

CONSUMER BEHAVIOUR FOR AYURVEDIC OVER THE COUNTER MEDICINES IN THE STATE OF HIMACHAL PRADESH

Thesis

by

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(BM-2019-06-D)**

submitted to



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CERTIFICATE-I

This is to certify that the thesis titled “**Consumer Behaviour for Ayurvedic Over-the-Counter Medicines in the state of Himachal Pradesh**” submitted in partial fulfilment of the requirements for the award of the degree of **Doctor of Philosophy Business Management** in the discipline of **Business Management** to Dr. Yashwant Singh Parmar University of Horticulture and Forestry, (Nauni) Solan (HP) – 173 230 is a bonafide research work carried out by **Ms. Monica Negi (BM-2019-06-D)** daughter of Shri Shyam Negi under my supervision and that no part of this thesis has been submitted for any other degree or diploma.

The assistance and help received during the course of this investigation have been fully acknowledged.

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CERTIFICATE-II

This is to certify that the thesis titled, “Consumer Behaviour for Ayurvedic Over the Counter Medicines in the state of Himachal Pradesh” submitted by Ms. Monica Negi (BM-2019-06-D) daughter of Shri Shyam Negi to the Dr. Yashwant Singh Parmar University of Horticulture and Forestry, (Nauni) Solan (HP) – 173 230 India in partial fulfilment of the requirements for the degree of **Doctor of Philosophy Business Management** in the discipline of **Business Management** has been approved by the Advisory Committee after an oral examination of the student in collaboration with an External Examiner.

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People will tell you that you can't make it or you'll never win, ironic, isn't it? When we all win in the end, but for life it isn't just about winning, it's figuring things out and following them to the very end. Not to the half way point or not to the half start, go the extra mile and take risk and chances. Life is what you make it not what you want it to become.

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LIST OF ABBREVIATIONS

ANOVA	:	Analysis of Variance
CAGR	:	Compound Annual Growth Rate
CII	:	Confederation of Indian Industry
CoV	:	Covariance
DCA	:	Drug and Cosmetic Act
DCR	:	Drug and Cosmetic Rule
DCTA	:	Direct-to-consumer prescription drug advertising
df	:	Degree of freedom
EBM	:	Engel, Blackwell and Miniard
EKB	:	Engel -Kollat and Blackwell
FDA	:	Food and Drug Administration
FMCG	:	Fast Moving Consumer Goods
IMCC	:	Indian Medicines Central Council
KMO	:	Kaiser-Meyer-Olkin Measure
MSB	:	Mean Sum of Squares between Groups
MSE	:	Mean Squares of Errors
NITI Aayog	:	National Institution for Transforming India
OTC	:	Over-the-Counter
OTCA	:	Over-the-Counter non-prescription drug advertising
Rx	:	Medical Prescription
SEM	:	Structure Equation Model
SPSS	:	Statistical Package for the Social Sciences
SSE	:	Sum of the Squares Error
TPB	:	Theory of Planned Behaviour
USD	:	United States Dollar
WHO	:	World Health Organizations

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Chapter-1

INTRODUCTION

“Ayurveda” is made up of two words Ayuh and Veda. Ayuh means life whereas Veda means knowledge or science. Thus, Ayurveda as a single word means ‘Science of Life’(Ministry of AYUSH,2021). The World Health Organization (WHO) adopted Traditional medicines programme around two decades ago and has regarded Ayurveda as a form of Traditional Medicines (Ministry of AYUSH, 2021). Traditional medicines formulated as per Indian tradition having composition of plant extracts and derivatives which are considered as natural or herbal in origin, are known as Ayurveda or Ayurvedic drugs/medicines. The Ayurvedic system of medicine is been recognized by Indian Medicines Central Council (IMCC) Act 1970. Ayurveda is considered as oldest and best traditional system which is preferred by many people (Gaur 2017). The name Ayurveda goes back to thousands of years where people cured the diseases with herbs, minerals and metals. A huge population depends on Ayurvedic system when other medicine fails to work or cure the ailments. The Ayurvedic industry is growing at higher rate than that of entire manufacturing companies of allopathic industries. The ingredients of Ayurvedic medicines are grown naturally and are not industrially produced (Harilal 2009, Gaur 2017). The advantage for this system was that among all others, there is absence of side effects which is most important factor that led to purchase of Ayurvedic products especially derma products by women (Khan & Khan 2013). This has led to more lifestyle choices in favor of traditional Ayurvedic products which is pleasing for the market (Arya et al 2012).

For decades Ayurvedic medicines have worked really hard to find their spot as a hybrid between medicines and FMCG products. After Covid-19 hit the world, some countries realized the benefits of Ayurvedic system (Golechha2020). After the outbreak of Covid-19, rules and guidelines which advised avoiding travel and caused fear for gatherings and meeting people caused more people getting invested in self-medication known as Over-the Counter medicines that are found in pharmacies and retail stores (Bond 2001, Wazaify et al 2005, Hossain et al 2020. Onchonga 2020). Ayurveda industry saw 40-50% hike in their sales during this period which were mostly purchase of Over-the-Counter formulation (Awasthi 2021).

Bhangalein(2007), said that OTC medicines which were registered as ‘Ayurvedic medicines’ (traditional Indian medicines containing natural/herbal ingredients) are also regulated by the Drugs and Cosmetics Act,1940 (DCA) and Drugs and Cosmetics Rule, 1945(DCR). However, they do not require a drug license and can be sold by non-chemists. But they can be manufactured commercially only after obtaining license from Ayurveda state licensing authorities. There is no price control on Ayurvedic medicines. Some top brands are Zandu, Patanjali, Himalaya, Dabur, Baidynath dealing in various categories such as Vitamins, Cough & cold, Immunity, Dermatological. In today’s busy scenario it has been tuff to keep up with our daily chores when minor ailments occur. Many people go with quick fixes otherwise it would cause a day’s work and income to middle-class families in visiting a doctor and obtaining remedies. Therefore, OTC medicines have been the best choices in times like this, considered to be low-cost treatment for majority of patients (Kanthé and Uttam 2010). Though, in India it’s not legally mentioned but every other medicine which fails to fall under the list of ‘prescription only medicines’ are considered as non-prescriptive medicines or OTC medicines (Bhangale 2007, Khan et al 2013). Over-the-Counter medicines are for treatments when no direct supervision is needed and are safe to be administered and are well tolerated. In other words, any medicines sold for self-treatments without prescription of medical practitioner for symptomatic relief is an OTC medicine (More and Srivastava 2010).

Globally Over-the-Counter medicines market size was USD 148 billion in 2020. The impact of Covid-19 around the globe was unprecedented and shocking which caused a rise in demand of OTC medicines amid the pandemic. According to the Fortune and Business Insights, a steady growth was seen with 6.8% in 2020 compared to average growth during the period of 2017-2019. The market has changed drastically and probably would grow from USD 157 billion in 2021 to USD 233.6 billion in year 2028 at a CAGR of 5.8% for the period of 2021-2028. This rise in CAGR was connected to market’s demand and growth returning to pre-pandemic levels once the pandemic was over (Fortune Business Insights, 2021).

The key factors that propelled the growth of OTC before pandemic was shift in consumer attitude towards self-medication, product innovations and shift in inclination of pharmaceutical industries (More and Srivastava, 2010). But know, after the pandemic is over its returning to pre-pandemic situation for which other factors for growth are to be considered such as Product

innovations, high penetration, favorable framework and inclination of pharmaceutical companies towards OTC drugs and highest growth rate in emerging markets. Furthermore, increase in disposable income of the population, which will add critical mass to the population available to access OTC medication have also triggered the growth in the global business (Bhowmick 2020).

The statistics depicting the growth trajectory of the global Ayurveda market are indeed impressive. From a value of USD 2.428 billion in 2015 to a significant surge of USD 10.21 billion in 2022, the market has shown remarkable expansion (Statistics MRC, 2015). With an anticipated annual growth rate of 15.63% between 2023 and 2029, it's projected to soar to nearly USD 28.31 billion by 2029. This growth trajectory showcases the increasing popularity and potential of Ayurveda on global scale, indicating a promising future for the industry (Maximise Market research Pvt Ltd, 2022).

To cater to this huge population, it's important to study the interests to see how people, groups of people and organizations utilize and recycle goods, services and ideas, experiences to meet their needs and desires (Kotler and Keller, 2011). The reason how consumers decide to purchase, specific factors that impact the insights about consumer and their purchases, an analysis of changing social factors and other issues are some specific aspects of consumer behaviour. Consumer behaviour is defined as "The assumption that people have series of needs which lead to drive state". (Faison and Edmund, 1977). Kotler (1994), "Consumer Behaviour is the study of how people buy, what they buy, when they buy and why they buy. According to Blackwell et al., (2006), "the basic idea behind the consumer research was questioning of buying reasons, moreover the researchers have to go in-depth and also they should ask people how and in which circumstances purchase and consume." Therefore, it's important to study how people evaluate among non-prescription drugs and what variable factors are responsible for their purchase. The consumer is considered to be king in today's scenario. Such research entails an exploration of segmentation in the context of Ayurvedic OTC medicines. Market Segmentation divides a market into well-defined groups or it consists of customers who share similar set of needs and wants. The marketer's task is to identify the appropriate number and nature of market segmented and decide which one to target. Some researchers have defined segmentation by looking for characteristics such as demographics, psychographics and geographical segments but

others define them by looking into behavioural considerations such as response attitude, usage occasions. Behavioural segmentation is a type of marketing strategy that helps understand consumer behaviour. It filters and further group people into similar behaviour patterns. This strategy can offer valuable insights to help organizations develop effective ways to cater to their needs and increase customer engagement, sales and satisfaction (Kotler & Keller, Pg no. 266, 15th edition). Marketers divided customers into groups on basis of their knowledge, attitude and response towards a product. Needs and Benefits: Kotler & Keller found that not everyone wants to buy the product for the same reason. The need for the product and benefits arriving from the same product can be different for any individual. Decision Roles: all buyers that identify to purchase a product or who are related to be part of the buying process are crucial. Different people are playing different roles but all are important to give ultimate customer satisfaction. User and Usage-Related Variables: different variables such as occasion, user status, usage rate, buyer readiness stage and loyalty status are used for segmenting (Kotler & Keller Pg No. 280, 15th edition).

Unlike for other products “seller to user sales” in pharmaceutical marketing is unique and a multiple tier process (Kalotra,2014). The consumer/user is not direct in contact with the salesman. The customer is mainly a medical profession who decides on behalf of the patient/consumer, which product is beneficial and needs to be purchased, in what amount, at what time is to be consumed and for how long it should be consumed. With more awareness and proper marketing of Ayurvedic system, people can be motivated to buy them. For that to happen it's important to understand how people have been reacting to the Ayurvedic system and what are the various things that are considered while purchasing Ayurvedic medicines which are mostly purchased Over-the-Counter. Therefore, it's important to inculcate the above understanding in the framework to describe the segments of Ayurvedic OTC.

Need of study: So, by the above facts stated, it can be said that Ayurveda is a small but rapidly growing industry for India. Furthermore, our country plays a major and important role in global Ayurvedic market. And lastly, this sector is projected to grow at a huge pace. After the pandemic shift in consumer attitudes is observed and majorly for purchasing Ayurvedic OTC medicines makes it important to study and provide a comprehensive estimate to fill the lacuna and layout a methodology for future data collection, which will enable us to understand

enormous contribution of the sector through backward and forward linkages in consumer behaviour for Ayurvedic OTC.

From the reviewed literature we feel the need to study the market segments for Ayurvedic OTC drugs as the researchers are unable to explain whether people buy OTC drugs influenced by branding or by their past experiences from that OTC product. The study would focus on different kinds of stimulus responsible for decision making process in minds of the consumers. While reading authors were unable to explain the true nature (whether or not to buy the product, in our case the Ayurvedic OTC drugs, and if so, which brand) due to which we feel a need to manifest the consumer behaviour for OTC drugs. The process also involves interpreting information, make plans and implement them (by getting themselves in comparison shopping or actually purchasing the product). This study mainly focuses to identify behavioural based segmentation of the consumers to choose the Ayurvedic OTC medicines.

Objectives:

- To study the manifest consumer behaviour for Ayurvedic OTC medicines, the consumer decision making process along with the factors influencing the purchase of Ayurvedic OTC medicines.
- To segment the market for Ayurvedic OTC medicines on the basis of consumer behaviour.
- To identify the demographic parameters of the market segment identified.

Chapter-2

REVIEW OF LITERATURE

Nin Ho et al. (1997) analysed consumer satisfaction with OTC drugs using confirmation or disconfirmation model. A survey was done in a major university to optimize response validity. A total of 105 students aged from 25-37 years were included. It showed that confirmation/disconfirmation of a consumer's expectation and perceived performance of an OTC drug is important in predicting consumer satisfaction.

Saradamma et al. (2000) investigated social factors that influence any individual to buy antibiotics without any prescription in Kerala, India. The survey was conducted in two parts where first the households were interviewed in a health centre and second, pharmacy-based interviews were made with secondary data gathered from the literature. It was found that almost half of 1% population adopted self-medication in which mostly are high income group families, highly educated and possess a higher status in the society.

Brass (2004) researched about consumer behaviour in the setting of Over-the-Counter Statin availability. The study was conducted in a simulated OTC setting and allowed consumers to purchase Statin. This study was formulated with the help of the Consumer Use Study of OTC Mevacor (CUSTOM). The custom dataset includes more than 3300 consumers who evaluated OTC for potential purchase of the study. These data have been analysed to address consumer decision making ability to purchase OTC medicines. The results showed study participants self-selected OTC statin and managed their own treatment, and these results are more important for making informed risk-benefit decision concerning OTC statin availability.

Wazaify et al. (2005) undertook a study to understand the misuse/abuse of OTC medicines. The paper investigates the opinion of general public and their perceptions regarding the topic. A survey for 1000 members in 10 sites of Northern Ireland, using structured interview was conducted. The retrieved data suggested general public had high level of awareness of the potential misuse of OTC medicines with a majority of painkillers.

Lodorfos et al.(2006) explores various determinants of consumer behaviour which exhibit brand loyalty. They investigated factors that contribute to an individual's brand

choice decision in OTC market. A survey for 118 consumers was used, suggesting experiences with brand created trustworthiness whereas price tolerance, brand trust and subjective opinions of others were important for repetitive purchases.

Babu (2007) performed an empirical study to find factors contributing towards purchase of Over the Counter (OTC) drugs in Bangladesh. A total of 280 persons from every age group were surveyed using mall intercept method and mail survey. 11 primary factors were found which are past experiences, corporate image, brand identity, prior assumptions and awareness about medicines that contributes to the selection of any medicines without proper medical documents.

Paninchukunnath (2007) examines Global Trends and Indian Experiences about OTC Drug Marketing. His idea was to create awareness for drug use through public education keeping in mind about broad vision of good health and wellbeing of the society. A pilot study was done to assess the level of awareness, attitude and usage of OTC drugs among adults. The results showed that awareness about OTC was high and safe and usually print media is preferred to receive information on rational usage from pharmaceutical companies.

Stargardt (2007) studied price reactions for German pharmacies after changes were made to OTC regulations in 2004. The survey was conducted after two years of market regulation where they found 23.1% of participating pharmacies had modified prices. However, 7.5% of prices differed from their pre-deregulation level. The survey revealed 47.1% respondents were aware of deregulation.

Taylor et al. (2008) wanted to state general aspects in buying OTC products and their use in Canadian city. They choose descriptive design having a cross-sectional study. A survey was conducted by mailing the questionnaires to the respondents. Majority of it didn't recall any side effects and did acquire pharmacist advice before purchasing OTC. By this they concluded, this city to have healthy attitude and do seek advice from the professionals.

More and Srivastava (2010) made an effort to understand how the aesthetics of the OTC helps in marketing the same. Here aesthetics means which are perceptible. The study was based on theoretical frame work where structure questionnaire was constructed. The survey was conducted in three cities A class city: - Mumbai, B class city: - Nasik and C-class city Igatpuri with sample size of 1000 respondents, consumers were from different age group

and gender. Data was retrieved from respondents through face-to-face interview asking structured questionnaires. The study revealed that aesthetics (colour, shape and taste) helps in improving brand recall and would help companies in packaging and selecting colours of tablets of OTC products.

Villako et al. (2010) aims to evaluate various factors influencing purchase of prescription and OTC medicines for people living in Tallinn, Estonia. The idea was to identify the role of community pharmacists in terms of directing patients for prescription and OTC medicines. A group of six community pharmacists (in capital city of Estonia-Tallinn) were used comprising 1820 patients answering to a structured questionnaire. The results showed up prescription and OTC medicines were bought from community pharmacists equally. They found analgesics cold (38%) and cough medicines (21%). People with less educational background and low income went on by purchasing prescription drugs whereas people with high income purchased a lot of food supplements and OTC medicines. Their research found out that the process of purchasing of medicines at these community pharmacies situated in Tallinn, Estonia was mainly influenced by recommendations given by medical professionals.

Bostrom (2011) wrote her thesis explaining consumer choices for OTC. A quantitative research was conducted during 2011 in four pharmacies to reach recent customers. 273 respondents answered the questionnaire, where location being most important to the customers. Then product range and staff were the factors influencing behaviour.

Karayanni and Georgi (2011) studied to identify consumer buying styles depending how they run through decision making with the level of involvement seen to purchase the OTC, second to identify appropriate communication elements for marketing an OTC medicine brand, and lastly to identify relationships between consumer buying styles and OTC brand marketing communications. On 102 loyal OTC consumers both qualitative and quantitative method dealt with series of advanced statistical analysis were used. The results revealed that there is a need for pharmaceutical companies to differentiate their marketing communications strategies. They identified three distinct buying styles; the 'OTC brand loyalty', the OTC brand switching for comparison and the OTC brand switching for variety seeking for which they suggested to build their promotion strategies on brand awareness, appropriate pricing and in pharmacy store promotion.

