of learning is mobile. It can be used to deliver important instructions, to deliver lectures. M-learning is a new and independent part of e-learning where the education contents, delivery instructions, notices are handled solely by mobile devices. The online and technology-driven education is playing an important role in evading the challenges of classroom-based education with the 3'A's Accessible, Anywhere, Anytime. Apart from students, working professionals and others who want to learn can increase their skill set by opting for courses taught by renowned Professors from the top Universities of the world. Usage of mobile in learning in addition to other activity provides flexibility in learning and as it is used by many it will become a trend to use it in learning, considering the advancement of technology and its integration into the society and circumstances are changing. Learner can use mobile devices not only to access educational information from various resources, they can create contents by themselves; share these resources to others both within the classroom environment and outside also. The use of mobile technologies can help teaching faculties to adopt a learner-centered approach to learning. Learning can result in different ways: learners can use mobile devices to access educational materials from various links, creates their own content, connect with others to share the resources, both within and outside the classroom infrastructure. Educational materials can be shared among everyone by using the same content, which leads to instant feedback and

instructions. Most of the students, researchers, and educators view M- learning as the immediate successor of eLearning.

Review of Literature:

Several studies have been conducted in an attempt to find the growing use of mobiles in learning. Cheung and Hew (2009) reviewed 44 articles published until the end of 2008 found that descriptive research was the most dominant method in studying mobile learning in schools and higher education where the data for studies is collected through questionnaires. Learning happening with the help of mobile devices is known as M-learning (Toteja& Kumar 2013). M-learning makes it possible for students to communicate, interact, and behave among each other with the aid of mobile devices (Al-Emran, Elsherif, and Shaalan2015). BlankaKlimova and Petra Poulova(2015) conducted a survey and found that the majority of students use mobile devices for learning for their studies to complete the missing information from their regular classes. Gikas& Grant (2013) found that mobilephones allowed students to access course materials andalso gave them the opportunity to share the contents, potentially contributing to bridging the gap between learning and real life.

Objective: To investigate whether mobile devices can improve the student'sgrades.

Hypothesis:

H₀: There is no association between gender and grade after using mobile devices for studies by learners.

H₁: There is an association between gender and grade after using mobile devices for studies by learners.

Methodology:

Survey method was used to collect the relevant data for the present data. A survey was taken from students of Mumbai Suburban colleges studying in Commerce, Social Sciences, Science and Technology, Medicine and Pharmacy branches. The data is also collected from various publications, articles, reports, and websites.

Tools: The researcher prepared a questionnaire based on the usage of Mobile Technology in learning. The questionnaire covered all the aspects of the study needed for the research. A survey

was taken from students of Mumbai Suburban colleges studying in Commerce, Social Sciences, Science and Technology, Medicine and Pharmacy branches. The purpose of the survey questionnaire is to study the student's awareness of M-learning.

Summary of the Survey:

A survey of 70 students was carried out in which they responded to the questions in the questionnaire out of this 44.3% are male and 55.7% are female students. Among this 40% of the students were 19 years of age. These students were studying in FY (11.4%), SY (44.3%), TY (27.1%), PG (17.1%) classes. 51.4% of students are from Commerce, 11.4% of students from Science, 2.9% of from Social sciences, 8.6% of students from Technology and 25.7% of students from Pharmacy took part in the survey.

Profile	Classification	Number	Percentage
Gender	Male	31	44.3
	Female	39	55.7
Age group	18	9	12.9
	19	28	40
	20	17	24.3
	21	8	11.4
	22 And above	8	11.4
Class	FY	8	11.4
	SY	31	44.3
	TY	19	27.1
	PG	12	17.1
Stream	Technology	6	8.6
	Medicine & Pharmacy	18	25.7
	Science	8	11.4
	Commerce	36	51.4
	Social Science	2	2.9

Table 1: Demographic profile of the respondents

Owning of mobile devices and availability of the Internet:

