

CHAPTER-3

RESEARCH METHODOLOGY

Research Methodology is a way to solve the problem systematically. This chapter presents the research design and methods that were used for collections of the empirical evidence.

3.1 Research Design

This study is quantitative in nature it is consent with numerical measure and involves statistical analysis for obtaining results and to test hypothesis. This study established in conceptual frameworks based on previous research this research test 17 hypothesis related to the factor that influence consumer awareness, attitude, satisfaction toward eco-friendly Packaged Products in selective district of Haryana.

The research data was collected using the questionnaire survey and methodology aims for the verification of hypothesis

3.2 Sampling Design

Choose a Sample, play an important role in the study. The sample selected for this study unabashed and large enough to satisfy the need of the research. Sampling is about selecting a subset of people who represent the entire population of the survey. Sampling procedure can either be probability, where each element of the population has an equal chance to be selected for the survey or non- probability. Survey could be conducted as a form of census by surveying each and every unit within the population, but this is commonly impossible in case of large sample spread across wide geographical area, where complete list of members of the whole population

might not possible to obtain. Therefore, cost constraints, time, sample size and research objectives could affect the sampling method selected.

3.2.1 Sample Technique

The Inhabitant under study is large and it is impossible and not practical to reach each single respondent in the population. To reach out the large population of consumers of Eco-Friendly packaged products from four districts of Haryana, a non-probability sampling method was adopted. At this study attempted to cover wide geographical area for the survey, in order to gain information from a diverse range of respondent's characteristics, non-probability sampling method was considered to be most appropriate. Quota Cum convenience sampling approach was chosen because the selection of the cases was based on the presence and willingness to participate in the study.

At first stage, the sample quota was decided among the four districts from four geographical zones of Haryana. The stratum and their proportions were identified as they represented the population (From each Four districts, 200 eco-consumers were selected,"4 districts X 200=800). Then convenience sampling was used to select the required numbers of respondents from each stratum. The attempt has been made to obtain samples covering various demographic backgrounds in order to reduce the sampling bias caused by user characteristics.

The objective populace for the investigation is four arrangements of individuals as follows:

- ❖ Clients of environment friendly packaged beauty products in four districts of Haryana (Ambala, Rohtak, Hisar and Gurugram).

- ❖ Users of environment friendly packaged Food products/ items in four districts of Haryana (Ambala, Rohtak, Hisar and Gurugram).

The test size considered for the Study is 800 who are the clients of Eco-friendly or Eco-friendly Packaged beauty and food products.

3.2.2 Data Population & Sample size

Table 3.1: Users of Eco-friendly packaged beauty and Food items)

Districts	Populace (No. of Eco-friendly Products Users)		
	Prepared Retail Outlets(Approx.)	Unorganized Retail Outlets(Approx)	Total(Approx.)
Gurugram	1,19,000	1,00,500	2,19,500
Ambala	87,000	1,14,000	2,01,000
Rohtak	47,500	76,500	1,24,000
Hisar	79,000	97,000	1,76,000
Total	3,32,500	388000	720,500

Source: Compiled from Databases of Retail Outlets <https://www.franchiseindia.com/>

Table 3.2: Indicating sample units of Eco-friendly Food and Beauty items)

Districts covered	Sample Units Considered
Gurgoan	200
Ambala	200
Rohtak	200
Hisar	200
Total	800

3.3 Instrument of the Research

To collect representative data of the target population within limited time, a self-administered questionnaire was considered as the most appropriate primary survey

instrument in this study. Questionnaire has an advantage of covering a wide area of the target population with standardized form of responses. They also reduce bias and can be completed at the respondent's convenience.

The survey is utilized on the grounds that it is organized, conservative, and suitable for capturing raw data to test the hypotheses formed and answer research questions.

Another data capture method used is an online questionnaire generated using Google Docs and emailed to respondents. By interacting with experienced and knowledgeable personnel at various retail stores, data on customer footfalls and the most appropriate location for collecting the previous part of the data were selected.