Arya et al. (2012) did a survey to study the consumer behaviour in purchasing Ayurvedic Medicines and Products in Joginder Nagar, District Mandi, Himachal Pradesh. They studied at least 500 people with structured interview questionnaires. Their survey found that 64.8% consumers preferred Ayurvedic medicines in comparison to other Allopathic, Unani Homeopathic medicines. When the respondents asked about reliability lay their trust more in Ayurvedic products for purchasing more of food/health supplements. In addition to this, the survey showed that advertisements have an affirmative impact on consumers as they buy products from brand such as Dabur and Himalaya. Hence, they concluded that more of OTC Ayurvedic drugs were preferred in this region.

Calamusa et al. (2012) factors that influence Italian consumers to purchase OTC medicines. The idea was to evaluate information that need use of safe self-medication and risk awareness about Over-the-Counter medicines. A survey was conducted where respondents aged above 18 were included. The study showed that people in Italy are highly unaware of several risk areas while consuming OTC medicines related to severe drug interactions, side effects and abuse/misuse.

Joanna et al. (2012) assessed the awareness in understanding the individuals concerning buying and utilization of OTC medications. The pith of the examination was performed to determine the components such as education, income, type and work environment that has impacted buying and utilization of OTC medications. They studied four equal groups (100 people each) by making them answer a structured questionnaire. This group had two professional groups of which one was of nurses and people with non-medical field and other was 2 student groups from medical and non-medical schools. These respondents answered 47 questions. The paper states 81.3% respondents use OTC drugs; they mainly buy the medicines in pharmacies which are mainly associated with medical sector more often take pharmacists advice on opinion. The majority are not familiar with chemical composition of the OTC drugs they take. Findings show medical background people bought OTC drugs more than others. Income is positively correlated with the number of purchased OTC drugs. Self-cure phenomenon is very common and it should be subjected to control for which they suggested to control and facilitate the information about potential dangers of inappropriate use of OTC drugs.

Cohen et al. (2013) wrote a systematic review to assess economic impact on switches made from prescription to non-prescription status (Rx-to-OTC). They channelled out various

opportunities and challenges in front of policy makers. They used an extensive way to search and retrieve published materials between 1995-2010 which talked about switched made from Rx-to-OTC. They found that very few switches had an impact for past 15 years but added that can be future trend that need to be researched more. For them it showed that main source of economic benefits is shifting the costs of drugs from payers to patients.

Shohel et al. (2013) did a cross sectional survey to understand the attitudes and intentions of loyal customers in Bangladesh for over the counter (OTC) drugs. For this consumer from five major hospitals in Dhaka, Bangladesh was studied between January to June 2012. Sample sizes of 100 OTC consumers were selected and data collected from questionnaires and personal interviews. From the data it's clear that price range, brand image and past experience are determinants of repetitive purchase behaviour. The force that drives future purchase is the less cost of the product.

Kohli and Buller (2013) focused their study to understand the factors that may influence consumer purchasing patterns of Generic versus brand name over-the-counter drugs. The researchers used 20 multiple choice questions to collect data. The results showed that single most influential factor was low cost to buy the OTC drugs. At the end they concluded that even if economic factors play a major role there are variety of other factors such as advertisements, duration of OTC effectiveness, safety of the OTC, relief and brand name. Ultimately the generic OTC drugs with low cost would be suitable for consumers.

Cohen et al. (2013) wrote a systematic review to assess economic impact on switches made from prescription to non-prescription status (Rx-to-OTC). They channelled out various opportunities and challenges in front of policy makers. They used an extensive way to search and retrieve published materials between 1995-2010 which talked about switched made from Rx-to-OTC. They found that very few switches had an impact for past 15 years but added that can be future trend that need to be researched more. For them it showed that main source of economic benefits is shifting the costs of drugs from payers to patients.

Dwivedi and Lodha (2015) emphasized on the importance of marketing strategies in promotion of OTC drugs. The OTC drugs can be promoted freely if they overcome the standards for safety, efficacy and less side effects. They felt the need for pharmaceutical companies to build a relationship with the retailers. In addition to this, it's important to communicate the objectives of the company and build a positive image for the product. Their

study revealed a success rate for the OTC drugs in respect to suitable promotional strategy. Therefore, they conclude by saying, the implementation of effective advertising and marketing media to deliver the positives of OTC is important to these firms.

Hayashi (2015) aimed to study information providers and channels that have an impact on purchase of OTCs. A survey was conducted for the people aged (more than 20) at Japanese drugstore for 1743 respondents. Both use of pharmacy as an information provider and consultation were positively associated with purchase of OTCs. They said that pharmacies can be used to channel individualised information for consultation and play an important role for purchases of OTC.

Kamath and Lakhangaonkar (2015) explore the consumer behaviour towards medicines without prescription in Pune city. This was an empirical study to address issue of increased use medicines without prescription, hazardous effects caused and measures taken to curb the problem. It showed that many people buy the medicines without any proper prescription written by a physician. They buy them on basis of their past experiences or hearing it out from others.

Khanna (2015) studied customer perception for Patanjali brand which has a range of Ayurvedic OTC in market. It becomes important to study brand perception among the consumers and what are the others attributes which compel them in buying this specific brand. A questionnaire was filled by 100 participants for the primary data. They analysis showed that huge population that chooses Patanjali was for satisfaction and reasonable price. They felt that Patanjali has high rate to cure the problem, which all joins in to create retention of customers.

Nagaraj et al. (2015) did a study on the dispensing pattern of over-the-counter drugs in retails markets of Sarjapur Area, East Bangalore. Their study was associated with rise in cost of health care and the amount of difficulties been faced for simple health care facilities. Three pharmacies were observed for the duration of 10 days. Nearly 216 patients were interviewed between 6pm to 9pm who had no prescription for the medicines they wanted. Data was analysed by descriptive statistics and the data revealed the use of OTC was pain. Adding to this 55.09% of dispensed drugs belonged to schedule H. They stated an alarming and urgent need for promoting appropriate use which can be achieved through proper educational regulatory and managerial strategies.

Lee et al. (2015) worked on research literature to compare consumers' attitude and behavioural responses to direct-to-consumer prescription drug advertising (DTCA) and over-the-counter non-prescription drug advertising (OTCA) of drugs. An online survey questionnaire was conducted for adults. They measured variables for demographics (age, gender, race, education and income), health related issue (prescriptions and over the counter drug use and involvement with prescription or over-the-counter), perceived amount of attention and exposure to DTCA and OTCA, attitudinal and behavioural outcomes triggered by DTCA and OTCA. They concluded that drug advertising is important predictors of attitudinal and behavioural outcomes.

Dive (2016) wanted to understand consumer's perspective for OTC drugs. He discusses how marketing activities can affect the buying behaviour that customers do that at risk of their life. Information from various sources has been collected to finally conclude that chemist play a major role in influencing consumer buying behaviour. It also writes the various factors that are responsible for compelling the consumer for self-medication.

Tong et al. 2016 did research to test how consumer would act on information related to Over-the-counter medicines. A structured questionnaire was used to understand what amount of dosage was used of Diclofenac when in pain and where would the same drug be stored. The results identified people are not implying their behaviour with the said instructions related to storage, and most importantly, dosage instructions.

Tiwari (2016) surveyed in Nepal how the buying behaviour was affected by advertisement in print media or television. He performed a descriptive study where he collected data from 400 OTC consumers by using structured questionnaires. The survey showed that there was positive contribution of advertisements. However, there is no effective change in decision making to buy. The respondents mostly relied on the recommendation of professional pharmacists and physicians thus suggested that companies may use pharmacists for effective advertisement for sale of OTC.

Pujari et al. (2016) surveyed on diversified peoples to understand how they choose their medicines. The motive is to discover factors influencing the customer's choice or customer behaviour for prescription or non-prescription ones (OTC). An organized questionnaire was used for the survey. The outcome showed that only 61% of respondents took professional advice other than that people are affected by other information sources. The

buying behaviour is also affected by 38% prescribed physicians, 14 % as per a pharmacist, 20% people purchase branded drug, 16% generic products, while 5% made decision on cost of medicines and 7% on easy availability. The survey suggested people demanded medication as per their will and pricing. The professional's choice would not be considered over money.

Chandra (2017) conducted a study to know about the Ayurvedic preferences. Like how aware the people are related to the Ayurvedic services and consumer satisfaction for the same. A survey was conducted by making the respondents answer a structured questionnaire. The results depicted low rate of awareness among the males compared to women. He states that awareness for Ayurvedic system is not high among the young population and their benefits are not reaching.

Cirstea et al. (2017) made an analysis of factors that influence OTC purchasing behaviour. They stated that OTC generates increasing revenue in total Romanian drug market. The buying decision of OTC is triggered by a number of factors out of which the most important were doctor's choice, previous own experience, advice of the pharmacist. The survey was constructed locally on their 324 people. They felt a need to check whether there are changes in the purchasing behaviour when individuals evolve as professional preparation. One of the main conclusions of the article emphasizes that both for students and employed persons with higher education, the purchasing decision of OTC is determined by two important factors: the recommendation of experts (physicians, pharmacists) and their assessment (previous personal experience and information stated on the prospectus).

Dadhich and Dixit (2017) worked through descriptive research in Jaipur city to study different promotional strategies that can influence the preference of a consumer while selection of any OTC product/brand at pharmacy or retail shops. This paper had a sample population classified on the basis of age. The data interpretation reveals the frequencies and percentage which express all categorical variables. To check the attitude of consumer towards OTC medicines, percentage analysis was carried out to identify the consumer behaviour towards OTC medicines. Their survey revealed that consumers in Jaipur city are all well aware with the use of OTC drugs. They felt it is the responsibility of the government and companies to promote knowledge for safe and effective use of OTC medicines. Their conclusion suggested the consumers should be familiar with the brand by OTC brand building and positioning that will cause repetitive purchase.

Dadhich and Dixit (2017) intended to explore consumer perception towards OTC medicines. The study intends to see the impact of marketing mix on consumer perception and OTC brand loyalty. Primary data was collected via structured questionnaire. The respondents were from different districts of Rajasthan. It was observed that marketing mix factors like Place, Price and Promotion had positive impact whereas self-medication practices had negative impact on consumer perception. They said that Place, Price and Promotions are the major factors which influence consumer to purchase OTC.

Giri (2017) studied the issues and challenges of Ayurvedic marketing in India. This study was based on secondary data, collected from various published articles etc. This system emphasises on Ayurveda with modern medical systems by various marketing strategies. At the end he stated that a new marketing initiative would help in identifying major issues. It will indicate how different initiatives would fight with other medical systems in Indian Urban Market.

Srivastava and Wagh (2017) aimed to study the impact of demographic variables on consumers purchase behaviour towards OTC products. They intended to study the consumer perception and factors that influence to buy OTC products. The research was exploratory with 90 respondents each from Mumbai and Nasik who answered their structured questionnaires. They observed factors such as Doctor's advice, past experience's, brand name, prior awareness, pharmacist's advice and safe to use affect the buying behaviour of OTC products.

Srivastava and Wagh (2017) focused on understanding the factors impacting in purchase of pharmaceutical products where they identified that factors can be used to position the products in direct-to-consumer advertising. A total of 100 respondents each from Mumbai, Nasik and Pimpalga on were randomly selected. They observed that five factors- corporate image, influencers, awareness, promotion and reliability were responsible for the purchase of OTC pharmaceutical products.

Jagmeet and Mehta (2018) were interested to study customer perception for an Ayurvedic brand- Patanjali. Their objective was to determine factors which influence repetitive purchase of the brand. Survey and observation were made to understand the whole buying behaviour form which the main reasons for repeat buying were quality, quantity and

availability of the products. The brand is competent enough to manage successful marketing campaigns focusing solely on Ayurveda and their benefits.

Jeyaprabha et al. (2018) explored brand perception with special reference to Patanjali products. Their aim was to understand the consumer perception, brand awareness which was earlier dominated by big mammoths. A survey was conducted for the customers who purchased Patanjali products and were tested by statistical tools. The analysis depicted customers are switching towards Ayurvedic products with intention of better healthy market and huge chunk of the population is aware of the brand and its natural ingredients giving therapeutic benefits.

Joshi and Sthapit (2018) aimed at finding the factors influencing customers preferences for Patanjali products. A survey for 200 respondents were administered for primary data. The paper sought to identify factors affecting buyer preference for Patanjali and concluded price, health consciousness and product quality to be most influential factors for consumer preferences for Patanjali.

Roblek et al. (2018) explored the behaviour of Slovenian customers buying over the counter drugs. They stated, customers exhibit at-least three typical behaviours: one is browsing information without purpose, looking for answers and then buying it. Their survey was conducted between younger and old age groups above 40. Their finding showed a huge amount of OTC bought online especially due to income and location.

Sharma and Bedi (2018) in his paper solely based on secondary data i.e., review of literature, studied the consumer behaviour towards the OTC medicines. He discussed various authors who ranked the most important features of OTC products were Brand naming; Efficiency; Packaging; Pricing; Promotional Offer.

Alagala et al. (2018) investigated the role of packaging on consumer buying behaviour of OTC drugs in Port Harcourt, Nigeria. They performed the survey in two sections where in section A they inquired about demographics such as sex, age education following with section B which had questions related to packaging, the colour, image, packaging material, design or wrapper and other innovations. They stated that with change in time buying behaviour has more of impulsive buying just by looking at the packaging details

which is a tool of promotional strategies. The data revealed a great influence on consumer buying decision which was due to packaging of the OTC drugs.

Hassan and Siddique (2018) aimed out to find the determinants of consumers' purchasing decision of medicine regarding over-the-counter (OTC) pharmaceutical market in Bangladesh. They selected the sample with convenient sampling and applied statistical tools for factor analysis and descriptive analysis to achieve the objectives. The study revealed five factors (reputation, knowledge, brand preference, brand favourability and willing to pay) that were responsible for consumer decision making.

Apte et al. (2019) addresses the role of media for suggesting OTC especially oral contraceptives to female customers. The emphasis on different media as a source, which have influenced adult female customers. A survey was done where it was found that socializing agents such as TV, internet played major role. Only a small number of adult females would read newspapers for the same.

Chopra and Baxi (2019) did a survey in Ahmedabad city to study consumer behaviour towards Ayurvedic Products. Both primary and secondary data was collected for this study. It was found that various promotional strategies had positive impact on the consumer. Strategies that are applied for other products such as giving freebies etc won't be applicable here.

Kathiravan et al. (2019) said that both uneducated and employed persons, buying decisions of OTC has determined by two essential factors i.e., the recommendation by the physicians and their assessment through personal experience or information through television advertisements derived from their descriptive based study. An analysis was done with 417 samples out of 600 respondents to measure the changes in purchasing behaviour of individuals compared to the consultation with the professional practitioners. They said level of economic factors like prices; brand and promotion would be lower in illiterate category.

Gupta and Ojha (2019) did a comparative study between Patanjali and Hindustan Unilever to understand the factors influencing consumer satisfaction. The idea was check and compare the brand image of Ayurvedic products in minds of consumers who purchase it as an FMCG product. Questionnaire survey method is applied to take responses and collect primary data. The findings showed that Patanjali is one of largest selling brand of Ayurvedic

medicines and in FMCG company in India due to its natural ingredients, good quality and health products.

Saxena (2019) studied the consumer behaviour for marketing push and pull strategy for Patanjali products. The data was collected from 150 participants to study their consumer preference or how are they effected by marketing strategies. They agreed with the rest that Patanjali products market is relied on the level of satisfaction they give to a customer. The strategies implied by the brand are doing justice and are attracting high numbers with their good advertisements policies.

Sivaranjani et al. (2019) proposed to make an attempt to find consumer awareness and preferences towards ayurvedic products. The study was related to find out consumer satisfaction, awareness, attitude and preference towards Ayurvedic products. 150 people were interviewed and their answers depicted valuable work done by the Ayurvedic industry to build consumer awareness and positive attitude, preferences towards them.

Sehgal and Mittal (2019) did an empirical survey for studying consumer behaviour for over-the-counter drugs as they felt it was essential to evaluate the stimulus that triggers a particular behaviour. A validated questionnaire was asked to assess intention towards OTC purchase where the key variable is like “perceived behavioural control, attitude and subjective norm as per the theory of planned behaviour (TPB).” They concluded that attitude was main driver for perceived behavioural control.

Bhowmick et al. (2020) wrote her thesis on how various factors influence consumer preferences for over-the-counter (OTC) allopathic medicine. They wanted to understand the impact of attitude and influence of social factors while purchasing OTC allopathic medicines. Questionnaire was distributed and filled for primary data. The validity and reliability were tested by statistical analysis. The result showed experience of the OTC product was major factor to influence decision of buying.

Chandran et al. (2020) wrote an article to investigate relationship between brand awareness and brand loyalty for Ayurvedic and natural-made products. A structured questionnaire was formed to collect primary data to further analysed and test the hypotheses.

Collins et al. (2020) did a survey to understand the self-care seeking behaviours. They wanted to explore relationship between characteristics of consumers requests and their

satisfaction with the pharmacy. Their survey was a cross-sectional study with both open-ended and multiple-choice questions. They found that most requests were direct-product requests. Prior experience with the product and well based knowledge of the product was better factor for decision making for the purchase. Consumer satisfaction was high at the pharmacy.

Gopinath (2020) explored new trends of Consumer Behaviour after Covid-19. An assumption is made that during Covid a lot of households started to buy online, so the author carried a structured survey to collect an easy response from various category of people and verified the same. Ultimately it was found that frequency of online shopping is increased at a higher rate in those past 6-7 months and still higher increase can be seen in future.

Habash and Al-Dmour (2020) in their empirical study examined the antecedent (internal and external) factors that should influence the buying intention for the Over the counter (OTC) medicines in Jordan. Conceptually a framework was developed from reviewing consumer buying models and all relevant available literature. The approach used for this research was quantitative and convenient sampling method to obtain the data by a questionnaire from sample size of 351 respondents which were academic staff, selected from different universities of Jordan. The results showed that the factors (Internal, External and combined) such as Brand experience, professional advice, Drug availability, brand package and family and friends' opinions have significant positive influences on the intentions to buy OTC medicines. We can conclude by saying that internal factors are more contributing than the external factors however the combination (internal and external) resulted in great influence rate on buying behaviour of the OTC medicines.