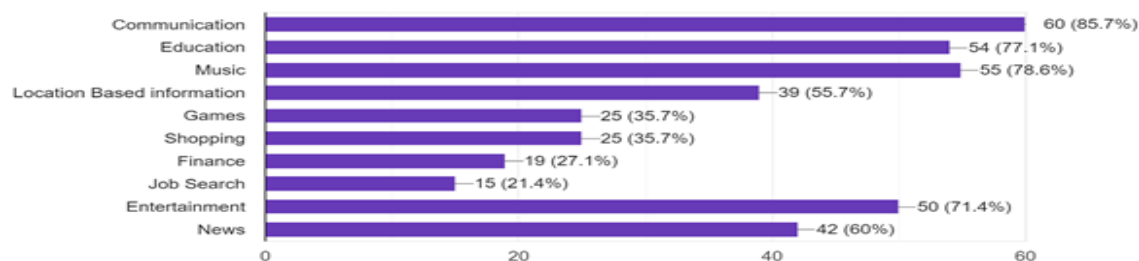
64.5% of students surveyed had their phones at the age of 14-16 years. 97.1% of the respondent had access to the internet. It is important to note that 97.1% of the students surveyed had internet access on their mobile. 62.9% students said that net connectivity is good.

Net Connectivity Speed	Good	Average	Poor
No.	44	22	4
Percentage	62.9	31.4	5.7

Table 2: student's opinion about the availability of the Internet

Usage of Mobile Phones:

Mobile is used for several purposes such as Communication, education, Music; Location-based information, games, shopping, Finance, job search, entertainment and news. College students use smartphones as learning aids in e-learning, web-based learning, to know their course schedule. Students have high smartphone self-efficacy.



Preference of Mobile access by functional Category

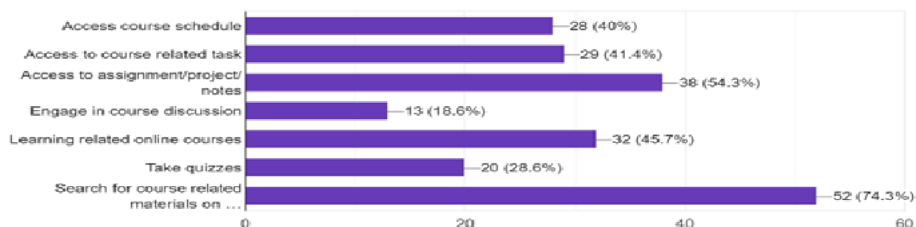
Among this, maximum number of students are using mobile for communication as it is designed for that and 77.1% of them are using it for education purposes. 85.7% of respondents are using mobile for learning. Maximum of 44.3% of students are spending 1-3 hours on mobile for learning activities.

No.Of Hour's Spent	Less Than 1 Hour	1-3 Hour	3-5 Hour	More Than 5 Hours
No.	27	31	9	3
Percentage	38.6	44.3	12.8	4.3

Table 3: No. of hours spent studying using mobile devices by learners

Students access content such as course schedule, video content, and assignment on mobile. The learning activity includes viewing course videos and contents developed by their teacher or someone else, one can download the content and can use later. The learner's responses show that

38.6% prefer to view course videos and animation developed by others and 14.3% are viewing the course materials created by their teachers. 47.1% are downloading and saving content for lateral use. Learner's preference of learning activity can be shown in the following graphs.



There are many Apps freely available for educational purposes and students are making use of these to get a better understanding of their subjects and get additional knowledge. Contents in these Apps can be downloaded and viewed later also. YouTube and Wikipedia are used by many than accessing TED, Khan Academy, Coursera, Duolingo, Lynda and Lumosity. As there are many apps available, they can have a choice of selecting from any one of these. All the contents are free, but the challenge is to select the best one and the one relevant to the course. They are happy with the contents available in the App.

Course Content	Excellent	Satisfactory	Average
No.	28	35	7
Percentage	40	50	10

Table 4: student's opinion about course content

As contents can be viewed from their mobile devices from Any time, Anyone, Anywhere. They can make use of their time to improve their grade.

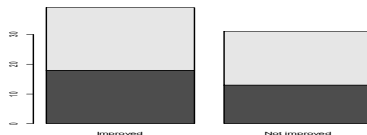
Grades	Improved	Not improved
No.	39	31
Percentages	55.71	44.29

Table 5: Student's view on the impact of these Apps on their grades:

Chi-Square test in R is used to check the hypothesis.