3.3.1 Pilot Survey Questionnaire

The pilot study was used to conduct the preliminary test of the instrument on 80 consumers of eco-friendly packaged products. Data was collected among shoppers/customers at Shopping Mall in district Gurugram of Haryana.

Different inquiries utilized right now the accompanying information about environmentally friendly products, divided into two categories, yes and no

Whether the respondents purchased environmentally friendly products is divided into "yes" and "no".

The question of an unlimited number of people who purchase environmentally-friendly products (monthly) is whether the respondents have purchased environmentally-friendly products this month, which are divided into "yes" and "no".

Respondents usually buy two sorts of environmentally-friendly products, namely beauty/cosmetic and food.

The second piece of the poll gathered respondents' perspectives on different environmental awareness factors designed based on existing literature.

The survey obtained contact information for approximately 68% of respondents. The questionnaire is at Appendix I.

3.3.2 Final Survey Questionnaire for Respondents

In light of the field survey recalled from the time of the primary/ pilot study & examination of the information got from the pilot study, the poll was improved to gather information with the best verifiable exactness during the last overview.

The progressions made in the survey are abridged as follows:

By reducing some questions to optimize the length of the questionnaire, the total length of the questionnaire was reduced. It was seen in the pilot review that numerous respondents who at first communicated their ability to answer left the minute they saw the poll, giving reasons.

Numerous respondents a portion of the time give signs of tiredness and fatigue while noting long surveys. What's more, since respondents were halted by the market while they were shopping, not at home, they needed to escape inconvenience. The undertaking is in a rush. It is normal that this ominous recognition circumstance won't acquire a right, impartial reaction from the example components. Subsequently, the all-out number of inquiries was decreased, and the poll was less upsetting for the respondents.

Wiped out builds of specific sizes, since they cover the components of different develops, and care is taken to guarantee that the adequacy of the build isn't relinquished all the while.

A few wordings have changed in light of the fact that numerous respondents don't get them. Hence, the poll was altered to guarantee the utilization of straightforward words that are all the more ordinarily utilized and better comprehended.

To decide the type of the inquiry concerning your involvement in nature- friendly beautifiers and nourishment was transformed from a 4 point likert scale to 7-point likert scale different things in the survey. This was done on the grounds that a few respondents were uncertain how to mark their reactions in the poll. This guarantees any obscure vagueness is dispensed with from the last poll.

For natural mindfulness, value affectability, advancement of bought items, item investment and wellbeing mindfulness, a few builds have been erased to make the poll simpler for respondents to answer. Also for the general qualities about the Eco-friendly restorative and nourishment items, some particular things were erased as their reactions were at that point gathered from the underlying piece of psychographic factors to make the survey short in size.

3.4 Analysis for Reliability

The variables utilized in the surveys to gather reactions were tried inside utilizing Cranach's alpha, which speaks to the normal between thing relationships inside each factor. Elements that cause Cronbach α to be equivalent to or more noteworthy than 0.7 are commonly viewed as dependable and hence can be utilized for additional investigation as a major aspect of explicit factors.

The Cranach's coefficient alpha was used to measure the reliability of the data received during pilot survey. Results revealed that all values for reliability estimates are computed ranging from 0.768 to 0.864, thus confirming acceptable internal

consistency reliability and evidence of content and construct validity. Exceeding a minimum value of 0.70 for factors indicates that the factors are internally consistent and are good measures of the concept under study (Nunnally, 1978; Hair et al. 2006)