Marathe et al. (2020) in their review article elucidates about the purchase of specific medicines "Over-the-Counter (OTC) Medicines", their misuse and adverse health effects cause concerns. They have described the concept of OTC medicines and various practices in India in relation to the law, patient awareness. They recognized the need for OTC Medicines as a separate category for India, due consideration is needed for safety, abuse and patient education.

Shah et al. (2020) primary objective was to assess older adults' knowledge, beliefs and attitudes that would compel their decision-making process. Interviews were conducted, 87 respondents participated to capture how old-adults use OTC medication. It was found that

older adults follow label instructions, medication safety concerns and avoid medication overuse. All together, these results have indicated that behaviour of older adults have high potential to contribute to safer medication use.

Aufegger et al. (2021) discussed about how price and brand information impact customers buying intentions to purchase OTC drugs. Through open ended questions participants rated purchase intentions and even their perceptions towards quality and risk. They comprehended, purchase intentions were perceived more of quality and risk. Consumers purchase behaviour was mostly influenced by misconception, unawareness. It suggests authorities to allocate budgets and invest interventions to educate consumers and healthcare professionals about OTC drugs.

Benny (2021) wrote about the various factors influencing promotion of Patented Ayurvedic Drugs by Ayurvedic dealers in Kerala. The objective was to determine the factors that encourage dealers to promote patented drugs. A sample of 270 people was questioned which indicated that consumer satisfaction, competitive advantage and financial incentives do influence on promoting drugs.

Landge and Petare (2021) studied OTC buying behaviour in times of Covid-19. Primary information was gathered by 120 respondents, descriptive methodology was used to understand factors influencing purchase of OTC medicine. Their findings uncovered use of self-medication widely accepted by individuals. Respondents tend to save their clinic expenses of whole family.

Pednekar and Mayekar in 2021 wrote about factors that influence consumers' buying behaviour towards purchase of Ayurvedic products. Research data was collected using primary survey for 500 respondents which showed that reasonable price, trust, ayurvedic products were the main factors that have attracted consumers to purchase Patanjali products.

Sing et al. (2021) analysed the change in pattern of buying behaviour towards Patanjali products. This paper focuses on finding factors influencing Customer buying behaviour towards Patanjali products. For which both primary and secondary data was gathered via google form. The analysis showed factors such as Quality, Freshness, Flavour, Colour, Brand Image and Packing have more influencing customer buying behaviour towards Patanjali products.

Segu et al. (2021) studies were focused on consumer buying behaviour towards herbal immunity boosters. A survey was conducted where total of 246 people participated. The respondents were between the age group of 21-30 years. The findings showed, majority of consumers to be aware of the term herbal immunity boosters and purchasing herbal immunity boosters once or twice a month. Association could be seen between purchase frequency and demographic parameters such as age, educational status, profession, marital status, family size and income. To which no association could be found with gender and frequency to purchase.

Tomar (2021) wrote a paper explaining “Post Covid Emergent Trends in Consumer Buying behaviour for Pharma-OTC Sector”. Their solely wanted to explore and identify trends in buying behaviour for OTC post Covid-19 and what are the profit strategies built for companies. The survey is conducted in Delhi, which showed a positive effect of COVID-19 on general awareness about self-healthcare amongst consumers. They said they are open to try out self-medication and respondents who are below 35 preferred the same. He said that products with Ayurvedic ingredient was favourable to purchase.

Umbarkar et al. (2021) studied the purchase behaviour for OTC and its types for self-care. Here the theory of planned behaviour was used to understand the behaviour and attitude of participants. This paper focuses on how different individual is buying and storing a different kind of OTC medicines for their current and future use. This was helpful to grasp the attitude of consumers towards OTC medicines.

Lalagkas et al. (2022) determined the frequency of uses and selection criteria for purchasing Over-the-Counter medicines. They wanted to study community attitudes and habits for the purchase of OTC medicines in Greece. A cross sectional survey was conducted, used to investigate significant factors that affect the participants' behaviour. Their results showed that people in Greece value medical professionals and rely a lot on their advices to select/purchase of OTC medicines. They prefer buying OTC from a pharmacy rather buying it from a retail shop.

Lee et al. (2022) studied the influence of socialization agents on consumer responses to OTC medicines advertising. An online survey was conducted in U.S. The study showed that consumers use of socialization agents directly influenced attitudes towards OTC advertising. Young respondents do not follow professional guidance but rely mostly on mass

media sources whereas older respondents do follow advice from a professional or medical practitioner.

Rasheed (2022) discussed how consumer behaviour can be differed when word-of-mouth spreads from physicians' side. The survey was conducted on 477 patients, where they answered a structured questionnaire. Their answers were tested using regression analysis. It showed a positive effect on their buying behaviour towards OTC medicines.

Alarsali & Aghaei (2022) studied effective determinants of consumer buying decision on OTC medications. An online survey was conducted to assess impact of pharmaceutical digital marketing, reference groups and brand experience towards consumer decision of OTC purchase. The primary data collected showed that consumers are well aware of use for minor ailments, and it's the government and companies' responsibility to increases this knowledge and awareness about safe and effective use of OTC through digital channels.

The researched literature highlights an intriguing gap in understanding consumer behaviour regarding the purchase of Ayurvedic OTC drugs. The disparity between the influence of branding and past experiences on consumer decisions remains unexplained. Thus, the proposed study aimed to delve into this enigma, focusing on diverse stimuli that impact consumer decision-making processes. By exploring these aspects, it endeavours to uncover the true nature behind consumers choices in the Ayurvedic OTC market, offering valuables insights for both academia and industry stakeholders.

Chapter-3

MATERIALS AND METHODS

3.1 Introduction

The research methodology adopted for this research is descriptive in nature. It is a quantitative and cross-sectional study. The study will be carried out to analyse the segments of the market for Ayurvedic OTC medicines on the basis of consumer behaviour. The methodology adopted is described in the following sub-sections.

3.2 Research Objectives

1. To study the manifest consumer behaviour for Ayurvedic OTC medicines, the consumer decision-making process along with the factors influencing the purchase of Ayurvedic OTC medicines.
2. To segment the market for Ayurvedic OTC medicines on the basis of consumer behaviour.
3. To identify the demographic parameters of the market segment identified.

3.3 Theoretical Framework

To manifest consumer behaviour, two frameworks were used which were 70's of Consumer Behaviour and EKB buying behaviour for better understanding towards buying behaviour for Ayurvedic OTC medicines. As this study was new, we needed some background to start with, therefore, these two frameworks were locus of reference for any further findings.

3.3.A 70's Framework of Consumer Behaviour

The framework is discussed as under: -

1. Occupant: -Who is the consumer?

This section discusses the various variables which define who the customer is. This initiates to discuss of the overall profile of the consumer in relation to its demographics, psychographic and geographical background. The demographics section reveals the age, income, gender, education, and occupation of the consumer, while the geographical section tells us from where the consumer belongs or which

particular area they are situated. It also represents the culture and ideology of the person belonging to a certain place whether rural or urban. Similarly, psychographic factors lead to the understanding of the consumer's lifestyle often reflected in their interest, activities, and opinions.

2. **Object:** -What does the Consumer buy?

It intends the product attributes which the consumer behaviour purchases i.e., the brand, product, or product form. Further, it will also identify the specification, colour, size, type, variant, etc., which the customer seeks to buy.

3. **Objective:** - Why are Consumer Buying?

It gives motive for the purchase of the product by the customer, in terms of the needs satisfied or benefits expected from the product. For example, Customers buy Patanjali products in need of natura/ organic ingredients.

4. **Occasion:** - When do they buy?

It learns the buying frequency and discusses how often the customer purchases or repurchases the product and on what occasion does they tend to buy the product or service. For example, Cold medicines are bought mostly in winter season as people tend to fall ill more frequently in winter seasons.

5. **Outlet:** -Where do they buy?

It identifies the place. The retail shop or an online platform i.e., app or website, departmental store, or any other location from where the customer makes the buying decision. For example: Ayurvedic OTC can be bought in retails stores such as Hajmola, Vicks including other brands lozenges etc.

6. **Operations** – How do they Buy?

It ascertains the background information, collected by the customer related to the product from various sources before they can make a decision to purchase the same or not. For example: Buying any Ayurvedic OTC Cream (such as Vicco-turmeric) we often visit or consult a doctor or medical professional for their professional advice in relation to the product.

7. **Organization** – Who is Involved?

It provides the management with various sources of information that are responsible in influencing the buying behaviour or can affect the buying decision of the consumer. Thus, marketers always try to understand consumer psychology with respect to their purchase decisions and identify the factors influencing consumer behaviour.

3.3.B EKB Model- Engel-Kollet-Blackwell Model

The model was published by Engel, Kollet and Blackwell in 1968 and is used to understand the buying behaviour of customers. It is a conscious problem solving and learning model of consumer behaviour. This model has been undergone through several amendments, latest publication was EBM model given by Engel, Blackwell and Miniard (2001). The model consists of five stages i.e., information input, information processing, decision process stage, decision process variables and external influences.

The information input is to expose the customer to variety of stimuli which in turn influence how they behave as consumers and make decisions. Consumer receive information at this stage from both marketing-related (advertisements, promotions, personal selling, demonstrations and store displays with point of purchase stimuli) and non-marketing sources (be it family, friends and peers), which also have an impact on the problem recognition stage of decision-making process. Information is provided by the first stage stimuli, which is then processed to create meaningful information. Consumer exposure, attention, perception, acceptance and finally retention of information make up this stage. The consumer is initially exposed to stimuli; afterwards, they would analyse and absorb information, save it in their short-term memory and retain it by transferring the input to their long-term memory.

The EKB decision process is based on five stages i.e.,

- Problem recognition
- Information Search
- Alternative Evaluation
- Choice
- Outcome (post-purchase evaluation and behaviour)

It's said that this not compulsory that every consumer goes under these stages, it would depend on whether it's a routine problem or an extended problem-solving behaviour. Environmental factors also have an impact on information search. The consumer then assesses the available options; this assessment aids in the development of their attitudes towards various goods and services, which in turn influences their desire to make a purchase. Following that, comes the step of decision and purchase, which is affected by personal preferences. The result is finally available, either satisfaction or discontent. This result actually feeds back on the input, affecting the cycle once more. Each stage of decision-

making process is influenced both directly and indirectly by environmental factors, human variations and social factors. Individual effects that have an impact on each of the five phases of the decision- making process make up the decision process variables stage. Personality traits include things like attitudes, convictions, demographics, drives, personalities, values and way of life. The model also addresses several situational and contextual factors that influence decision-making. In contrast to situational impacts, which include the consumer's financial circumstances, environmental effects include social influences such as culture, subculture, social class, reference groups, family, and other normative influences (Baharun and Mahmood, 2019).

3.4 Construction of Questionnaire

The questionnaire comprised of four sections divided on basis of the framework.

- Part one of the questionnaire asked questions related to manifest consumer behaviour in relation to Ayurvedic OTC medicines. To obtain this the 7O's framework was used to frame the questions. In this section, questions 1,2,3,4,5 and 6 belonged to the O-Object. Question 8 and the demographic question were defining the O-Occupants. Similarly, question 7,9 and 10 were asked to present O-Objectives. Questions 11,12,13,14 and 15 were dealt to understand O-Organisations. Furthermore, questions 16,17,18,19,20 and 21 answered about what O-Operations was. Questions 22,23,24 and 25 asked to know about O-Occasion. Lastly, questions 26,27 and 28 were meant to answer the O-Outlets.
- Part two of the questionnaire dealt with consumer decision making process of the respondents. To obtain this objective, the five stages of EKB model of Consumer Buying process was studied and questions were formulated in reference to them. This section is consisted of 30 questions from 29 to 58, each divided in a way to follow the five stages of consumer-buying behaviour.
- Part three of the questionnaire was dealt with factors influencing to purchase Ayurvedic OTC medicines from 59-81 question number. By reading literature, 24 factors were discovered which however influenced the buying behaviour of individuals while buying medicines. Therefore, we incorporated them in the study to understand whether same factors played a role while purchasing Ayurvedic OTC medicines.

- Part four of the questionnaire asks questions to identify demographic indicators of the market segments from 82 to 94 question.

The questions were created by the scholar herself based upon the theoretical framework and the idea gained from review of literature. All of these questions are closed ended, in which respondents has been given a choice on 5-point Likert scale depending upon the nature of the questions asked. Scores were given accordingly during analysis. A cautious attitude was adopted while making the questionnaire so that activities are not duplicated under opinion and the other way around.

3.5 Sampling Plan

The research was carried out to analyse the segments of the market for Ayurvedic OTC medicines based on consumer behaviour. The data used were both primary and secondary. The sampling unit in this case is all age-groups people above 18 who tends to buy OTC medicines. A sample size of 401 respondents was considered for the study by using the formula of Yamane's $(n=N/1+N(e)^2)$. This was approximately 389 which when round of was taken as 400. In addition to this one more respondent was taken to be safe from missing values. For this, a multi-stage random and proportionate sampling design was adapted to select the samples of respondents.

- First, out of 12 districts of Himachal Pradesh, 2 districts Solan and Hamirpur, were selected randomly.
- Then randomly two tehsils per selected district were chosen for the study.
- Within each tehsil, proportionate sampling was applied where the sample size of 400 respondents was first divided as per the proportion of the population of the two districts. Sample sizes are allocated to a district which was divided amongst the tehsil selected in the proportion of their population.
- At the tehsil level, the population was collected both from urban and rural areas based using proportionate sampling. The sample size has been decided based on the proportion of the rural and urban population of the tehsil.

3.6 Procedure and Sample Size

Using the data provided by Census 2011 report for Himachal Pradesh, further calculation was made. The total population of Solan and Hamirpur is 10,35,088 where Solan

is 5,80,320 and Hamirpur constitutes to be 4,54,768. With this information, the respondents were divided and 224 responses were collected from the Solan district and 176 responses from the Hamirpur district. For these two districts, further two tehsils were selected, which were Arki (26,682) and Kasauli (42,554) for Solan district and Hamirpur town (1,16,948) and Bhoranj (90,590) for Hamirpur district. By proportionate division, the number of responses was divided and Arki had 85 total responses and Kasauli with 139 responses. Hamirpur town had 99 responses of the total and Bhoranj would have 77 responses. Furthermore, responses were taken accordingly from both rural and urban areas as per their population. For Arki, the rural population was 23,599 where 75 responses were collected and the urban was 3,083 for which 10 respondents were questioned. Similarly, for Kasauli, the rural population was 29,911 against which 97 responses were taken and the Urban population is 12,643 for which 42 responses were made. As far as Hamirpur town was concerned, the rural population was 99,344 against which 83 responses were made and for the urban population with 17,604 number, 16 responses were filled from here. Lastly for Bhoranj, this area has no urban population and only a rural area with 90,590 for which 77 responses were necessary. Wholly this calculation counted to 400 responses as the initial sample size.

Table 3.1

District	Population	Tehsil		Population	Sample
Solan	580320	Arki	Rural	26682	75
			Urban	3083	10
		Kasauli	Rural	29911	97
			Urban	12643	42
Hamirpur	454768	Hamirpur Town	Rural	99344	83
			Urban	17604	16
		Bhoranj	Rural	90590	77
					Sample Size=400

3.7 Statistical Tools

3.7A Factor Analysis

Factor analysis is used to break down a large number of variables into a smaller number of elements. Using this, the minimum common variances across all variables are extracted and converted into a single score. The general linear model comprises factor analysis, which also makes various other presumptions, including the existence of linear relationships, the absence of multi-collinearity, the inclusion of pertinent variables in the

analysis, and the existence of real correlation between variables and factors. There are other techniques, but principal component analysis is the most used one.

They are types of factoring i.e., types of method used to extract the factor from data set.

- **Principal Component analysis:** The method that is used the most frequently is to take the most variance out of the data and place it in the first component. The highest variance for the second component is then extracted after the variation described by the first factors has been eliminated. Using this method, the top floor is reached.
- **Common factor analysis:** this method, which removes common variation and enables it to be listed into factors, is the second most popular among academics. This approach does not account for each variable's particular volatility.
- **Image factoring:** essentially bases its prediction of the factor on a correlation matrix.
- **Maximum likelihood method:** this method incorporates using the maximum likelihood formula while working with correlation metrics.

Factor Loading

It is factor and variable's correlation coefficient. Factor loading displays the variance on that specific factor that is explained by the variable. Generally speaking, under the SEM technique, factor loading of 0.7 or greater indicates that the factor extracts enough variance from the variable.

Eigen Values

The variance explained by that specific factor out of the total variance is shown by Eigen values which are also called characteristic roots. It can be determined how much of the total variation is explained by the first factor from the commonality column. For instance, if the factor explains 68% of the in general variance, the other factor will be responsible for 32% of the variance.

Factor Score

The component score is the name given to the factor score. This score includes every row and every column, making it possible to use it as an index of every variable and to conduct further analysis. A common phrase can be multiplied to standardise the score. Any analysis performed was based on factor score and presume that all variables that behave and move as factor scores.

Criteria for determining the number of factors

Eigen values are a useful criterion for choosing a factor, according to the Kaiser criterion. In regard to Eigen values a factor is if they are larger than one, and we shouldn't consider them as a factor if they are less than one. It should be over 0.7 in accordance with the variance extraction criteria. If variance is smaller than 0.7, it shouldn't be taken into account.

Rotation method

It improves the output's readability. The rotation method is unaffected by Eigen values; however, the extracted variance or Eigen values are affected by the rotation method. There are several rotation techniques such as no rotation method, varimax rotation method, Quartimax rotation, direct Oblimin rotation method and promax rotation method. Each of them can be quickly chosen in SPSS, allowing to compare the variance's explanation using those specific techniques. The varimax rotation approach was used for the study as it maximises the squared loadings variance within the factors. The most used rotation technique, it makes the columns of the loading matrix simpler. This strategy tries to make the loadings large or tiny to facilitate understanding.