	Improved	Not Improved	Sum
Male	18	13	31
Female	21	18	39
Sum	39	31	70

By using Chi-square test of independence,
Pearson's Chi-squared test with Yates' continuity correction
data: tbl
X-squared = 0.01226, df = 1, p-value = 0.9118.



Since P-value is greater than 0.05. Hence, we do not reject the null hypothesis at a 5% level of significance and our data reveals that there is no association between Gender and Grade.

Students preferred mobile for learning as it is easy to carry and few do not have a desktop or laptop at home so using mobile as a device they can access the content and in their class group.

Conclusion:

Constant up-gradation of the knowledge is the need of the hour. Enhancement of skills is required in all employment sector. The result of the survey indicated that the majority of the students are using mobile for learning and are aware of the various application available. Mobile learning helps the students to access to multiple information sources and makes the learning flexible. The m-learning environment will provide more learning opportunities for the learner which allows him to study at anytime, anywhere he wanted to study.

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EXAMINING FACTORS INFLUENCING RESPONSIBLE GREEN CONSUMPTION BEHAVIOUR OF CHEMICAL INDUSTRIES IN INDIA

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ABSTRACT

Purpose: The main purpose of this study is to analyze the factors that which influences responsible green consumption behavior of Chemical industries across India. It has been attempted to study new variables such as Clean Water Concern and readiness to pay extra price for green consumption.

Design/methodology/approach: The primary data were obtained with the help of Google form and 300 CEO and top level executives were selected from various chemical companies located in different geographical areas of India. To test the identified model procedure in IBM SPSS AMOS related Structural equation modeling has been used.

Findings: Barring the positive correlation between social influence and intention to consume the research showed a favorable inclination towards TPB framework. It was proven from the study that Green consumption intention was indirectly influenced by clean water concern by way of its effect on perceived behavior, social influence and attitude. The relationship of consumption intention with responsible green consumption behavior was moderated by readiness to pay extra price. It was found that consumption intention had an influence on responsible green consumption behavior.

Practical implications: The current study focuses on the factors that influence responsible green consumption and helps manufacturers to take advantage of the potential opportunities of responsible green consumption strategies across chemical industries in India.

Originality/value: The study is an extension of the existing materials on record by authenticating and enhancing the model of responsible consumption behavior in a novel Indian context and getting an advanced clarity of psychological mechanisms lying beneath and limitations between the association of Consumption Intentions and responsible green consumption behavior.

Keywords: Green Consumption, Clean Water Concern, Psychological Mechanisms, Modeling Procedures, Perceived Behavior

INTRODUCTION

Manufacturers are now more sensitive towards the environment due to which green consumption has become an increasing trend. In order to mitigate their carbon footprints, the industrialists are adopting environmentally friendly approaches. Encouraging others and following green consumption behaviour will not only lead to improved health but will also provide a platform that will add to creating a sustainable environment (Leonidou *et al.*, 2013). Understanding the increased awareness about sustainability among the masses, consistent efforts are made by the chemical manufacturing companies on green consumption and focusing on catering to the changing customer needs by providing them with green products.

Due to rapid industrialization in the developing nations there has been an increase in the environmental damage and numerous health problems. Hence to protect the environment and for better health, green consumerism is catching up gradually in India. The factors which affect green consumerism like the thought process and the way the consumer uses green products are social, cultural and economic. Therefore, in developing nations like India, it is imperative to study the intention of the industrial consumers and their behaviour towards green products. The current study tries to gain the knowledge of the behaviour towards buying and intention of chemical companies located in India towards green products. In India millions of people every year succumb to pollution. Despite this, the research, on testing their purchase intention and purchase behavior towards green consumption of products and services are limited

This research Supplements the planned behavior theory (Ajzen, 1991), by focusing on understanding the responsible green consumption behavior of chemical companies in India. To have and understanding the green marketers and manufactures should select India as a target markets as India has the World's second largest population In order to validate theory of planned behaviour with respect to Indian markets this study examines the three main forecasters which are perceived behaviour ,norms which are subjective and buying attitude

towards green product. In this study, the three main predictors examined are attitude towards buying green products, subjective norms and perceived behavior to find out the predictive ability to test whether PBT is valid in the Indian scenario or not. The research adds two more variables, clean water concern and readiness to pay extra price.