Table 3.3: Showing score for the various builds of the elements

Factors	Constructs	Cronbach's Alpha score
Environmental Consciousness	<p>I support different measures to improve water management leading to water conservation.</p> <p>I am aware about the issues and problems related to the environments.</p> <p>It is very difficult for a person like me to do anything about the environment.</p> <p>I believe that using recyclable materials for daily use will improve the environment.</p> <p>I would like to Eco-friendly product as it gives me the pleasure of being environment friendly.</p>	0.864
Price Sensitivity	<p>In general the price or cost of buying Eco-Friendly Packaged Products is important to me.</p> <p>I know that a new kind of Eco-Friendly or Eco-friendly Packaged Products is likely to be more expensive than additional ones , but that does not matter to me.</p> <p>I am less willing to buy a Eco-Friendly or Eco-friendly Packaged Products if I think that it will be high in price.</p> <p>I don't mind paying more to try out a new Eco-Friendly or Eco-friendly Packaged Products.</p> <p>A really good Eco-Friendly or Eco-friendly Packaged Products is worth paying higher prices.</p> <p>I don't mind paying more to try out a new Eco-Friendly or Eco-friendly Packaged Products.</p> <p>A really good Eco-Friendly or Eco-friendly Packaged Products is worth paying higher prices.</p>	0.776
Innovativeness in buying products	<p>I would like to take a chance in buying new products.</p> <p>I would like to try Innovative products.</p> <p>I am the first in my circle of friends to buy a new product when it appears in the market.</p> <p>I am the first in my circle of friends to experiment with the brands of latest products.</p>	0.795
Product Involvement	<p>I select and purchases the Eco-Friendly or Eco-friendly Packaged Products very carefully.</p> <p>Using branded Eco-friendly products helps me express my personality.</p> <p>You can tell a lot about a person from whether he/she buys Eco-Friendly or Eco-friendly Packaged Products.</p> <p>I believe different brands of Eco-friendly Nature would</p>	0.842

Factors	Constructs	Cronbach's Alpha score
	<p>give different amounts of satisfaction.</p> <p>I would recommended Eco-friendly products based on quality to my friends.</p>	
Health Consciousness	<p>I worry that there are chemicals in my food.</p> <p>I worry that there are chemicals in my cosmetic products.</p> <p>I avoid foods containing preservatives.</p> <p>I read more health-related articles earlier time.</p> <p>I am aware of what types of Eco-friendly products I need to do to feel consummate.</p> <p>Pollution in food and other products does not bother me.</p> <p>I believe that Eco-friendly products are of better quality than non-Eco-friendly products.</p> <p>I worry that there are chemicals in my food.</p>	0.819
General Characteristics about Eco-Friendly or Eco-friendly Packaged Products	<p>Eco-friendly cosmetic products are safer to use than non-Eco-friendly cosmetic products.</p> <p>Eco-friendly cosmetic products are of better quality than non- Eco-friendly cosmetic products.</p> <p>Eco-friendly cosmetic products are more effective than non- Eco-friendly cosmetic products.</p> <p>Branded Eco-friendly cosmetic products are better than non- branded Eco-friendly cosmetic products.</p> <p>Less knowledge about Eco-friendly cosmetic products prevent people from buying them.</p> <p>Less information about Eco-friendly cosmetic products prevent people from buying them.</p> <p>Less availability about Eco-friendly cosmetic products prevent people from buying them.</p> <p>Eco-friendly cosmetic products are expensive than non-Eco-friendly cosmetic products.</p> <p>Eco-friendly food products are safer than non- Eco-Friendly or Eco-friendly Packaged food products.</p> <p>Eco-friendly food products are healthier than non-Eco-friendly food products.</p> <p>Eco-friendly food products have more nutritional value than non-Eco-friendly food products.</p> <p>Eco-friendly food products are tastier than non-Eco-friendly food products.</p> <p>Branded Eco-friendly products are better than non-branded Eco-friendly food products.</p> <p>Eco-friendly food products do not look good in appearance.</p> <p>Less availability about Eco-friendly food products prevent people from buying them.</p>	0.768

Source: SPSS Output

3.5 Data collection Methods

The information with the assistance of the above portrayed polls had been gathered utilizing both offline and online surveys. The survey was conducted through visiting the retail outlets, shopping malls in selected four cities of Haryana from March 2019 to August 2019.