The factor analysis model is:

$$X = \mu + L F + e$$

where $X = p \times 1$ vector of measurements

$\mu = p \times 1$ vector of means

$L = p \times m$ matrix of loadings

$F = m \times 1$ vector of common factors, $e = p \times 1$ vector of residuals.

When measuring a topic or object, p would be the number of measurements, and m would be the number of common components. It is believed that F and e are independent, as well as that each F is independent of the others. The identity matrix $\text{Cov}(F)$ equals 1, the mean of F and e is 0, and $\text{Cov}(e)$ equals a diagonal matrix. This is an orthogonal factor model because of the assumptions on the independence of the F (Joreskog, 1977).

3.7B Cluster Analysis

Clusters are formed when an attempt is made to put together a collection of things that share similar traits. The method is known as clustering. Finding the qualities of each

individual thing is difficult; it would be simpler to group objects that are similar and have a set of shared characteristics. It is a multi-variate data mining method whose objective is to classify things (such as goods, responders, or other entities) according to a set of user-selected traits or features. Data compression, machine learning, pattern recognition, information retrieval and other areas all use this essential and crucial phase of data mining, which is also a widely used method for statistical data analysis. Clusters should display high level of internal and external homogeneity.

Types of Cluster Analysis

- **Hierarchical Cluster Analysis:** a cluster is created initially, and then it is combined with another cluster (the one that is closest and most comparable) to create a single cluster. Until every subject is in a single cluster, this process is repeated. Agglomerative approach is the name of this specific technique. Agglomerative clustering begins by collecting individual items into clusters.
- **Centroid-based Clustering:** a core entity, which may or may not be a component of the supplied data collection clusters. In this approach, items are assigned to the closest cluster centres using the K-Means method of clustering, where K are the clusters.
- **Distribution-based Clustering:** it is a form of clustering model that is strongly connected to distribution-based statistics. A cluster is created by grouping together objects that fall within the same distribution. Some complicated characteristics of objects, such as correlation and reliance between qualities can be captured by this kind of grouping.
- **Density-based Clustering:** in this kind, regions of density that are greater than the rest of the data set serve as the basis for cluster definition. Clusters are typically separated by objects in sparse regions. Typically, the graph's border points and noise are the items in these sparse spots. DBSCAN is the most often used technique for this kind of clustering.

Basic K-Means Algorithm

In this research, (Aldenderfer and Blashfield in 1985) K means clustering technique is used which is a simple technique. Initial centroids (K) were chosen first where K is the number of desired clusters. These points are then assigned to the closest centroid where each point of collection makes a centroid known as clusters. The centroid formed are improved

with the points assigned to the cluster. This process is repeated and steps are updates until if the clusters are not changed.

Then, point nearest/closet to centroid is assigned that measures the notion of ‘closet’ for specific data. Euclidean distance is used for such data points and this similarity measures used for K-means are relatively simple since the algorithm which repeats continuously to calculate similar points to each centroid. To fulfil our objective function, need to measure the scattering of data which is called as Sum of the Square Error (SSE). This is used to calculate each data point error that are Euclidean distance to closet centroid and the find SSE.

$$SSE = \sum_{i=1}^K \sum_{\mathbf{x} \in C_i} dist(\mathbf{c}_i, \mathbf{x})^2$$

Where dist is the standard Euclidean (L_2) distance between two objects in Euclidean space.

The centroid that could minimize the SSE of the cluster is the mean. Using the above equation, the centroid which is mean of the i^{th} cluster is as follows:

$$\mathbf{c}_i = \frac{1}{m_i} \sum_{\mathbf{x} \in C_i} \mathbf{x}$$

•

3.7C Descriptive Analysis:

ANOVA Test

By evaluating the amount of variation within each sample to the amount of variation within each sample, an ANOVA is used to examine differences between population mean differences. The theory that the means of two or more populations are equal is tested by analysing the variance. Analysis of Variance (ANOVA) is used in the study to test a certain hypothesis and determine how the groups respond, with the null hypothesis being that the means of different groups are identical. Two populations are not equal if there is a statistically significant difference between them.

Means: The grand mean is the average of sample means from several groups or the mean of all observations put together, whereas a sample mean is the average value of two groups.

F- Statistics: The F-ratio is a statistical metric that reveals how much the means of several samples deviate from one another. The sample means are closer when the F-ratio is lower.

Sum of Squares: Technique for figuring out the dispersion of data points in regression analysis. To compare the value of F, it is utilised in the ANOVA test.

Hypothesis: We have a null and an alternative hypothesis in an ANOVA. The alternative hypothesis is true when at least one of the sample means differs from the other, but the null hypothesis is true only when all of the sample means are equal or hardly different.

Group-Variability: a collection of samples inside distinct variables. In this context, between groups refers to a considerable difference in the sample distributions of different groups. Within groups refers to changes that are discernible within the sample's group.

One-Way ANOVA: The most popular approach is using a single independent variable. Using this technique, you may determine if the means of your independent variables differ significantly from one another.

The formula for Analysis of Variance is:

ANOVA coefficient, $F = \text{Mean sum of squares between the groups (MSB)} / \text{Mean squares of errors (MSE)}$.

Therefore $F = \text{MSB} / \text{MSE}$

where, Mean squares between groups, $\text{MSB} = \text{SSB} / (k - 1)$

Mean squares of errors, $\text{MSE} = \text{SSE} / (N - k)$

Total degrees of freedom, $N - 1 = \text{df}_3$

Degrees of freedom of errors, $N - k = \text{df}_2$ here, N is the total number of observations throughout k groups.

Degrees of freedom between groups, $k - 1 = \text{df}_1$, where k is the number of groups.

Moreover, the ANOVA table below represents its many components:

Table 3.2

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Value
Between Groups	$SSB = \sum n_j (\bar{X}_j - \bar{X})^2$	$df_1 = k - 1$	$MSB = SSB/(k-1)$	$f = MSB/MSE$
Error	$SSE = \sum \sum (X - \bar{X}_j)^2$	$df_2 = N - k$	$MSE = SSE/(N-k)$	
Total	$SST = SSB + SSE$	$Df_3 = N - 1$		

Chi-Square Test

It is statistical procedure for determining the difference between observed and expected data. It determines whether correlates to categorical variables in our data. It is a comparable non-parametric test that is required to test a hypothesis regarding the distribution of categorical variable. Chi-square is a statistical test that examines the differences between categorical variables from a random sample in order to determine whether the expected and observed results are good to go. These tests used degree of freedom to determine if a particular null hypothesis can be rejected based on total number of observations made in the experiments. Larger the sample size, more reliable is the result.

Chi-square test of Homogeneity was applied to different variables to test the difference between them. The calculated values of Chi-Square were compared to the tabulated values at (r-1) (c-1) degree of freedom. The test statistics is as follows:

$$X^2 = \sum \frac{(O-E)^2}{E}$$

Where;

O= Observed value

E= Expected Value

$$\text{Expected Value} = \frac{\sum c}{\sum g} \sum R$$

$\sum C$ = Total of columns in a r*c contingent table.

$\sum R$ = Total of rows in a r*c contingent table.

$\sum G$ = Grand total in r*c contingent table

r= Number of rows

c= Number of columns.

Percentage analysis

Percentage Analysis refers to a special kind of ratio which is used in making comparisons between two or more series of data. The formula used in percentage method is

$$P = \frac{X}{Y} \times 100$$

Where X= Number of respondents failing in a specific category to be measured.

Y=Total number of respondents

Mean

A sample mean is average value of two groups, whereas the grand mean is average of sample means from various groups or the mean of all observations combined.

Mean also known as arithmetic average, is the most common measure of central tendency & can be defined as the value which we get by dividing the total of values of various given items in a series by the total number of items.

$$\bar{X} = \frac{\sum xi}{n}$$

where $\bar{X}$ = the symbol used for mean

Σ = Symbol for summation

X_i = value of the i^{th} item

n= total number of items

Bartlett test of Homogeneity

Bartlett test of homogeneity of groups was applied to test the degree of homogeneity between the groups. The following test statistics was followed:

$$X^2 = \frac{M}{C}$$

where,

$$M = \sum (n_i - 1) \log_e S^2 - \sum (n_i - 1) \log_e S_i^2$$

$$\log_e S^2 = \log_e 10 * \log_{10} S^2$$

$$S^2 = \frac{\sum (n_i - 1) s_i^2}{\sum (n_i - 1)}$$

$$\text{Log}_e 10 = 2.30259$$

$$C = 1 + \frac{1}{3(K-1)} \left[\sum \frac{1}{(n_i - 1)} - \frac{1}{\sum (n_i - 1)} \right]$$

K = Number of groups

The calculated value of χ^2 was compared with the tabulated value at K-1, degrees of freedom.

Chapter-4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter has the detailed discussion on the results of data analysis as related to objectives of the research. This chapter also discusses the findings of the study.

4.2 Demographic Profile

This section is about the overall demographic profile for the respondents who participated in the survey to accumulate primary data to fulfill the objectives of the research.

4.2.1 Age

Table 4.1

Age	Frequency	Percent
20-29	187	46.6
30-49	151	37.7
50-65	60	15
Over 65	3	0.7
Total	401	100

The table 4.1, represents the age of the respondents. It shows that 46.6% belong to the age group pf 20-29 years of age, followed by 37.7% belonging to the age group of 30-49 years. The results reflected the figures released by Economic and Statistics Department in its document “Youth in Himachal Pradesh-2018” where they mentioned total youth population has increased from 10.56 lakh in 1971 to 24.20 lakh in 2011. Here ‘Youth’ defines as persons in the age group of 15-29 years.

4.2.2. Employment Status

Table 4.2

Employment	Frequency	Percent
Full-time work	123	30.7
Part-time	89	22.2
Unemployed	31	7.7
Retired	29	7.2
Student	129	32.2
Total	401	100

The table 4.2 depicts the employment status of the participants. The highest proportion can be observed of students (n=129, f=32.2%) and full-time workers (n=123, f=30.7%). These two comprise the largest population with 52.9% out of the total sample. Whereas least frequent category can be seen as that of respondents who were retired (n=29, f=7.2%). We can see that 85.1% of the sample were actively working either being employed or are students.

4.2.3 Occupation

Table 4.3

Occupation	Frequency	Percent
Public sector	83	30.7
Private sector	79	29.2
Self-employed	34	12.5
Professional	21	7.7
Businessman	7	2.5
Others	48	17.5
Total	272	100

The table 4.3 depicts the occupation of the respondents. The majority of respondents work in the public sector (n=83, f=30.7%) followed by private sector (n=79, f= 29.2%). Thus, it can be seen that most of the sample comprises of either public or private sector (59.9%) whereas, others, businessman, self-employed, professional comprise 40.2% of the sample.

4.2.4 Sector

Table 4.4

Sector	Frequency	Percent
Education	110	40.6
Banking	5	1.7
Health services	6	2.2
Administrative Services	16	5.7
Corporate Sector	24	8.7
Others	111	40.9
Total	272	100

The table 4.4 is about sectors the participants are working in. It can be seen majority of the participants (n=111, f=40.9%) are from the others sector followed by Education (including rural schools) with (n=110, f=40.6%). The remaining participants (n=51, f=18.3%) were from banking, health services, administrative and corporate sector. The sector named

others were majorly selected by people who were associated with agriculture or related vocations as agriculture provides direct employment to 71% of population of Himachal Pradesh (NITI Aayog on Natural Farming, 2021).

4.2.5 Gender

Understanding gender distribution is crucial in comprehending the dynamics of societies, offering insights into disparities, participation, and representation.

Table 4.5

Gender	Frequency	Percent
Female	139	34.7
Male	262	65.3
Total	401	100

This table 4.5 aims to illustrate the proportionate representation of genders, shedding light on the demographic makeup and offering a glimpse into the gender landscape within our society. It was noted that number of males who participated were more as compared to the females. The males were 262(65.3%) and rest 139 (34.7%) were females.

4.2.6 Place of Residence

Table 4.6

Place of Residence	Frequency	Percent
Rural	314	78.3
Urban	87	21.7
Total	401	100

The table 4.6 presents the place of residence of the respondents. It was seen, that a very large population of the sample lives in rural areas i.e., 314(78.3%) whereas only 21.7 % lives in urban areas. This in line with Census 2011 which tells us, majority of population of the state residing in rural areas.

4.2.7 Monthly Income

Table 4.7

Monthly Income	Frequency	Percent
Below Rs 20,000	87	21.7
Rs 20,000-60,000	209	52.1
Rs 60,000-80,000	71	17.7
Rs 80,000-90,000	32	8
Rs 90,000 and above	2	0.5
Total	401	100

The table 4.7 shows the monthly income of the family. It is clear from the table that large proportion (n=209, f=52.1%) of the sample has monthly income in the range of Rs 20,000-60,000/- whereas least proportion (n=2, f=0.5%) of the sample had income can be seen for the range of Rs 90,000 and above.

4.2.8. Education

Table 4.8

Education	Frequency	Percent
8th grade or less	2	0.5
Attended high school	9	2.2
High school	91	22.7
Some college	64	16
College students	26	6.5
Graduate/ Professional	206	51.4
Others	3	0.7
Total	401	100

The table 4.8 shows us the educational background of the respondents. It is observed that the highest frequency was of graduate or professional degrees constituting 206(51.4%) of the total participants. The lowest frequency was of respondents with education less than 8th grade which comprises of 0.5% of the total population. This reflects the high literacy level and education level of Himachal Pradesh.

4.2.9 Type of family

Table 4.9

Type of Family	Frequency	Percent
Joint family	139	34.7
Nuclear family	262	65.3
Total	401	100

The table 4.9 depicts the type of family the respondents are residing in. It can be seen from the table that most of the respondents live in a nuclear family i.e., 262(65.3%) and only 139(34.7%) were said to be in joint family system. This reflects the breakdown of joint families, even amongst families residing in rural areas and may be attributed to presence of nuclear family structure in the study area.

Type of Schooling

Table 4.10

Type of schooling	Frequency	Percent
English medium	198	49.4
Hindi medium	203	50.6
Total	401	100

Table 4.10, tells us about the type of schooling the respondents have received. The table presents that most of the respondents studied in Hindi medium schools comprising 203(50.6%) whereas English medium schools to be 198 (49.4%) in total. This reflects the shift that has been seen in higher enrolments in private schools, compared to government schools over the years. This is similar to a study done in 2007 by Tooley et al., where they found high enrolments rates in private schools in Hyderabad and concluded that parental preference because of English medium and high quality at lower costs primarily drove the educational enrolment in these schools.

4.2.11. District-wise Residential Distribution

Table 4.11

District Staying in	Frequency	Percent
Hamirpur	176	43.9
Solan	225	56.1
Total	401	100

The table 4.11 depicts the districts in which the respondents are living in. Out of the total 225(56.1%) lived in Solan district and 176(43.9%) were living in Hamirpur district out of the total respondents. According to the sampling plan, the two districts were randomly selected and then sample size(n=400) were first divided as per proportion of the population of the two districts given by census,2011. The population of Solan was 5,80,320 whereas Hamirpur was 4,54,768 which both calculated to be 10,35,088. They were both proportionally divided amongst which 224 responses were to be filled from Solan and 176 responses from Hamirpur district.

4.2.12 Tehsil-wise Distribution

Table 4.12

Tehsil	Frequency	Percent
Arki, Solan	85	21.2
Bhoranj, Hamirpur	77	19.2
Hamirpur	99	24.7
Kasauli, Solan	140	34.9
Total	401	100

As the sample plan suggested, two tehsils randomly selected within the randomly selected two districts of Himachal Pradesh. Table 4.12 shows us the Tehsil in which respondents belong to. The table tells us that 34.9% of people were from Tehsil Kasauli, District Solan, followed by 24.7% from Hamirpur town. These were deliberately taken as part of the sampling plan which specified multi-stage proportionate sampling, these two tehsils were randomly selected each from the randomly selected two districts of Himachal Pradesh.

4.3 Manifest Consumer Behaviour

For this section, the 7 O framework was used to study the manifest consumer Behaviour and was used while formulating the questionnaire for better understanding of Consumer Behaviour which is described accordingly.

4.3.1. Objects Purchased

Table 4.13

Variables	Responses	Percentage
Preferred OTC medicine type	Ayurvedic	46.4
	Allopathatic	42.4
	Homoepathic	9.0
	Others	2.2

Object tells us about what the market/ consumer buy. For the first variable, it can be clearly seen that 46.4% respondents were more interested to buy Ayurvedic OTC medicines type. In recent research, Anute et al., 2015 found that younger people are more inclined towards buying natural products and as this research presents majority youth population, the idea of choosing Ayurvedic medicine type was reflected.

Table 4.14

Ayurvedic OTC brand you purchased	Dabur	14.7
	Himalaya	30.2
	Patanjali	37.2
	Zandu	4.0
	Hamdard	3.5
	Baidyanath	2.7
	Others	7.7

Second variable asked about the brand they buy. For that a mix response could be seen, Patanjali was purchased by most i.e., 37.2% and Himalaya by 30.2% respondents. In recent research, it can be seen Patanjali is a brand preferred and recognized for natural products by mostly everyone in India, supporting the percentage above.

Table 4.15

Type of OTC medicines you purchased	Vitamins	17.7
	Lozenges	7.0
	Cold-Flu-remedies	22.2
	Allergy remedies	12
	Immunity-booster	21.4
	Skincare	19.7

Next 22.2% said they bought these Ayurvedic OTC medicines for cold-flu related problems and 21.4% bought it for skincare.

Table 4.16

Forms of Ayurvedic OTC medicines bought	Tablets	25.7
	Syrups	26.4
	Powder	12.7
	Creams	26.9
	Capsules	8.2
	Blister-packs	5.7

Another variable talk about what form was preferred for Ayurvedic OTC medicine, in which participants marked Creams (26.95), Syrups (26.4%) and Tablets (25.7%) as their choices.