The research sample was different as compared to the sample of the previous studies and the focus of the research was to test whether Planned Behaviour Theory is applicable in an Indian context. Moreover, the study tries to understand the complex relationship between the variables which dependent and independent by finding out the social-psychological processes that explain the nature of relationships. The current research attempts to examine by suggesting and examining readiness to shell out extra price as a moderating variable which wasn't done in the previous studies. This research will help the green manufacturer in India to formulate customized consumption plans and help them to become responsible chemical companies of the nation.

THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

The PBT explains the behavioral intent in the context of perceived behaviour, social influence ,view point towards the behavior .Based on situation of the relative significance of the above three factors was asserted by Ajzen (1991). He also stated that depending upon the situation in certain circumstances a single variable may materially impact on the intention whereas in certain other circumstances two or three variables may be required to explain the individual's intention and behaviors this is also supported by the study carried out by (Chan and Lau, 2002)All these variables are described below:

Attitude

An attitude is referred to be an individual's performance of concerned behavior which may be positive or negative Ajzen (1991). A positive correlation between view point towards green manufacturing and green consumption behavior was supplemented by empirical evidence provided by few studies conducted in India **Khare (2015)** by conducting a study on consumers from metropolitan cities in India concluded that there exist a positive correlation between past green attitude and green consumption behavior. **Manaktola and Jauhari (2007)** in travel sector the consumers attitude towards green consumption influences the willingness of the consumers to opt for staying in hotel adopting green practices **Prakash and Pathak (2017)** concluded that view point towards green packing has a positive influence on the intention to purchase products that have ecofriendly packagingGreen PI and view point towards green packing were found to direct relationship **Paul et al. (2016)** and

Yadav and Pathak (2017). Whereas another study done by **Ramayah et al. (2010)** stated that there is non-significant association between attitude towards consequences and intentions of green consumption.

Social Influence

Social pressure for conducting or non-conducting of a particular behavior is perceived as social influence (**Ajzen, 1991**). The former studies have reported that the positive perception of important people like family, friends, relatives and peers towards eco –friendly products have a material impact on individuals' green consumption intention (**Dean et al., 2012; Teng et al., 2014**). **Yadav and Pathak (2017)** found that in relation to Indian context the PI is significantly impacted by SN in general towards green product.

Perceived Behaviour

The prior studies have concluded that the perceived ease of performing a particular behavior is the strongest forecasters of intentions and behavioural pattern of human being across a basket of green services and products e.g. Hotels that adopt green practices (**Teng et al., 2014**) and organic food products (**Thøgersen, 2007**)

Consumption Intention and Consumption Behaviour

Acceptance to perform a particular behaviour is referred as intention (**Yadav and Pathak, 2017**). The focus is to find out the motivating factor that leads to enactment of a behavior for example readiness to behave in a particular manner and the quantum individual effort that one is willing to take. Planned Behavior states that the intentions result into performance when one behaves according to one's own free will. As far as green products are concerned, **Yadav and Pathak (2017)** based on significant evidence concluded that the relation between the green consumption behavior and behavioral intentions is positive.

The following hypotheses are developed, based on the above arguments and the theoretical framework of TPB:

H1: There relation between Attitude and Green Consumption Intention is positive

H2: The intention to consume green product and Social Influence are positively related

H3: Perceived Behavior and Green Consumption Intention are positively related to each other

H4: The association between Consumption Intentions and responsible green consumption behavior is positive

Considering the available literature with respect to Indian context this study adds two variables to the model clean water concern and willingness to shell out extra price.