Ethical considerations were taken into account during the data collection. Confidentiality and anonymity were ensured so that all respondents were protected from harmful and undesirable consequences that might have occurred after the data collection process.

The Questionnaire was printed in hardcopy and was administered to the targeted respondents of Eco-friendly packaged products. At the same time, questionnaires were also made available on the internet and were emailed to the subscribers to answer the web survey on Google forms via providing the link in the cover email.

3.5.1. Offline survey

The hard multiplications of the polls were spread in the accompanying parts for information gathering from general store, retail outlets, shopping malls etc. The numbers of responses obtained from printed hard copy were 312 out of 400 targeted respondents due to less interest in filling up the questionnaire.

3.5.2 Online Survey

The last review survey was planned web based utilizing online/internet sources to be disseminated to the current shoppers of the Eco-friendly items. All the current shoppers' informations were being gathered from the retail outlets. The numbers of

responses obtained from web survey were 288 out of 400 targeted respondents. 112 responses were incomplete so they were rejected for final analyses.

3.6. Analysis of Results

The information was collected as the various reactions given by the respondents. At that point, examination was done in six phases as follows:

3.6.1 Stage first

The Descriptive insights and graphical instruments are being utilized to examine fundamental qualities about the utilization of eco-friendly beauty care products and nourished food products. The essential attributes concerning the idea of utilizing Eco-friendly beauty and nourishment food items are being investigated utilizing expressive insights and graphical devices.

3.6.2 Stage second

The Four psychographic factors which were referenced in the survey comprise of inside develops. Along these lines, every single together build were gathered into factors utilizing the factor analysis (This is directed to reveal the fundamental of a generally enormous arrangement of factors and gathering them)

3.6.3 Stage third

The Multiple relapse was utilized to organize the structure of the four mental factors (ecological mindfulness, value affectability and development in item commitment, buying items, and wellbeing attention) to uncover the basic structure of a bigger arrangement of factors.

3.6.4. Stage fourth

All four psychological variables (price sensitivity, co-awareness, and innovativeness of purchasing, product engagement, and health awareness) are being tested for dependent variables, as well as other characteristics related to eco-friendly cosmetics and food products, that is, consumers' preference for eco-friendly beauty/cosmetic and food items. By this we can explain diverse attributes influence the preferences of conscious consumers for eco-friendly cosmetics/beauty and food items.

Since the scale used in the questionnaire was a rating scale, the above analysis was performed utilizing ANOVA

3.6.5. Stage fifth

Respondents' socioeconomics are classified in a plain as day way. To play out a rate investigation to locate the specific number of individuals who reacted along these lines.

At that point utilize an examination of difference (ANOVA-a strategy that checks one factor's familiarity with another) to break down the segment classifications of the populace's age, income level, gender, education, occupation, and family members.

The Researchers use ANOVA to check whether the sample response depends on demographic variables, i.e. whether it depends on the dependent variable, that is, the consumer's preference for environmentally-friendly cosmetics and food, to understand how various demographic factors increase consumers' consumption. People prefer to understand Eco-friendly cosmetics and food.

3.6.6 Stage sixth

This area clarifies the apparent effect of various mental and free factors on item client inclinations on eco-friendly beautifying agents and nourishment.

In spite of the fact that the respondents considered right now clients of eco-friendly makeup, they comprehend, are satisfied, and understand eco-friendly beauty and food. This section provides answers based on "If the respondent is a user of eco-beauty, what are their responses" and the questionnaire for eco-beauty users. In this way, it helps confirm the user's findings.

All the above analysis was done using IBM SPSS (Version 26).