Table 4.17

Kind of packaging bought	Sachets	19
	Bottles	49.6
	Tube	25.7
	Blister-packs	5.7

Lastly, they were inquired about the packaging of the Ayurvedic OTC medicines. The results show responses for bottle packaging (49.6%) over every other packaging.

4.3.2 Objectives

Table 4.18

Variables	Responses	Percentage
Quantity of Ayurvedic OTC	Immediate-cure	40.4
	Regular basis	59.4

The table 4.18 and further discuss about the second O which is Objectives, the framework articulates that there is a need to understand why does the market buy. The first variable shows us that 59.4% bought Ayurvedic OTC medicines for regular basis.

Table 4.19

Benefit you buy Ayurvedic OTC medicines.	Non-side-effects	47.4
	Natural-ingredients	43.1
	Therapeutic	9.2

Furthermore, it was because of non-side effects and natural ingredients that 47.4% and 43.1% of respondents respectively tend to buy these products. This was same to the research earlier cited where they stated more of natural ingredients products are used by Anute et al., (2015).

Table 4.20

Reason to not visit a doctor rather than buying an OTC product.	Expensive	6.7
	Kills-my-time	11.7
	Unnecessary	38.2
	My mood	17.2
	Minor-ailment	25.9

Last variable was for to understand objectives as to why participants don't visit the doctor, 38.2 % of respondents said that it was unnecessary as they could treat themselves as 25.9% said they had minor ailments for which they feel unnecessary to visit a doctor.

Table 4.21

Mostly you buy Ayurvedic OTC for.	Skincare	22.2
	Immunity	30.7
	Pain relief	12.7
	Mental-growth	4.5
	Cough & cold	17.2
	Supplements	6.7
	Gastritis/Acidity	3
	Other	3

The respondents who need immunity OTC are the ones who constitute mainly our market according to the result i.e., 30.7%. This can also be seen due to recent Covid-19, many companies promoted their products with hashtag immune-booster which was said to be a rhetorical product just used to generate activity in online attention economy (Wagner et al., 2020).

4.3.3 Organisations

Table 4.22

Variables	Responses	Percentage
Visits to the doctor instead buying OTC medicines	Very often	12
	Often	17.5
	Sometimes	40.9
	Rarely	26.9
	Never	2.7

When asked about the frequency about visiting the doctor, 40.9% respondents said they sometimes visited instead of buying Ayurvedic OTC medicines.

Table 4.23

Doctor prescribed Ayurvedic OTC medicines	Very often	7.7
	Often	11.2
	Sometimes	31.9
	Rarely	31.7
	Never	17.5

Since participants don't visit their doctors, it can be inferred that less respondents would have got themselves prescribed medicines. Respondents i.e., 7.7% said they very often and 11.2% said they often got prescribed medicines for themselves.

Table 4.24

Recommendations of your friend	Very often	3.2
	Often	18.2
	Sometimes	44.6
	Rarely	23.9
	Never	10

Another way to infer how the customers participate in buying was to ask them about who influences them or from whom are they influenced the most. When asked about recommendations made by friends 18.2% responses were for often and sometimes as 44.6%. The impact of friends on a consumer's choice is greatest when they are closed to them (Alarsali&Aghaei, 2022).

Table 4.25

Recommendations of your family	Very often	6.7
	Often	21.4
	Sometimes	35.9
	Rarely	26.9
	Never	8.7

Similarly, recommendations from family accounted often which were 21.4% whereas rarely to be 26.9% respectively.

Table 4.26

Inquired about specific brand	Very often	6.5
	Often	20.9
	Sometimes	49.1
	Rarely	18
	Never	5.5

The customers are not really influenced by the recommendations made by others but do inquire about specific brands available in Ayurvedic OTC segment. A mix response with 49.1% which is half the respondents, agreed to sometimes inquire about ayurvedic OTC medicines whereas 20.9% said they often inquired and 18% did not inquired about the same.

4.3.4 Operations

Table 4.27

Variables	Responses	Percentage
Source of knowledge of most often used OTC product.	General-store	9.2
	Internet	22.2
	Doctors	17.7
	Free sample	5
	Pharmacist	17
	Friends/relatives	17.2
	Newspapers	2
	Advertisements	9.7

Operations makes us understand how market buys the product. Market means the customer or consumer. For the product to buy we need to be aware of the product. Most of the responses show Internet is powerful tool to know about any OTC product with 22.2% and has increasingly been used as source of medicines-related information as they tend to prefer the internet for ease of access (Bergmo et al.,2023). Doctors, friends/relatives and pharmacists have similar results in educating about OTC product and are still consulted with 17.7%, 17.2% and 17% respectively. In research done by Apte&Markale (2018) stated educational qualifications up to Graduation preferred medical advice from pharmacist and doctors. In terms of OTC product, Advertisements stand a less influence as they have 9.7% participants who were impacted by them.

Table 4.28

Seek advice from your doctor before buying	Very often	7.2
	Often	20
	Sometimes	28.4
	Rarely	27.7
	Never	16.7

The table shows that the respondents rarely seek advice from doctor before buying Ayurvedic OTC medicines (27.7%) whereas for OTC medicines reference groups are considered an important factor to consult or influence before buying (Ding *et al.*, 2020 and Alarsali&Aghaei, 2022).

Table 4.29

Seek advice from your friend before buying	Very often	2.2
	Often	16.5
	Sometimes	39.4
	Rarely	29.4
	Never	12.5

The respondents showed no interest to seek advice from friends (41.9%) before buying Ayurvedic OTC but in case of OTC medicines, people normally reflect towards the reference group including friends.

Table 4.30

Seek advice from your family before buying	Very often	5.5
	Often	21.7
	Sometimes	37.4
	Rarely	28.9
	Never	6.5

In case of family, 37.5% responded as sometimes they would consider seeking advice from family.

Table 4.31

Purchased Ayurvedic OTC by yourself.	Very often	6.5
	Often	26.9
	Sometimes	41.6
	Rarely	20.7
	Never	4.2

The numbers show 26.9% often purchase Ayurvedic OTC for themselves while 41.6% sometimes go buy it for themselves.

Table 4.32

Somebody else purchased Ayurvedic OTC for you.	Very often	10
	Often	11.2
	Sometimes	25.9
	Rarely	41.6
	Never	11.2

41.6% of responses showed that the participants rarely asked somebody else to purchase Ayurvedic OTC medicines for them, whereas 11.2% has often and 10% of them has very often asked somebody else to purchase the same for them.

4.3.5 Occasion

Table 4.33

Variables	Responses	Percentage
Purchased Ayurvedic OTC in summer season.	Every week	1.7
	Every day	2.5
	Once-a-month	41.4
	Once-fortnight	5.7
	<once-a-month	48.6

These tables will tell us about the occasion, when does the market buy the product, as to which time of the year or which period of the month. The data showed participants buy 2.5% of Ayurvedic OTC medicines every day in summer season and majority said they would purchase the same once in a month i.e., 41.4%.

Table 4.34

Purchased Ayurvedic OTC in winter season.	Every week	2.7
	Every day	4.7
	Once-a-month	41.1
	Once-fortnight	13.7
	<once-a-month	37.7

This data shows increase of daily usage of Ayurvedic OTC in winter season (4.7%) to double the purchased amount in summer season (2.5%). Majority still felt that they would purchase once a month i.e., 41.1%.

Table 4.35

Purchase Ayurvedic OTC medicines in a month.	Very Often	2
	Often	45.9
	Sometimes	33.7
	Rarely	13.2
	Never	5.2

The table 4.35 shows 33.7% respondents sometimes purchase Ayurvedic OTC in a month and 45.9% said they would purchase Ayurvedic OTC in a month.

Table 4.36

Purchase Ayurvedic OTC medicine often	Very often	8.2
	Often	22.2
	Sometimes	40.1
	Rarely	26.2
	Never	3.2

40.1% participants felt they sometimes purchased Ayurvedic OTC and only 22.2% purchased it often with 8.2% very often.

4.3.6 Outlets

Table 4.37

Variables	Responses	Percentage
You purchased most of your Ayurvedic OTC medicines in last 12 months from.	Chemist-shop	46.6
	General-merchant	37.7
	Online	15.6

The table 4.37 discusses where does the market buy its products from mainly which outlets do they prefer. 37.7% respondents purchased Ayurvedic OTC from General Merchant and 46.6% from Chemist shop.

Table 4.38

Distance of retail outlet mentioned.	<0.5kms	19
	0.5-2.5kms	52.9
	>2.5kms	27.9

52.9% had outlets present within the distance of 0.5-2.5 kms of their residence.

Table 4.39

Percentage of your required Ayurvedic OTC medicine you purchase from same retail shop.	0-25%	20
	25-50%	38.2
	50-75%	33.2
	75-100%	8.7

71.4% of the total respondents believe that they require 25-75% of Ayurvedic OTC medicines from the same retail/chemist shop.

4.3.7 Occupants

The descriptive analysis in 4.2 which is titled as demographic profile explains or discusses about Occupants, that defines the people who all constitute the market.

4.4 Synthesizing Manifest Consumer Behavior

This section explains the factor analysis performed on the 70 based variable to get better understanding of which correlate with one another to form a factor. Hence, these variables may be pointing to a common theme or issue related to consumer Behaviour. Before this reliability test is run through so as to check whether these numbers are good to carry out factor analysis for which KMO and Barlett's Test.

Table 4.40

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.670
Bartlett's test Of Sphericity	Sig.	.000

KMO & Bartlett's Test is a measure of sampling adequacy that is recommended to check the case to variable ratio for the analysis being concluded. In most academic and business studies, KMO & Bartlett's test play an important role for accepting the sample adequacy. While the KMO ranges from 0 to 1, the world-over accepted index is over 0.6. Also, the bartlett's test of Sphericity relates to the significance of the study and thereby shows the validity and suitability of the responses collected to the problem being addressed through the study. For Factor Analysis to be recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05 (Vincent Nijs,2019).

Here, the value of KMO= .670 and Bartlett's Test of Sphericity= .000

For the sample size of 400, table 4.41 show communalities after extraction should be above 0.5 meeting the assumption of factorability. So, it can be concluded that the data are suitable for structural detection. This is implied on a scale which was factor analyzed using principal component analysis and varimax rotation.

Table 4.41

Communalities of 7 O' S of Consumer Behaviour		
S.No.	Variables	Extraction
1.	Most preferred OTC medicine	.620
2.	Frequency of purchase of Ayurvedic OTC medicines	.638
3.	Preferrable Ayurvedic OTC medicines	.684
4.	Type of Ayurvedic OTC medicines purchased	.603
5.	Forms of Ayurvedic OTC medicines bought	.559
6.	Kind of packaging purchased	.407
7.	Quantity purchased	.616
8.	Purpose of buying Ayurvedic OTC medicines	.682
9.	Benefits of Ayurvedic OTC medicines	.574
10.	Reason not to visit the doctor	.574
11.	Frequency to visit the doctor	.593
12.	Frequency to be inquired about specific brand	.696
13.	Frequency to get prescribed Ayurvedic OTC medicines	.688
14.	Purchase on recommendation of friend	.619
15.	Purchase on recommendation of family	.543
16.	Source of knowledge	.600
17.	Seek advice from doctor	.656
18.	Seek advice from friend	.660
19.	Seek advice from family	.695
20.	Purchased Ayurvedic OTC medicines for yourself	.599
21.	Somebody else purchased Ayurvedic OTC medicines	.663
22.	Frequency to purchase in summer season	.722
23.	Frequency to purchase in winter season	.772
24.	Purchase in a month	.760
25.	Purchase of Ayurvedic OTC medicines from	.557
26.	Distance of outlet	.609

The above table shows us the communalities which indicate the amount of variance in each variable that is accounted for. Initial Communalities are estimates of the variance in each variable accounted for by all components or factors. Communalities between 0.25 and 0.4 have been suggested as acceptable values with the ideal communalities being above 0.7 or above (Beavers *et al* 2013). Therefore, the table shows all its value above 0.7 which means that all the values are accepted.

Table 4.42
Total Variance explained

Component	Initial Eigenvalues		Cumulative %	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings	
	Total	% of Variance		Total	% of Variance	Cumulative %	Total	% of Variance
1	3.964	15.246	15.246	3.964	15.246	15.246	2.45	9.425
2	2.434	9.36	24.606	2.434	9.36	24.606	2.434	9.362
3	1.995	7.673	32.278	1.995	7.673	32.278	2.244	8.631
4	1.716	6.599	38.877	1.716	6.599	38.877	1.978	7.608
5	1.531	5.887	44.764	1.531	5.887	44.764	1.77	6.809
6	1.309	5.033	49.797	1.309	5.033	49.797	1.562	6.008
7	1.216	4.677	54.474	1.216	4.677	54.474	1.373	5.281
8	1.126	4.33	58.804	1.126	4.33	58.804	1.337	5.14
9	1.101	4.235	63.039	1.101	4.235	63.039	1.242	4.776
10	0.958	3.685	66.724					
11	0.893	3.435	70.159					
12	0.847	3.259	73.418					
13	0.767	2.95	76.368					
14	0.708	2.724	79.091					
15	0.67	2.579	81.67					
16	0.636	2.446	84.116					
17	0.622	2.394	86.51					
18	0.555	2.135	88.645					
19	0.546	2.1	90.744					
20	0.477	1.834	92.578					
21	0.421	1.618	94.196					
22	0.378	1.454	95.65					
23	0.328	1.26	96.91					
24	0.31	1.193	98.104					
25	0.252	0.97	99.074					
26	0.241	0.926	100					

Extraction Method: Principal Component Analysis.

From the principal component analysis major variances were included into 9 factors (components). The rotation immediately stops as soon as the Eigen value reaches below 1 or equal to 1. Hence, the table 4.42 shows it stopped at 1.101 Eigen value giving us 9 rotations.

Table 4.43

	Component								
	1	2	3	4	5	6	7	8	9
V23	.869	.039	.052	.084	.023	.043	.000	.062	-.018
V24	.849	.123	.034	-.064	-.019	-.038	-.049	-.030	-.117
V22	.808	.045	.073	-.157	.093	.012	.165	.014	.027
V17	.182	.718	.006	.032	.287	-.012	.114	-.025	.096
V11	-.064	.701	.084	.248	.098	-.031	-.118	.001	-.066
V12	.061	.697	.327	.007	-.169	.069	.069	-.067	-.239
V13	.168	.568	.097	.040	.328	-.145	.129	.344	.252
V15	.021	.144	.740	.035	-.077	-.077	.087	.082	-.047
V14	.077	.123	.714	-.061	.018	.012	.023	-.002	.084
V20	.067	.043	.597	-.169	.393	-.122	-.232	.049	.041
V4	.099	.169	-.269	.684	.119	-.086	.027	.035	-.018
V25	-.216	-.074	.118	.659	.066	.029	.096	-.046	.200
V5	-.046	.246	.009	.653	-.116	.098	-.121	.032	-.180
V7	-.053	.035	-.218	.052	.709	.150	.163	.012	-.102
V18	.199	.321	.295	-.019	.605	-.078	-.089	.058	.218
V19	.045	.186	.373	.236	.571	.151	-.089	-.285	-.162
V9	.029	.036	-.095	.156	.116	.711	.072	-.052	-.106
V8	.012	.034	.025	-.502	-.128	.528	.041	.338	.132
V3	.058	-.060	-.174	.025	.161	.508	-.380	.359	.296
V6	.068	.246	-.071	.265	-.002	-.470	-.205	.065	-.012
V16	.031	.161	-.206	-.147	.032	.188	.681	-.073	-.063
V21	.179	-.089	.320	.277	.051	-.012	.619	.048	.235
Cumulative %	9.425	18.787	27.418	35.025	41.834	47.842	53.123	58.264	63.039
% Of Variance	9.425	9.362	8.631	7.608	6.809	6.008	5.281	5.140	4.776
Eigen Value	2.450	2.434	2.244	1.978	1.770	1.562	1.373	1.337	1.242

Extraction Method: Principal Component Analysis

Rotation Method: Varimax method

Rotation converged in 10 iterations.

The above tables present the factor analysis. After finding significance from KMO and Bartlett's Test, the next step is to be executed to find out total variance explained. In this initial Eigen values are calculated and they help us to find out total Eigen value, % of variance explained by them and cumulative % variance explained. Now it is found that first 18 components explain 88% of variation. But out of those 18 components only 9 factors have

Eigen value greater to 1% and these first 9 variables explain 63% of the variance. For taking the Eigen values following statements are taken into consideration:

1. Take that many Eigen value so that they explain 60-80% variation.
2. Another thought is to take that many values that have Eigen value >1 or 1 %
3. Third school of thought is to take that many values that have Eigen values >0.7 .

As it can be seen first 9 components explain 63% of variation which further would help us analyze manifest consumer behaviour.

An attempt to locate factors is made by looking up rotated loading of different factors for variables with co-efficient values more than 0.5000, and hence the following 6 factors are identified because factor 7,8 and 9 did not have co-efficient more than 0.5000.

Factor 1: - Statements such as 22, 23 and 24 have coefficient values .869, .849, .808 respectively with factor 1. Cumulative variance explained by this factor is 9.425% and Eigen value is 2.450. This factor, it ascertains the buying frequency (how often) and the occasion on which the customer tends to buy the product or services. It explains when does the market go to buy the product.

Factor 2: - Statements such as 11, 12,13 and 17 have coefficient values .718, .701, .697, .568 respectively with factor 2. Variance explained by this factor is 9.362% and Eigen value is 2.434. The factor 11, 12, 13 are related to Organization and 17 factor is related to Operations. Where Organization explains us who participates in buying i.e., who influence the buying decision of the consumer by helping with sources of information and Operations explains how the market buys the product by collecting background information themselves from different sources before making purchase.