Clean Water Concern as Environment concern

Chen and Tung (2014) found out that Clean Water Concern as environment concern is an important variable which has positive significant effect on consumption intention via its effect on attitude, social influence and perceived behavior. The consumption intention is affected directly or indirectly by clean water concern as environment concern with the development of positive attitude towards responsible green consumption behavior of chemical companies Hartmann and Apaolaza-Ibanez (2012). Paul et al. (2016) with respect to Indian Context found that green consumption intentions are significantly directly and indirectly impacted by clean water concern as environment concern through the mediations of readiness to pay extra price. Therefore, we hypothesize the following:

H5. Attitude and Clean Water Concern are positively related

H6. There is a positive relation between Clean Water Concern and Social influence

H7. Clean water concern relates positively to perceived behavior

H8. There exist a positive relation between clean water concern and green consumption intention

Readiness to pay extra price

Due to high costs of production the cost of green products are much higher than the conventional products. (Ling, 2013.) Thus in green consumption price becomes a huge deterrent. (Gleim et al., 2013; Nasir and Karakaya, 2014). Environmentally concerned individuals have an inelastic demand for green products as per some researchers from the west. (Grankvist and Biel, 2001; Cronin et al., 2011). Contradictory to these researches, Yadav and Pathak (2017) and Prakash and Pathak (2017) in their study researched that for eco-friendly products customers are ready to shell out extra price . As there is a difference in findings it becomes necessary to analyze the causes that influence to pay premium amount on green consumption and responsible green consumption behaviour. Hence, we formulate the following hypothesis:

H9. Readiness to shell out premium price has an influence on the relation between green Consumption Intentions and responsible green consumption behaviour.

Research Methodology

Judgmental sampling method was adopted by the researcher in selection of “Industrialists of the chemical companies” to represent the chemical industries in India. The industries located in different geographical locations of India constituted the sample. An online google form was used in the collection of primary data due to which there was a probability that each industrialist got an equal chance to be a part of the research. The Industrialist were send a questionnaire on their official email id in the month of December 2019. Out of the 320 total responses received 300 were found appropriate for further research after removing the outliers and incomplete responses. Since judgmental sampling technique has been used which focused on educated managers and executives of the chemical companies, the results cannot be generalized to the entire consumer base in the country. In order to improve the results and make it more general to the entire population in future random sampling can be used.

Data Analysis

Table I mean, standard deviation and inter-correlations among the study variables

Variable	Mean	SD	1	2	3	4	5	6	7
Clean Water Concern	3.1612	0.60924	1						
Attitude	3.1511	0.6021	0.619	1					
Social Influence	2.3521	0.7016	0.315	0.459	1				
Perceived Consumption Behaviour	4.2551	0.7046	0.528	0.657	0.709	1			
Readiness to pay Extra Price	3.4041	0.6921	0.568	0.655	0.606	0.531	1	1	
Consumption Intentions	2.9525	0.6812	0.587	0.895	0.777	0.597	0.776	1	
Consumption Behaviour	2.0536	1.2131	0.352	0.488	0.665	0.323	0.612	0.626	1

Data Analysis was done by using SPSS AMOS 24. An ideal sample size of 150 was recommended by Iacobucci (2010) to arrive at better and convergent solution in place of

following various rules of thumb for three or more indicators per factor. Hence structural equation modeling (SEM) can be taken as the criteria of the required sample size for SEM had been met. Confirmatory factor analysis (CFA) was used to find out the convergent and discriminant validity of the research. In order to test the fitness of the proposed model SEM used.

Results

Table 1 depicts the inter-correlations standard deviation and Mean, among the study variables. The mean scores of the respondent's shows it can be seemed that the concern for clean water is high and consumption intention and attitude with respect to consumption of green products and services is significantly positive. There was a significant association between all the research variables.

Measurement model

Table II Confirmatory factor analysis

Model	χ^2	χ^2/df	GFI	CFI	IFI	TLI	RMSEA
Final Modified Seven –factor model	490.26	1.325	0.910	0.906	0.909	0.969	0.0405

To test the fitness of the Seven –factor model CFA was used. Some of the items were removed and CFA was run again as the factor loading for these items were below 0.50. In the final model good fit to the data was found and as every factor loadings were found to be significant at 0.05, between the constructs there is a convergent validity. (Anderson and Gerbing, 1988)

Table III. Reliability and Validity indicators

Construct	Indicators	CR	AVE	MSV	ASV	Factor loading
Clean Water Concern	Our company is concerned about Clean Water	0.85	0.79	0.68	0.45	0.823
	Our company would be willing to protect clean water by reducing consumption					0.869
						0.831
	In to protect the natural water, social changes are a must					0.849