3.6.7. Naming of variables.

Table 3.4: Showing List of Variables Considered

Variables(used in the study) contributing for the popularity of Eco-friendly products	
Environmental Consciousness	
Variable	Description
v1	I support different measures to improve water management leading to water conservation
v2	I am aware about the issues and problems related to the environment
v3	It is very difficult for a person like me to do anything about the environment
v4	I believe that using recyclable materials for daily use will improve the environment
v5	I would like to Eco-friendly product as it gives me the pleasure of being environment friendly.
Price Sensitivity	
v1	In general the price or cost of buying Eco-Friendly Packaged Products is important to me
v2	I know that a new kind of Eco-Friendly or Eco-friendly Packaged Products is likely to be more expensive than additional ones , but that does not matter to me
v3	I am less willing to buy a Eco-Friendly or Eco-friendly Packaged Products if I think that it will be high in price
v4	I don't mind paying more to try out a new Eco-Friendly or Eco-friendly Packaged Products
v5	A really good Eco-Friendly or Eco-friendly Packaged Products is worth paying higher prices.
v6	I don't mind spending a lot of money to buy a Eco-Friendly or Eco-friendly Products
Innovativeness in buying Products	
v1	I would like to take a chance in buying new products

Variables(used in the study) contributing for the popularity of Eco-friendly products	
Environmental Consciousness	
Variable	Description
v2	I would like to try Innovative products
v3	I am the first in my circle of friends to buy a new product when it appears in the market
v4	I am the first in my circle of friends to experiment with the brands of latest products
Product Involvement	
v1	I select and purchases the Eco-Friendly or Eco-friendly Packaged Products very carefully
v2	Using branded Eco-friendly products helps me express my personality
v3	You can tell a lot about a person from whether he/she buys Eco-Friendly or Eco-friendly Packaged Products
v4	I believe different brands of Eco-friendly Nature would give different amounts of satisfaction
Health Consciousness	
v1	I worry that there are chemicals in my food.
v2	I worry that there are chemicals in my cosmetic products
v3	I avoid foods containing preservatives.
v4	I read more health-related articles earlier time
v5	I am aware of what types of Eco-friendly products I need to do to feel consummate
v6	Pollution in food and other products does not bother me.
v7	I believe that Eco-friendly products are of better quality than non-Eco-friendly products.
v8	I'm concerned about my health all the time.
General Characteristics about Eco-Friendly or Eco-friendly Packaged Products	
v1	Eco-friendly cosmetic products are safer to use than non-Eco-friendly cosmetic products
v2	Eco-friendly cosmetic products are of better quality than non- Eco-friendly cosmetic products
v3	Eco-friendly cosmetic products are more effective than non- Eco-friendly cosmetic products
v4	Branded Eco-friendly cosmetic products are better than non- branded Eco-friendly cosmetic products
v5	Less knowledge about Eco-friendly cosmetic products prevent people from buying them
v6	Less information about Eco-friendly cosmetic products prevent people from buying them
v7	Eco-friendly cosmetic products are expensive than non-Eco-friendly cosmetic products
v8	Eco-friendly food products are safer than non- Eco-Friendly or Eco-friendly Packaged food products

Variables(used in the study) contributing for the popularity of Eco-friendly products	
Environmental Consciousness	
Variable	Description
v1	Eco-friendly food products are healthier than non-Eco-friendly food products
v2	Eco-friendly food products have more nutritional value than non-Eco-friendly food products
v3	Eco-friendly food products are tastier than non-Eco-friendly food products
v4	Branded Eco-friendly products are better than non-branded Eco-friendly food products
v5	Eco-friendly food products do not look good in appearance
v6	Less availability about Eco-friendly food products prevent people from buying them
v7	Eco-friendly food products are expensive
v8	Eco-friendly food products are safer than non- Eco-Friendly or Eco-friendly Packaged food products
v9	Eco-friendly food products are healthier than non-Eco-friendly food products
v10	Eco-friendly food products have more nutritional value than non-Eco-friendly food products

Source: Compiled from Literature Reviewed