Factor 3: - Statements such as 15, 14 and 20 have coefficient values .740, .714, .597 respectively with factor 3. Variance explained by this factor 8.631% and Eigen value is 2.244. The factor 15th and 14th relate to influencing the consumer done by management to buy its product whereas 20th belongs to Operations which tells us about how the consumer collects all information themselves before buying the product.

Factor 4: - Statements such as 4,5 and 25 have coefficient values .684, .659, .653 respectively to factor 4. Variance explained by this factor is 7.608% and Eigen value is 1.978. These 4 and 5 factors belong to Object criteria which means what does the consumer buy or determines the product proposition which the consumer purchases i.e., the brand, product or product form. It even tells us the color, size, type, variant etc. which the customer seeks to buy. The factor 25 belongs to Outlet criteria which means where do they buy. It identifies retail shop, online platform i.e., app or website, departmental store or any other location from where the customer makes the buying decision.

Factor 5: - Statements such as 7, 18, 19 have coefficient value .709, .605, .571 respectively to factor 5. Variance explained by this factor is 6.809% and Eigen value is 1.770. The factor 18 and 19 belong to Operations criteria which means what does the market buy and 7 factor belong to objectives which means why does market buy.

Factor 6: - Statements such as 3,8,9 have coefficient value .508, .528, .711 respectively to factor 6. Variance explained by this factor is 6.008% and Eigen value is 1.562. The factor 3rd tells us consumer purchases i.e., which brand, color, size and type would be preferred, 8th factor belongs to Occupants which tells us who all constitutes the market or who is the consumer to understand the overall profile in relation to its geographic, demographics. The 9th factor relates to why is consumer is buying, in terms of the needs satisfied or benefits expected from the product.

On basis of the analysis, it can be said that 6 elements can describe to manifest consumer behaviour by Solan and Hamirpur district. These elements are: -

1. **Frequency of Purchase**
2. **Professional Advice**
3. **Social Influences**
4. **Objects & Outlets**
5. **Quantity purchased**
6. **Brands & Objectives**

4.5 Consumer Behaviour Decision Making Process

For this section, EKB model (Engel-Kollat Blackwell Model,1978) was used. This model is used to understand the buying behaviour of the respondents and has 5 stages for the whole process to happen. The section B of the questionnaire was divided on basis on these stages and are further discussed accordingly.

Cronbach's Alpha

Before describing the model used here, it's important to check the reliability of the data used. Cronbach's alpha is used to measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of reliability. Technically speaking, Cronbach's alpha is not a statistical test, it is a coefficient of reliability (or consistency).

Table 4.44

Cronbach's Alpha	N of Items
0.825	30

A general accepted rule is that Alpha between 0.6-0.7 indicates an acceptable level of reliability and 0.8 or greater is considered a very good level (Hutin, Nettenmeyer and Cudeck,2001). From the table 4.44, we can see alpha for 30 items is 0.825 which means the reliability of the data collection tool focused for consumer decision making process is very good.

4.5.1 Problem Recognition

Table 4.45

S.No.	Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Need of non-side effects medicines	16 (4)	31 (7.7)	98 (24.4)	164 (40.9)	92 (22.9)
2	Symptoms at the time of purchase	13 (3.2)	44 (11)	116 (28.9)	190 (47.4)	38 (9.5)

Table 4.45, explains us the first phase of buying behaviour of customer which is Problem Recognition. In this phase the customer detects the problem that he/she may be

facing for which they require a solution in form of product/ services. In light of the topic, the 40.9% of the respondents are prompted to buy Ayurvedic OTC medicines as they feel for non-side effects. For this 22.9% strongly need arousal and feel the need to buy non-side effects medicines. Times have changed, people are more educated and are more aware of what good for them and what's bad. Therefore, the results above depicts that the respondents value Ayurvedic OTC for their therapeutic efficiency. Similarly, the participants purchase of Ayurvedic OTC was prompted by symptoms where 47.4% agreed to this statement and 9.5% strongly agreed to the statement. Therefore, it can be said purchase is prompted by need to avoid side-effects of medicines.

4.5.2 Information Search

A pro-active and aware customer would always do their research before purchasing any product. Table 4.46 discusses the second phase of buying behaviour i.e., Information Search where it discusses various information sources that are considered by customers before choosing Ayurvedic OTC medicines.

Table 4.46

S.No	Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Purchase Ayurvedic OTC medicines after seen/heard advertisement.	26 (6.5)	67 (16.7)	131 (32.7)	159 (39.7)	18 (4.5)
2	Recommendations sought from friends regarding Ayurvedic OTC medicines.	16 (4)	57 (14.2)	153 (38.2)	151 (37.7)	24 (6)
3	Recommendations sought from family regarding Ayurvedic OTC medicines.	10 (2.5)	66 (16.5)	144 (35.9)	159 (39.7)	22 (5.5)
4	Recommendations sought from doctor regarding Ayurvedic OTC medicines.	11 (2.7)	67 (16.7)	130 (32.4)	149 (37.2)	44 (11)
5	Recommendations obtained from pharmacist regarding Ayurvedic OTC medicines.	17 (4.2)	71 (17.7)	127 (31.7)	168 (41.9)	18 (4.5)

44.2% of respondents mostly relied on advertisements before deciding about Ayurvedic OTC. Less than half of the respondents i.e., 43.7% sought recommendations from

their friends. 45.2% of respondents sought recommendations from family while doing their research about Ayurvedic OTC medicines. 48.2% respondents agreed that they sought recommendations from doctor and 46.4% of them would seek recommendations from a pharmacist. The results show, most important source of information is recommendations taken from pharmacists and least are the recommendations coming from their friends.

4.5.3 Alternative evaluation

Table 4.47

S.No.	Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Consider price before buying	19 (4.7)	57 (14.2)	153 (38.2)	127(31.7)	45 (11.2)
2	Consider various advertisement before buying	18 (4.50)	85 (21.2)	166 (41.4)	90 (22.4)	42 (10.5)

The table 4.47 would discuss the third phase of buying Behaviour by EKB Model. In this phase, customer evaluates its alternatives on basis of following discussed variables so as to buy Ayurvedic OTC medicines. 46.9% of the participants consider price while evaluating its alternatives whereas 18.9% of them don't feel a need to do so for buying Ayurvedic OTC medicines. When asked does advertisement, 32.9%of the participants were highly influenced by advertisements. So, to evaluate an alternative, price is an important factor to impact before buying Ayurvedic OTC medicines.

4.5.4 Choices

The table 4.48 discusses the fourth phase of buying behaviour i.e., choices that are made while buying Ayurvedic OTC medicines. First variable is location, which is choice of comfort. 24.2% respondents feel comfortable buying in privacy whereas 37.7% participants do not have the same notion. This result is something which is different from research held in western country where respondents wanted privacy related their purchase.

Further, 55.1% of the participants felt that product brand was important to them and 42.1% respondents were influenced by the packaging design. Brand value is an important factor which is considered mostly by every consumer and here 41.6% agreed and 6% strongly agreed with the statement. 44.9% of the participants resonated with the fact that branded products are used for their brand familiarity.

Table 4.48

S.No.	Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Pharmacy location where no one can recognise you.	46 (11.5)	105 (26.2)	152(37.9)	68 (17)	29 (7.2)
2	Product brand important for you.	11 (2.7)	48 (12)	120 (29.9)	165 (41.1)	56 (14)
3	Package design influence my purchasing decision.	19 (4.7)	80 (20)	133 (33.2)	148 (36.9)	21 (5.2)
4	Buy branded Ayurvedic OTC for its brand value	25 (6.2)	64 (16)	121 (30.2)	167 (41.6)	24 (6)
5	Purchase branded Ayurvedic OTC for its brand familiarity	19 (4.7)	60 (15)	142 (35.4)	153 (38.2)	27 (6.7)
6	Bought, as no choice	34 (8.5)	89 (22.2)	138 (34.4)	124 (30.9)	16 (4)
7	Consider the packaging while buying.	19 (4.7)	76 (19)	131 (32.7)	141 (35.2)	34 (8.5)
8	Consider brand name while buying	15 (3.7)	40 (10)	117 (29.2)	191 (47.6)	38 (9.5)
9	Consider dosages before buying	8 (2)	59 (14.7)	126 (31.4)	170 (42.4)	38 (9.5)
10	Purchase for routine problems.	7 (1.7)	57 (14.2)	130 (32.4)	179 (44.6)	28 (7)
11	Purchase for Chronic problems.	23 (5.7)	107 (26.7)	128 (31.9)	112 (27.9)	31 (7.7)
12	Purchase for seasonal problems.	9(2.2)	49 (12.2)	92 (22.9)	216 (53.9)	35 (8.7)
13	Purchase from one specific pharmacy.	12 (3)	101 (25.2)	142 (35.4)	120 (29.9)	26 (6.5)
14	Consider location important	30 (7.5)	103 (25.7)	149 (37.2)	95 (23.7)	24 (6)
15	Consider the staff important	26 (6.5)	82 (20.4)	183 (45.6)	91 (22.7)	19 (4.7)
16	Consider product range important	20 (5)	61 (15.2)	131 (32.7)	157 (39.2)	32 (8)
17	Consider extra services important	23 (5.7)	76 (19)	178 (44.4)	101 (25.2)	23 (5.7)
18	Wish to be familiar with pharmacy staff	20 (5)	78 (19.5)	163 (40.6)	115 (28.7)	25 (6.2)

When asked whether to buy same products if no energy left to explore, 34.95% of the participants agreed saying if they had satisfactory experience in past then they would. 43.7% respondents are intimidated by brands and are attracted to fancy and innovative packaging while buying and are highly convinced that 57.1% of them would purchase the same by listening to the brand name.

For 51.9% of the respondents' dosages are considered while buying the Ayurvedic OTC. About 84% of the participants use Ayurvedic OTC for routine problems and only 35.6% of them prefer Ayurvedic OTC for chronic problems. Also, 62.6% would prefer Ayurvedic OTC for seasonal problems and a mix of 36.4% to buy them from specific pharmacy whereas 35.4% have no such choice in mind. Again, a mix of responses can be seen for location of pharmacy, when asked for which 6% of the respondents had strong importance for location whereas 37.2% of them had no importance.

When asked about staff, neutral response was seen for 45.5% of respondents which means not much were concerned whether the staff is good or bad but 34.9% felt they should be familiar with them. Before choosing Ayurvedic OTC 47.2% of the participants considered product range and 44.4% of them feels no effect of extra services at the pharmacy.

4.5.5 Outcome

Table 4.49

S.No.	Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Buy same Ayurvedic OTC medicines as it works best for you.	8 (2)	31 (7.70)	104 (25.9)	200 (49.9)	58 (14.5)
2	Consider consuming same Ayurvedic OTC brands.	9 (2.2)	44 (11)	157 (39.2)	166 (41.4)	25 (6.2)
3	Consider buying branded OTC for its effectiveness.	17 (4.2)	46 (11.5)	100 (24.9)	195 (48.6)	43 (10.7)

The table 4.49, discusses the last phase of buying behaviour which is Outcome. After the purchase it is important to understand whether customer is satisfied and wants to again purchase the product. 64.4% of the respondents were going to buy Ayurvedic OTC as it works best for them. 47.6% of the respondents said they would consume same Ayurvedic

OTC brands and 59.3% would buy the same for its effectiveness. Therefore, it can be said that experience with Ayurvedic OTC or which works best for the respondents is considered most important for re-purchase.

ANOVA was performed on these above variables to check whether there are any statistically significant differences between the means of these groups (Refer to appendix - IV). But the group sizes are unequal and test of homogeneity is violated as in appendix -V the values should be less than 0.05 but are not. Therefore, F statistic would be biased and would be not considered.

4.6 Cluster Analysis

This section explains the clusters that has been made for the present study. First, two clusters were determined but the iteration history was not significant. After that an attempt was made to make four, where the iteration history was significant but the cases were not equally distributed and the representation didn't look justified. Furthermore, five clusters were formed with iteration history being significant and equal representation of the total population. Therefore, the table 4.50 shows representation of the total cases divided into five cases/clusters.

Table 4.50

No. of Cases in each cluster		Percentage of Respondents
1	97	24.18
2	92	22.94
3	95	23.69
4	38	9.47
5	79	19.70
Total	401	

Here, we have five clusters having significance value and equally distributed among our respondents. In appendix -III, the table explains the cluster membership i.e., distance of each segment from each other.

Cluster 1: Respondent number 1, 3, 4, 7, 12, 16, 23, 29, 34, 38, 41, 47, 51, 53, 60, 61, 62, 66, 81, 85, 90, 105, 110, 111, 113, 116, 119, 122, 123, 129, 130, 138, 139, 159, 164, 165, 166, 171, 178, 179, 182, 187, 191, 197, 200, 202, 217, 219, 222, 232, 233, 234, 235, 237, 238, 244, 249, 250, 252, 255, 258, 261, 262, 268, 269, 277, 278, 292, 298, 301, 303, 318, 320,

323, 333, 334, 335, 336, 337, 338, 339, 345, 350, 351, 356, 362, 365, 367, 382, 384, 387, 394, 397, 398, 399, 400, 401. They are 97 in total.

Cluster 2: Respondent number 2, 5, 8, 10, 11, 13, 15, 19, 20, 24, 27, 36, 37, 39, 43, 48, 49, 52, 54, 58, 64, 68, 69, 78, 79, 80, 82, 83, 84, 86, 94, 99, 100, 120, 121, 124, 125, 126, 128, 135, 140, 143, 153, 160, 161, 162, 176, 177, 180, 183, 185, 186, 188, 190, 201, 203, 204, 205, 208, 210, 214, 239, 259, 260, 263, 264, 265, 267, 274, 279, 282, 291, 300, 302, 304, 305, 306, 309, 311, 315, 330, 340, 355, 364, 366, 368, 369, 370, 373, 375, 379. They are 92 in total.

Cluster 3: Respondent number 6, 9, 14, 17, 18, 31, 32, 33, 35, 40, 45, 63, 102, 103, 107, 114, 115, 117, 118, 131, 134, 137, 141, 144, 155, 156, 156, 157, 163, 181, 184, 189, 192, 193, 194, 196, 206, 213, 215, 216, 218, 220, 221, 223, 224, 226, 227, 236, 241, 242, 246, 253, 254, 256, 257, 270, 273, 276, 280, 283, 289, 290, 293, 294, 295, 297, 307, 314, 316, 317, 319, 321, 322, 324, 325, 327, 328, 342, 343, 347, 354, 357, 358, 359, 361, 371, 378, 380, 381, 383, 385, 386, 388, 389, 391, 392. They are 95 in total.

Cluster 4: Respondent number 21, 28, 30, 42, 44, 46, 50, 59, 71, 96, 106, 108, 127, 136, 147, 148, 151, 154, 158, 173, 195, 225, 228, 229, 245, 247, 266, 275, 286, 287, 296, 326, 329, 346, 348, 360, 390, 393. They are 38 in total.

Cluster 5: Respondent number 22, 25, 26, 55, 56, 57, 65, 67, 70, 72, 73, 74, 75, 76, 77, 87, 88, 89, 91, 92, 93, 95, 97, 98, 101, 104, 109, 112, 132, 133, 142, 145, 146, 149, 150, 152, 167, 168, 169, 170, 172, 174, 175, 198, 207, 209, 211, 212, 230, 231, 240, 243, 248, 251, 271, 272, 281, 284, 285, 288, 299, 308, 310, 312, 313, 331, 332, 341, 344, 349, 352, 353, 363, 372, 374, 376, 377, 395, 396. They are 79 in total.

4.7 Factors Influencing Purchase of Ayurvedic OTC medicines

The below table 4.51, explains the factors influencing purchase behaviour. These factors were found from the relevant literature which explained that these were responsible to persuade individuals to purchase Allopathic OTC medicines. Therefore, an attempt is made to see whether these 18 variables are responsible in persuading the purchase for Ayurvedic OTC medicines.

Here the discussion is about the variables to understand how they would be significant in our study. According to the results, we see pharmaceutical company's country origin plays very little importance in the mind of the respondents which accounts to be 18.2% very important only with 24.2% saying it's not important whereas the rest were confused about the variable. When asked about pharmacist's opinion and recommendations 28.7% were the ones to accept it very important where others (25.7%) felt it was somewhat important. The next variable was asked to understand whether there was any influence by the internal environment mainly opinion given by friends and family where the 36.9% felt it was important and 5.5% said it was not important.

Table 4.51: Influential Factors in Purchase Behavior Analysis

S.No.	Variables	Not Important	Somewhat Important	Important	Very Important	Extremely Important
1	Pharmaceutical Company's country of Origin	24.2	30.7	15	18.2	12
2	Pharmacist's opinion and recommendations	4.5	25.7	32.7	28.7	8.5
3	Family and Friends opinions	5.5	27.4	36.9	23.2	7.0
4	Product Experience	2.5	18.2	24.2	29.4	25.7
5	Relieves multiple symptoms	3.5	18.2	43.6	30.4	4.2
6	Are you in medical or related field	20.2	15	41.4	20.4	2.5
7	Reasonable price	2.5	17.7	49.1	24.4	6.2
8	Best value of money	2.7	13.5	43.9	30.4	9.5
9	Easy Availability	1.7	15.7	44.4	30.2	8.0
10	Product Safety	3	10.5	44.1	29.7	12.7
11	Advertisements	4.7	20.9	44.9	26.9	3.2
12	Company Reputation	2.7	17.7	41.1	29.4	9.0
13	Less side effects	2	10.5	37.7	30.9	19
14	Taste Of the OTC	5.7	20	39.7	30.2	4.5
15	Chemist recommend	7.7	20.7	45.6	21.7	4.2
16	Bought because you noticed on the shelf	14.5	14.2	19	48.9	3.0
17	Effectiveness of OTC	4	5	16.2	41.9	32.9
18	Degree of Sickness (mild)	3	6.7	23.2	45.9	20.7

Another factor to discuss, whether product experience have a positive influence on the consumer purchase behaviour. For this variable, 24.2% felt important, 29.4% said very important and 25.7% marked extremely important factor to influence purchase Ayurvedic OTC. When asked whether would Ayurvedic OTC relieve multiple symptoms be influential,

43.6% said yes it was important for them. 41.4% respondents said it does make a difference if you belong to a medical or related field. Price has always been an important factor to influence the buying of specific product and here even, 49.1% gave importance to reasonable price and 43.9% said it should be best value for money when Ayurvedic OTC medicines purchased. The product is sold easily and people tend to buy more if easily available for which 44.4% respondents agree. Many respondents agreed and gave 44.1% importance to product safety and 37.7% said the products should have less side-effects for them to purchase it. Advertisements have always been a catalyst to accelerate the buying of any product and in the case of Ayurvedic OTC medicine 44.9% respondents believe the same. Pharmaceutical is the sole business which is easily harmed by its image as the product directly affect the well-being of any individual, therefore, company reputation also plays a great factor for purchase behaviour and 41.1% respondents marked it important. The aesthetics of the product is equally important (39.7%) and taste of OTC and 41.9% very important to effectiveness. Chemists recommend Ayurvedic vitamins were said to be influential as 45.6% felt it important.