	Water pollution laws should have a strict enforcement					
Attitude	We believe in consumption of green products Consuming green is our priority We have a positive attitude toward consuming green products	0.85	0.69	0.62	0.49	0.885 0.898 0.863
Social Influence	The most important stakeholders think we should consume green products. Stakeholders who are our beneficiary would want us to consume green products Stakeholders whose opinions are important to us prefer that We consume green products A positive opinion of our counterparts motivates us to consume green product	0.72	0.68	0.46	0.38	0.893 0.888 0.845 0.802
Perceived Consumption Behaviour	We believe that we have the capability to consume green products If the decision is left to us ,we are sure that we will purchase green products we see ourselves as being able to consume green products in future We are ready to consume green products and we have enough time and resources for the same.	0.89	0.69	0.62	0.59	0.895 0.838 0.821 0.726
Readiness to Pay Extra Price	We would be willing to shell out premium price for those product which is going an extra mile to be environmentally sustainable To make the organization's/product effort more sustainable environmentally we would be willing to shell out premium price towards ecofriendly products Even though cost of green eco friendly products are higher than conventional products, we feel a sense of pride towards our company since we have such products.	0.79	0.71	0.63	0.49	0.802 0.879 0.859
Consumption intention	Since green products are less polluting, we will we will try to move towards purchasing such products	0.91	0.69	0.61	0.57	0.808 0.836 0.896 0.879

	Due to ecological reasons we will gradually move towards environment friendly brands In comparison to traditional products we will pay more for green products Due to its positive environmental contribution it is expected that we will buy such products in future We are sure that we are willing to buy environment friendly products in times to come					0.835
Consumption Behaviour	We have been using green ecofriendly products on an in day today life Even for the recurring daily consumption we have been consuming green products Over the past two quarters we have exhibited green consumption behavior	0.81	0.78	0.54	0.38	0.888 0.867 0.796

(AVE) values (Table III) (Hair et al., 2010). In Addition to it, the respective AVE values (Table III) were found to be higher than the respective average shared variance (ASV) and maximum shared variance(MSV), which shows discriminant validity (Hair et al., 2010). Hence, in the hypothesized model convergent and discriminant validity of the constructs was confirmed.

Structural model: after ensuring that the variables are valid and reliable, whether the model is fit or not and testing of hypothesis has been done.SEM was used to test the proposed. With the respective subscale means as indicators of the latent factors all the study measure were modeled as latent constructs. There was good fit to the data as found in the proposed model which can be seen in the table as the CFI, TLI and IFI values were more than 0.90 (Bagozzi and Yi, 1988) and RMSEA value was less than 0.08 (Browne and Cudeck, 1993).

Table IV SEM model fit indices

Model fit indices	Structural model
χ^2	393.16
χ^2/df	3.038
GFI	0.918

CFI	0.908
IFI	0.919
TLI	0.909
RMSEA	0.076
R^2 (CI)	0.928
R^2 (CB)	0.510

We can conclude that outlook toward green consumption behavior, influence of the society and Perceived consumption behaviour was significantly influenced by Clean Water Concern. As expected, the influence of Perceived consumption behaviour on both consumption intention and consumption behaviour was significant. Also consumption behaviour was predicted using consumption intentions significantly at 95% confidence level. Table V depicts the standardized path coefficients showing the direct effects and the coefficient is significant at 0.05 levels.

Table V Path relationships

Paths	β coefficient	t-value	p-value	Relationship
CWC-ATT	0.71	6.944	0.001	Supported
CWC-SN	0.53	5.251	0.001	Supported
CWC-PCB	0.49	6.01	0.001	Supported
CWC-CI	0.08	0.498	0.041	Supported
SI-ATT	0.18	2.282	0.022	Supported
SI-PCB	0.68	8.874	0.001	Supported
SI-CI	0.08	-0.597	0.005	Supported
CB-CI	0.65	3.993	0.001	Supported
PCB-CB	0.89	4.13	0.001	Supported
CI-CB				Supported
CI \times RP-CB				Supported
RP-CB				Supported

A hypothesis test was conducted to study the effect of the moderator variable i.e. readiness to pay on the two variables: purchase intention and behavior. In order to test the moderation, predictor variable and interaction term, once both these variables were standardized and were regressed on the outcome variable. At 90% confidence level the β coefficient for the interaction term was found to be significant variation was explained in the moderation model.