Buying a product just by seeing it on the shelf is an important factor. 48.9% respondents said it was very important that they see the product on the shelf. Research said that mostly people purchased Ayurvedic OTC for mild degree of sickness. The same was delivered through the results where 45.9% agreed on this statement. From the table it can be said that the factors that impacted most the buying decision are effectiveness of OTC, less side effects and product experience.

4.8 Profile of Market Segment

Understanding the profile of a market segment is fundamental in devising effective strategies. It involves dissecting demographic, psychographic, and behavioral traits to create a comprehensive picture of a specific consumer group.

4.8.1 Demographics and Profile of Market Segments

This section helps us understand which demographic parameter would be significant in building the profile of the market segments identified.

4.8.1(A) Age and Segments

Table 4.52

Age	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster
20-29 years	42	43.29	44	47.82	51	53.69	22	57.89	28	35.42
30-49 years	37	38.15	38	41.32	34	35.79	12	31.58	30	37.98
50-65 years	18	18.56	10	10.86	10	10.52	3	7.89	19	24.06
> 65 years	0	0	0	0	0	0	1	2.63	2	2.54
Total	97	100	92	100	95	100	38	100	79	100

H₀: There is no difference among cluster as per age group

H₁: There is a difference among clusters in terms of age

Table 4.53

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.253	12	0.047
Likelihood Ratio	21.227	12	0.047
N of Valid Cases	401		

Chi-Square Calculated = 21.253

df = (r-1) (c-1) = 12

$\chi_{\text{Tabulated}}$ for df=12 at 95% level of confidence or 0.05 level of significance = 21.026

The chi-square calculation for table 4.53 shows that Chi-square calculated which is 21.253 is greater than Chi-square tabulated for df=12 at 0.05% level of significance which is 21.026 and p value to be 0.047. This shows that alternate hypothesis (H₁) holds which means there is significant difference among cluster as per age group. The table 4.52 shows, Cluster 1,2,3 and 4 are dominated by age group 20-29 years and have 43.29%, 47.82%, 53.69 and 57.89% respectively. But for Cluster 5, age group of 30-49 years of age is dominated.

4.8.1(B) Employment Status and Segments

Table 4.54: Employment Status Distribution Across Market Segments

	CLUSTER 1		CLUSTER 2		CLUSTER 3		CLUSTER 4		CLUSTER 5	
	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster	Population of Cluster	Percentage of Cluster
FULL-TIME	28	28.87	32	34.79	32	33.68	6	15.79	25	31.65
PART-TIME	20	20.62	19	20.66	22	23.16	9	23.69	19	24.06
UNEMPLOYED	12	12.38	8	8.69	2	2.10	3	7.89	6	7.59
RETIRED	10	10.31	6	6.52	7	7.37	2	5.27	4	5.06
STUDENT	27	27.82	27	29.34	32	33.69	18	47.38	25	31.65
TOTAL	97	100	92	100	95	100	38	100	79	100

H₀: There is no difference among cluster as per employment status

H₁: There is a difference among clusters in terms of employment status

Table 4.55

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.423	16	0.424
Likelihood Ratio	17.784	16	0.337
N of Valid Cases	401		

Chi-Square Calculated= 16.423

df= (r-1) (c-1) = 16

$\chi^2_{\text{Tabulated}}$ for df= 16 at 95% level of confidence or 0.05 level of significance =26.296

The chi-square calculation for table 4.55 shows that Chi-square calculated which is 16.423 is not greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be 0.424. This shows that null hypothesis (H_0) holds which means no significant difference among clusters and employment status.

4.8.1(C) Occupation and Segments

Table 4.56

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
Public	32	32.98	28	30.44	33	34.73	2	5.27	28	35.44
Private	17	17.53	33	35.87	28	29.47	19	50	20	25.317
Self-Employed	14	14.43	9	9.79	13	13.69	8	21.06	6	7.59
Professional	6	6.19	4	4.35	10	10.53	1	2.63	10	12.66
Businessman	7	7.217	0	0	0	0	1	2.63	2	2.53
Others	21	21.65	18	19.57	11	11.58	7	18.42	13	16.45
Total	97	100	92	100	95	100	38	100	79	100

H_0 : There is no difference among clusters as per occupation

H_1 : There is a difference among clusters in terms of occupation

Table 4.57

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	48.823	20	0
Likelihood Ratio	54.691	20	0
N of Valid Cases	401		

Chi-Square Calculated= 48.823

df = (r-1) (c-1) = 20

$\chi^2_{\text{Tabulated}}$ for df=20 at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.57 shows that Chi-square calculated which is 48.823 is greater than Chi-square tabulated for $df=20$ at 0.05% level of significance which is 31.410 and p value to be 0.000. This shows that alternate hypothesis (H_1) holds which means there is significant difference among cluster as per occupation. By the table 4.56, it is clear that clusters 1,2,3 and 5 are dominated by public services which are 32.98%,30.44%, 34.73% and 35.44% respectively. But for cluster 4 other services such as agriculture and allied services was 18.42%.

4.8.1(D) Sector and Clusters

Table 4.58

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
Education	43	44.32	38	41.30	34	35.78	15	39.47	33	41.77
Banking	0	0	2	2.17	1	1.05	2	5.26	2	2.53
Health Services	3	3.09	2	2.17	2	2.17	1	2.63	1	1.26
Administrative	7	7.21	9	9.78	6	6.31	0	0	1	1.26
Corporate	17	17.52	9	9.78	3	3.15	4	10.52	2	2.53
Others	27	27.83	32	34.78	49	51.57	16	42.10	40	50.63
Total	97	100	92	100	95	100	38	100	79	100

H_0 : There is no difference among clusters as per sector

H_1 : There is a difference among clusters in terms of sector

Table 4.59

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.71	20	0.005
Likelihood Ratio	44.189	20	0.001
N of Valid Cases	401		

Chi-Square Calculated= 39.710

$df = (r-1) (c-1) = 20$

$\chi_{\text{Tabulated}}$ for $df=20$ at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.59 shows that Chi-square calculated which is 39.710 is greater than Chi-square tabulated for $df=20$ at 0.05% level of significance which is 31.410 and p value to be 0.005. This shows that alternate hypothesis (H_1) holds which means there is significant difference among clusters as per sector. The table 4.58 specifies that cluster 1 and 2 are clearly dominated by education related services/sector which is 44.32% and 41.30%, but for clusters 3, 4 and 5, they are dominated by others sector such as agricultural and allied services. They are 51.57%, 42.10% and 50.63% respectively.

4.8.1(E) Gender and Clusters

Table 4.60

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
Female	31	31.95	23	25	37	38.94	12	31.57	36	45.56
Male	66	68.04	69	75	58	61.05	26	68.42	43	54.43
Total	97	100	92	100	95	100	38	100	79	100

H₀: There is no difference among clusters as per gender

H₁: There is a difference among clusters in terms of gender

Table 4.61

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.185	4	0.057
Likelihood Ratio	9.228	4	0.056
N of Valid Cases	401		

Chi-Square Calculated= 9.185

df = (r-1) (c-1) = 4

$\chi^2_{\text{Tabulated}}$ for df=4 at 95% level of confidence or 0.05 level of significance = 9.488

The chi-square calculation for table 4.61 shows that Chi-square calculated which is 9.185 is less than Chi-square tabulated for df=4 at 0.05% level of significance which is 9.488 and p value to be 0.057. This shows that null hypothesis (H₀) holds, which means there is no significant difference among clusters as per gender.

4.8.1(F) Place of Residence and Clusters

Table 4.62

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
Rural	73	75.25	67	72.83	74	77.89	34	89.47	66	83.55
Urban	24	24.75	25	27.17	21	22.11	4	10.53	13	16.45
Total	97	100	92	100	95	100	38	100	79	100

H₀: There is no difference among clusters as per place of residence

H₁: There is a difference among clusters in terms of place of residence

Table 4.63

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.232	4	0.182
Likelihood Ratio	6.705	4	0.152
N of Valid Cases	401		

Chi-Square Calculated= 6.232

df = (r-1) (c-1) = 4

$\chi^2_{\text{Tabulated}}$ for df=4 at 95% level of confidence or 0.05 level of significance = 9.488

The chi-square calculation for table 4.63 shows that Chi-square calculated which is 6.232 which is less than Chi-square tabulated for df=4 at 0.05% level of significance which is

9.488 and p value to be 0.182. This shows that null hypothesis (H_0) holds which means there is no significant difference among clusters as per place of residence.

4.8.1(G) Monthly Income and Clusters

Table 4.64

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
<20,000	22	22.69	26	28.26	15	15.78	9	23.68	15	18.98
20-60,000	50	51.54	44	47.82	59	62.105	17	44.73	39	49.36
60-80,000	16	16.49	17	18.47	11	11.57	6	15.78	21	26.58
80-90,000	9	9.27	5	5.43	8	8.42	6	15.78	4	5.06
>90,000	0	0	0	0	2	2.105	0	0	0	0
Total	97	100	92	100	95	100	38	100	79	100

H_0 : There is no difference among clusters as per monthly income

H_1 : There is a difference among clusters in terms of monthly income

Table 4.65

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.279	16	0.106
Likelihood Ratio	21.908	16	0.146
N of Valid Cases	401		

Chi-Square Calculated= 23.279

df = (r-1) (c-1) = 16

$\chi^2_{\text{Tabulated}}$ for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.65 shows that Chi-square calculated which is 23.279 which is less than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be 0.106. This shows that null hypothesis (H_0) holds which means there is no significant difference among clusters as per education.

4.8.1(H) Education and Clusters

Table 4.66

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
<8 th grade	1	1.030928	1	1.086957	0	0	0	0	0	0
Attend High school	3	3.092784	1	1.086957	3	3.157895	0	0	2	2.531646
High school graduate	20	20.61856	16	17.3913	28	29.47368	8	21.05263	19	24.05063
Some College	9	9.278351	19	20.65217	12	12.63158	5	13.15789	19	24.05063
College students	8	8.247423	1	1.086957	11	11.57895	3	7.894737	3	3.797468
Graduate/Professional	56	57.73196	53	57.6087	41	43.15789	21	55.26316	35	44.3038
Others	0	0	1	1.086957	0	0	1	2.631579	1	1.265823
Total	97	100	92	100	95	100	38	100	79	100

H_0 : There is no difference among clusters as per education

H_1 : There is a difference among clusters in terms of education

Table 4.67

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.417	24	0.117
Likelihood Ratio	36.341	24	0.051
N of Valid Cases	401		

Chi-Square Calculated= 32.417

df = (r-1) (c-1) = 24

χ^2 Tabulated for df=24 at 95% level of confidence or 0.05 level of significance = 36.415

The chi-square calculation for table 4.67 shows that Chi-square calculated which is 32.417 is less than Chi-square tabulated for df=24 at 0.05% level of significance which is 36.415 and p value to be 0.117. This shows that null hypothesis (H_0) holds which means there is no significant difference among clusters as per education.

4.8.1(I) Type of Family and Clusters

Table 4.68

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
Joint	40	41.24	27	29.35	33	34.74	16	42.11	23	29.12
Nuclear	57	58.76	65	70.65	62	65.26	22	57.89	56	70.88
Total	97	100	92	100	95	100	38	100	79	100

H_0 : There is no difference among clusters as per type of family

H_1 : There is a difference among clusters in terms of type of family

Table 4.69

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.002	4	0.287
Likelihood Ratio	4.991	4	0.288
N of Valid Cases	401		

Chi-Square Calculated= 5.002

df = (r-1) (c-1) = 4

χ^2 Tabulated for df=4 at 95% level of confidence or 0.05 level of significance = 9.488

The chi-square calculation for table 4.69 shows that Chi-square calculated which is 5.002 less than Chi-square tabulated for df=4 at 0.05% level of significance which is 9.488 and p value to be 0.287. This shows that null hypothesis (H_0) holds which means there is no significant difference among clusters as per type of family.

4.8.1(J) Type of Schooling and Clusters

Table 4.70

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
English	49	50.52	48	52.17	46	48.43	22	57.89	33	41.77
Hindi	48	49.48	44	47.83	49	51.57	16	42.11	46	58.23
Total	97	100	92	100	95	100	38	100	79	100

H₀: There is no difference among clusters as type of schooling

H₁: There is a difference among clusters in terms of schooling

Table 4.71

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.304	4	0.508
Likelihood Ratio	3.317	4	0.506
N of Valid Cases	401		

Chi-Square Calculated= 3.304

df = (r-1) (c-1) = 4

χ^2 Tabulated for df=4 at 95% level of confidence or 0.05 level of significance = 9.488

The chi-square calculation for table 4.71 shows that Chi-square calculated which is 3.304 less than Chi-square tabulated for df=4 at 0.05% level of significance which is 9.488 and p value to be 0.508. This shows that null hypothesis (H₀) holds which means there is no significant difference among clusters as per type of schooling.

4.8.1(K) District belonging and Segments

Table 4.72

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
Arki	24	24.74	18	19.56	26	27.36	6	15.79	11	13.93
Bhoranj	17	17.54	15	16.30	16	16.84	10	26.32	19	24.06
Hamirpur	21	21.64	32	34.78	12	12.65	10	26.32	24	30.37
Kasauli	35	36.08	27	29.36	41	43.15	12	31.57	25	31.64
Total	97	100	92	100	95	100	38	100	79	100

H₀: There is no difference among clusters as per district they belong to

H₁: There is a difference among clusters in terms of district they belong to

Table 4.73

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.579a	12	0.043
Likelihood Ratio	22.265	12	0.035
N of Valid Cases	401		

Chi-Square Calculated= 21.579

df = (r-1) (c-1) = 12

χ^2 Tabulated for df=12 at 95% level of confidence or 0.05 level of significance = 21.026

The chi-square calculation for table 4.73 shows that Chi-square calculated which is 21.579 greater than Chi-square tabulated for $df=12$ at 0.05% level of significance which is 21.026 and p value to be 0.043. This shows that alternate hypothesis (H_1) holds which means there is significant difference among clusters as per district belonging to. The table 4.72 shows cluster 1,3,4 and 5 are dominated by participants who belong to Kasauli as they are 36.08%, 43.15%, 31.57% and 31.64%. And for cluster 2, Hamirpur is dominated by 34.78% respectively.

4.8.1(L) District Residing and Clusters

Table 4.74

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5	
	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster	Frequency	Percentage of Cluster
Hamirpur	38	40	47	51.09	28	32.8	20	52.63	43	54.44
Solan	59	60	45	48.91	67	67.2	18	47.37	36	45.56
Total	97	100	92	100	85	100	38	100	79	100

H_0 : There is no difference among clusters as per district residing in

H_1 : There is a difference among clusters in terms of district residing in

Table 4.75

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.571	4	0.004
Likelihood Ratio	15.844	4	0.003
N of Valid Cases	401		

Chi-Square Calculated= 15.571

$df = (r-1)(c-1) = 4$

χ^2 Tabulated for $df=4$ at 95% level of confidence or 0.05 level of significance = 9.488

The chi-square calculation for table 4.75 shows that Chi-square calculated which is 15.571 greater than Chi-square tabulated for $df=4$ at 0.05% level of significance which is 9.488 and p value to be 0.004. This shows that alternate hypothesis (H_1) holds which means there is significant difference among clusters as per district residing in. The table 4.74 shows Clusters 1,3 and 4 belong to participants residing mostly in Solan district, having 60.82%, 78.82% respectively. But cluster 2,4 and 5 are dominated by respondents residing in Hamirpur district. They are 51.08%, 52.63% and 54.43% respectively.

4.8.2 Manifest consumer behaviour and behavioural Market Segments

a.) Objects

Table 4.76

What is the most preferred OTC medicine type?						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Ayurvedic	51	26	52	14	43	186
	51.00%	28.26%	54.74%	36.84%	54.43%	100.00%
Allopathic	41	55	29	13	32	170
	41.00%	59.78%	30.53%	34.21%	40.51%	100.00%
Homoepathic	8	11	11	8	1	36
	8.00%	11.95%	11.58%	21.05%	1.27%	100.00%
Others	0	0	3	3	3	9
	0.00%	0.00%	3.16%	7.89%	3.80%	100.00%
Total	100	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters with most preferred OTC medicine type

H₁: There is a difference among clusters in terms of preferred OTC medicine type

Table 4.77

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	46.438	12	0
Likelihood Ratio	50.395	12	0.00%
N of Valid Cases	401		

Chi-Square Calculated= 46.438

df = (r-1) (c-1) = 12

χ^2 Tabulated for df=12 at 95% level of confidence or 0.05 level of significance = 21.026

The chi-square calculation for table 4.77 shows that Chi-square calculated which is 46.438 greater than Chi-square tabulated for df= 12 at 0.05% level of significance which is 21.026 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among clusters with most preferred OTC medicine type. The table 4.76 shows Clusters 1,3,4 and 5 are dominated by Ayurvedic medicine type. They are 51%, 54.74%,36.84% and 54.43% respectively. Whereas Cluster 2 relies more on Allopathic medicine type with 59.78%.