Discussion and theoretical implications

The study was conducted in a developing economy to forecast green CI's and CB's among educated consumers. Earlier limited research was conducted on CIs and CBs of Indian consumers towards green products.

It was found that Social influence affects the attitudes and perceptions of behavioral control and has indirect but significant influence on CIs and CBs. The study also strongly highlights that green CB is the after effect of green CI. By examining the indirect effects, the study focuses on the processes through which green buying behaviour is influenced by CWC, attitudes, SI and PCB via their influence on CI. Thus, the study reveals the changes underlying of the correlation between variables. Hence the study proves the effectiveness of the model in explaining green consumptions of educated Indians who are working in chemical industries. The study establishes the use of the above construct in estimating intentions and behaviors which is an extension of the theory. This research validates the findings done by Paul et al. (2016). He found out that among Indian consumers predictor variables mediated the association between EC and PI. The study brings out the psychological mechanisms, which explains the relationship between EC and PI of educated executives and managers of India who are working in chemical industries, by analyzing the indirect effects. In addition to this, the readiness to pay a extra price towards green products was found to have a strong relationship on the vitality of the association among CI and CB. The consumers, who had more readiness to pay than the others, displayed a stronger relationship between CI and CB. Vital information is provided to the marketers through this study on the conditions that may strengthen the relationships between behavior and intentions. Also, this study goes one step ahead of the previous studies which were limited to the investigation of CIs only. This study finds out the link between intentions and actual consumption behaviour and proves that intension has positive significant effect on behaviour.

Practical implications

The study will be of great use to organizational managers who produce and market ecofriendly products. By using this research the marketers will be able perceive the intention of customer's to buy green products. As it was found that CI was a significant forecaster of CB, it becomes necessary that efforts are made by the marketers so that the perceptions of all the forecasting variables can be improved. Further, the marketers by orienting themselves towards different variables may have an advantage. Marketers would be able to target the right group of people, who will be more responsive by showcasing strong green CI and CB, by appropriate market segmentation. Attitude and PCBC were the predictors which were directly impacting CI

Hence efforts should be made to change the attitudes of consumers and influence the consumers towards green product by setting a positive picture of the green products through increased promotions highlighting the utilities of ecofriendly products. How easily ecofriendly products can be acquired can be highlighted by the marketers will help them to increase their market for ecofriendly products, as the strongest predictor of CI and CB was PBC. The green marketers should focus on making availability of the green product to the consumers with no extra efforts. To take a further step in this direction it is necessary to lay more emphasis on R&D and create alternative distribution channels which will help the marketers to broaden green choices and more accessibility to green products (Paul et al., 2016). There will be ease in acquiring green products by reducing perceived problems in acquisition of green products by enhancing consumer's perception of control. The organizations in its CSR activities may take up the above activities having a double edge sword effect in the form of enhanced external prestige and more revenue from green product sales. There is a need to integrate the "green" with corporate strategy contributing to environmental competitiveness of the organizations to achieve the desired objectives. Marketers need to focus on another factor which is willingness to shell out premium to convert PI into PB. As the consumers who were a part of the sample had limited purchasing power, Efforts should be made for reinforcement of perceived benefits resulting out of use of green products which will help to increase the willingness to premium price for green products.

Thus, a conclusion can be made, that the study focused on enhancing the understanding on the factors having an impact on CI and CB among educated Indian will assist the policy makers to frame plans programs and policies, with the objective to achieve environmental sustainability by enhancing the adoption of green CBs. Since for developing countries like

India which is included in the 30 most polluted countries around the World, environmental sustainability is extremely crucial, this study by making it easier to understand the causes that predict attitudes which are environment friendly and behavior's in consumers who are educated will lead to a reduction in the environmental impact as they will indulge in smart purchasing.

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