Table 4.78

	Ayurvedic brand you purchase					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Dabur	18	16	16	2	7	59
	12.24%	12.12%	13.11%	4.00%	7.07%	
Himalaya	34	34	21	16	24	129
	23.13%	25.76%	17.21%	32.00%	24.24%	
Patanjali	35	29	36	11	33	143.87
	23.81%	21.97%	29.51%	22.00%	33.33%	
Zandu	3	3	6	3	1	16
	2.04%	2.27%	4.92%	6.00%	1.01%	100.00%
Hamdard	5	0	6	0	3	14
	3.40%	0.00%	4.92%	0.00%	3.03%	100.00%
Baidyanath	18	16	16	2	7	11
	12.24%	12.12%	13.11%	4.00%	7.07%	100.00%
Others	34	34	21	16	24	31
	23.14%	25.76%	17.21%	32.00%	24.24%	100.00%
Total	147	132	122	50	99	
TotalPercentage	100	100	100	100	100	

H₀: There is no difference among clusters as per Ayurvedic OTC brand to be purchased

H₁: There is a difference among clusters in terms of Ayurvedic OTC brand to be purchased

Table 4.79

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.295	24	0.009
Likelihood Ratio	51.978	24	0.001
N of Valid Cases	401		

Chi-Square Calculated= 43.295

df = (r-1) (c-1) = 24

χ^2 Tabulated for df=24 at 95% level of confidence or 0.05 level of significance = 36.415

The chi-square calculation for table 4.79 shows that Chi-square calculated which is 43.295 greater than Chi-square tabulated for df= 24 at 0.05% level of significance which is 36.415 and p value to be .009. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among clusters with purchase of Ayurvedic OTC brand mostly in the past 12 months.

The table 4.78 shows us that Cluster 1st, 2nd and 4th is dominated by Himalaya Ayurvedic OTC brand which is 23.13%, 25.76% and 32% respectively whereas for cluster 3 and 5, they are dominated by the brand name Patanjali in Ayurvedic OTC segment. They are 29.51% and 33.33%.

Table 4.80

	Type of OTC and cluster					Total
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	
Vitamins	19	10	17	11	17	74
	19.59%	10.87%	17.89%	28.95%	21.52%	
Lozenges	12	4	3	0	9	28
	12.37%	4.35%	3.16%	0	11.39%	
Cold-Flu remedies	16	28	20	8	13	85
	16%	30.43%	21.05%	21.05%	16.46%	
Allergy remedies	4	10	21	4	10	49
	4.12%	10.87%	22.11%	10.53%	12.66%	
Immunity booster	26	22	17	9	12	86
	26.80%	23.91%	17.89%	23.68%	15%	
Skincare	20	18	17	6	18	79
	20.62%	19.57%	17.89%	15.79%	22.78%	
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per type of OTC medicine purchased

H₁: There is a difference among clusters in terms of OTC medicines purchased

Table 4.81

Chi-Square Test			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.745	20	0.01
Likelihood Ratio	4075.30%	20	0.004
N of Valid Cases	401		

Chi-Square Calculated= 37.745

df = (r-1) (c-1) = 20

$\chi^2_{\text{Tabulated}}$ for df=20 at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.81 shows that Chi-square calculated which is 37.745 greater than Chi-square tabulated for df= 20 at 0.05% level of significance which is 31.410 and p value to be .010. This shows that alternate hypothesis (H₁) holds, which means there is significant difference clusters as per type of OTC medicines purchased most often in the past 12 months.

The table 4.80 shows us Cluster 1 were dominated by purchase of immunity booster which is 26.80%. Clusters 2 is dominated by Cold-Flu remedies where participants were about 30.43% respectively whereas for cluster 3, Allergy remedies were preferred medicines type of Ayurvedic OTC with 22.11%. Cluster 4 with 28.95% was dominated by Vitamins and cluster 5 was dominated by skincare (22.78%).

Table 4.82

	Purchased Ayurvedic OTC Medicines in the Last Twelve Months					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Tablets	29	31	16	7	20	103
	29.90%	33.70%	16.84%	28.00%	25.64%	100.00%
Syrups	27	21	29	13	16	106
	27.84%	22.83%	30.53%	52.00%	20.51%	100.00%
Powder	8	13	8	8	14	51
	8.25%	14.13%	8.42%	32.00%	17.95%	100.00%
Creams	26	27	29	7	19	108
	26.80%	29.35%	30.53%	28.00%	24.36%	100.00%
Capsules	7	0	13	3	9	32
	7.22%	0.00%	13.68%	12.00%	11.54%	100.00%
Total	97	92	95	25	78	97
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per forms of ayurvedic OTC medicines bought.

H₁: There is a difference among clusters with forms of Ayurvedic OTC medicines bought.

Table 4.83

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.898	20	0.021
Likelihood Ratio	40.856	20	0.004
N of Valid Cases	401		

Chi-Square Calculated= 34.898

df = (r-1) (c-1) = 20

χ^2 Tabulated for df=20 at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.83 shows that Chi-square calculated which is 34.898 greater than Chi-square tabulated for df= 20 at 0.05% level of significance which is 31.410 and p value to be .021. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among clusters as per type of OTC medicines purchased most often in the past 12 months.

The table 4.82 shows us that cluster 1,2 and 5 choose tablets as forms of Ayurvedic OTC medicine they would purchase with 29.90% ,33.7% and 25.64%. For clusters 3, syrups and creams were the form of Ayurvedic OTC medicines with 30.53% and 30.53% which the participants bought. Cluster 4, with 52% choose powder form of Ayurvedic OTC medicines.

Table 4.84

	Most Purchased Packaging Types in the Last Twelve Months					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Sachets	12	14	23	12	15	76
	12.37%	15.22%	24.21%	31.58%	18.99%	100.00%
Bottles	54	51	42	20	32	199
	55.67%	55.43%	44.21%	52.63%	40.51%	100.00%
Tube	25	21	27	6	24	103
	25.77%	22.83%	28.42%	15.79%	30.38%	100.00%
Blister-packs	6	6	3	0	8	23
	6.19%	6.52%	3.16%	0.00%	10.13%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per kind of packaging of Ayurvedic OTC medicines bought.

H₁: There is a difference among clusters with kind of packaging of Ayurvedic OTC medicines bought.

Table 4.85

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.536	12	0.076
Likelihood Ratio	21.397	12	0.045
N of Valid Cases	401		

Chi-Square Calculated= 19.536

df = (r-1) (c-1) = 12

$\chi^2_{\text{Tabulated}}$ for df=12 at 95% level of confidence or 0.05 level of significance = 21.026

The chi-square calculation for table 4.85 shows that Chi-square calculated which is 19.536 less than Chi-square tabulated for df= 12 at 0.05% level of significance which is 21.026 and p value to be .076. This shows that null hypothesis (H₀) holds, which means there is no significant difference among clusters as per the kind of packaging of Ayurvedic OTC medicines bought.

b) Objectives

Table 4.86

Quantity of Ayurvedic OTC Purchased in the Last Twelve Months						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Dose for immediate cure	39	26	56	19	22	162
	40.63%	28.26%	58.95%	50.00%	27.85%	100.00%
Dose for regular basis	57	66	39	19	57	238
	59.38%	71.74%	41.05%	50.00%	72.15%	100.00%
Total	39	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per quantity purchased of Ayurvedic OTC medicines.

H₁: There is a difference among clusters with quantity purchased of Ayurvedic OTC medicines.

Table 4.87

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.013	8	0
Likelihood Ratio	28.815	8	0
N of Valid Cases	401		

Chi-Square Calculated= 29.013

df = (r-1) (c-1) = 8

χ^2 Tabulated for df=8 at 95% level of confidence or 0.05 level of significance = 15.507

The chi-square calculation for table 4.87 shows that Chi-square calculated which is 29.013 greater than Chi-square tabulated for df= 8 at 0.05% level of significance which is 15.507 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among clusters as per quantity purchased of Ayurvedic OTC medicines.

The table 4.86 tells us that, participants in clusters 3 purchase dose of Ayurvedic OTC medicines for immediate cure i.e., 58.95%. Whereas, clusters 1,2 and 5 purchase Ayurvedic OTC for regular use. They are 59.38%, 71.74% and 72.15% respectively. Cluster 4 purchased Ayurvedic OTC for both immediate use and regular basis.

Table 4.88

	Purposes for Purchasing Ayurvedic OTC Medicines					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Need of non-side effect medicines	39	58	33	26	34	190
	40.21%	63.74%	34.74%	68.42%	43.04%	100.00%
Need any kind of natural ingredients	45	28	51	8	41	173
	46.39%	30.77%	53.68%	21.05%	51.90%	100.00%
High rate of therapeutic efficiency	13	5	11	4	4	37
	13.40%	5.49%	11.58%	10.53%	5.06%	100.00%
Total	97	91	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters with that of benefits for which we buy Ayurvedic OTC medicines bought.

H_1 : There is a difference among clusters with benefits of Ayurvedic OTC medicines bought.

Table 4.89

Chi-Square Tests			
	Value	df	Asymp.sig.
Pearson Chi-Square	33.466	12	0.001
Likelihood Ratio	33.975	12	0.001
N of Valid Cases	401		

Chi-Square Calculated= 33.466

df = (r-1) (c-1) = 12

χ^2 Tabulated for df=12 at 95% level of confidence or 0.05 level of significance = 21.026

The chi-square calculation for table 4.89 shows that Chi-square calculated which is 33.466 greater than Chi-square tabulated for $df=12$ at 0.05% level of significance which is 21.026 and p value to be 0.001. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among clusters as per the benefits for which we buy Ayurvedic OTC medicines bought. The table 4.88 shows cluster 1, 3 and 5 are dominated by ones who need natural ingredients. They are 46.39%, 53.68% and 51.9% respectively. Clusters 2 and 4 are participants which in need of non-side effects with 63.74% and 68.42%.

Table 4.90

Reasons to not visit doctor						
	Cluster 1	Cluster2	Cluster3	Cluster 4	Cluster 5	Total
It's expensive	5	4	10	0	8	27
	5.21%	4.34%	10.52%	0.00%	10.12%	100.00 %
Kills my valuable time	8	12	13	7	7	47
	8.34%	13.08%	13.68%	18.42%	8.86%	100.00 %
It's unnecessary because of prior experience	44	38	21	10	40	153
	45.83%	41.30%	22.11%	26.31%	50.63%	100.00 %
Depend on my mood	21	18	20	6	4	69
	21.87%	19.56%	21.05%	15.78%	5.06%	100.00 %
It's a minor ailment	18	20	31	15	20	104
	18.75%	21.73%	32.63%	39.47%	25.31%	100.00 %
Total	96	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per the notion of not visiting the doctor.

H_1 : There is a difference among clusters with that of not visiting the doctor.

Table 4.91

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.300	20	0.003
Likelihood Ratio	47.338	20	0.001
N of Valid Cases	401		

Chi-Square Calculated= 42.300

$df = (r-1)(c-1) = 20$

χ^2 Tabulated for $df=20$ at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.91 shows that Chi-square calculated which is 42.300 greater than Chi-square tabulated for $df=20$ at 0.05% level of significance which is 31.410 and p value to be .003. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among clusters with notion of not visiting the doctor and buying Ayurvedic OTC products.

The table 4.90 reveals that cluster 1,2 and 5 felt it unnecessary as they had prior experience which constitute about 45.83%,41.30% and 50.63% respectively. Clusters 3 and 4 feel for minor ailment they don't need to visit a doctor. They are 32.63% and 39.47%.

b.) Organization

Table 4.92

Comparison: Doctor Visits vs. OTC Medicine Purchases in the Last Twelve Months						
	Cluster1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very Often	2	6	16	6	18	48
	2.06%	6.52%	16.84%	15.79%	22.79%	100.00%
Often	7	25	22	6	10	70
	7.21%	27.17%	23.15%	15.79%	12.66%	100.00%
Sometimes	61	32	27	14	30	164
	62.89%	34.78%	28.42%	36.84%	37.97%	100.00%
Rarely	26	29	24	9	20	108
	26.80%	31.52%	25.26%	23.68%	25.32%	100.00%
Never	1	0	6	3	1	11
	1.03%	0.00%	6.31%	7.89%	1.27%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per frequency to visit a doctor.

H_1 : There is a difference among clusters with frequency to visit a doctor.

Table 4.93

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	63.550	16	0
Likelihood Ratio	66.627	16	0
N of Valid Cases	401		

Chi-Square Calculated= 63.550

$df = (r-1) (c-1) = 16$

$\chi^2_{\text{Tabulated}}$ for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.93 shows that Chi-square calculated which is 63.550 greater than Chi-square tabulated for $df=16$ at 0.05% level of significance which is

26.296 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among clusters as per frequency to visit a doctor.

The table 4.92 shows that cluster 1,2,3,4 and 5 are dominated by sometimes i.e., 62.89%, 34.78%, 28.42%, 36.84% and 37.97% as a frequency for which participants go visit their doctors.

Table 4.94

Inquiries About Specific Brands of Ayurvedic OTC Medicines in the Last Twelve Months						
	Cluster1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very Often	2	5	4	5	10	26
	2.06%	5.43%	4.21%	13.15%	12.65%	100.00%
Often	11	24	31	6	12	84
	11.34%	26.08%	32.63%	15.78%	15.18%	100.00%
Sometimes	63	46	32	18	38	197
	64.94%	50.00%	33.68%	47.36%	48.10%	100.00%
Rarely	18	17	14	6	17	72
	18.55%	18.47%	14.73%	15.78%	21.51%	100.00%
Never	3	0	14	3	2	22
	3.09%	0.00%	14.73%	7.89%	2.53%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per inquiry about specific brand.

H_1 : There is a difference among clusters with inquiry about specific brand.

Table 4.95

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	57.838	16	.000
Likelihood Ratio	58.355	16	.000
N of Valid Cases	401		

Chi-Square Calculated= 57.838

$df = (r-1)(c-1) = 16$

$\chi^2_{\text{Tabulated}}$ for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.95 shows that Chi-square calculated which is 57.838 greater than Chi-square tabulated for $df=16$ at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among clusters and frequency of inquiries made about specific brand available for Ayurvedic OTC medicines.

The table 4.94 shows that participants in cluster 1,2,3,4 and 5 (i.e., 64.94%, 50%, 33.68%,47.36% and 48.1%) have sometimes inquire about specific brand available for Ayurvedic OTC medicines.

Table 4.96

Frequency of Doctor-Prescribed Ayurvedic OTC Medicines in the Last Twelve Months						
	Cluster1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very often	12	7	8	3	1	31
	12.37%	7.608%	8.42%	7.89%	1.26%	100.00%
Often	9	7	13	8	8	45
	9.278%	7.608%	13.68%	21.05%	10.12%	100.00%
Sometimes	28	38	30	5	27	128
	28.86%	41.30%	31.57%	13.15%	34.17%	100.00%
Rarely	29	28	34	13	23	127
	29.89%	30.43%	35.78%	34.21%	29.11%	100.00%
Never	19	12	10	9	20	70
	19.58%	13.04%	10.52%	23.68%	25.31%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per how often has the doctor prescribed Ayurvedic OTC medicines.

H₁: There is a difference among clusters with how often has the doctor prescribed Ayurvedic OTC medicines.

Table 4.97

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.866	16	0.033
Likelihood Ratio	30.295	16	0.017
N of Valid Cases	401		

Chi-Square Calculated= 27.866

df = (r-1) (c-1) = 16

$\chi^2_{\text{Tabulated}}$ for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.97 shows that Chi-square calculated which is 27.866 greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .033. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among clusters with how often has the doctor prescribed Ayurvedic OTC medicines.

The table 4.96 explains that cluster 1,3 and 4 were dominated by rarely option when asked about how frequent has the doctor prescribed you Ayurvedic OTC medicines. They are 29.89%, 35.78% and 34.21% respectively. For cluster 2 and 5, the results show (41.30% and 34.17%) the sample marked sometimes when asked about Ayurvedic OTC prescribed from a doctor.

Table 4.98

Friend Recommendations Impacting Ayurvedic OTC Purchases in the Last Twelve Months						
	Cluster1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very often	1	2	7	0	3	13
	1.03%	2.17%	7.368%	0	3.797%	100.00%
Often	5	28	18	11	11	73
	5.154%	30.43%	18.94%	28.94%	13.92%	100.00%
Sometimes	66	37	35	11	30	179
	68.04%	40.21%	36.84%	28.94%	37.97%	100.00%
Rarely	18	16	30	8	24	96
	18.55%	17.39%	31.57%	21.05%	30.37%	100.00%
Never	7	9	5	8	11	40
	7.216%	9.782%	5.263%	21.05%	13.924%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per recommendation made by friends to purchase.

H₁: There is a difference among clusters with recommendations made by friends to purchase.

Table 4.99

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	59.836	16	0
Likelihood Ratio	60.329	16	0
N of Valid Cases	401		

Chi-Square Calculated= 59.836

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.99 shows that Chi-square calculated which is 59.836 greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among clusters as per recommendation made by friends to purchase Ayurvedic OTC medicines.

The table 4.98 shows cluster 1,2,3 and 5 participants responded to have sometimes as their frequency to purchase Ayurvedic OTC on their friend's recommendations with 68.04%,40.21%, 36.84% and 37.97%. Whereas cluster 4, responded often and sometimes as the frequency of purchasing Ayurvedic OTC on their friend's recommendations i.e., 28.94% and 28.94%.

Table 4.100

Family Recommendations and Ayurvedic OTC Medicine Purchases in the Last Twelve Months						
	Cluster1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very often	3	6	9	9	0	27
	3.09%	6.59%	9.47%	23.68%	0	100.00%
Often	6	31	18	9	22	86
	6.18%	34.06%	18.94%	23.68%	27.84%	100.00%
Sometimes	42	31	28	9	34	144
	43.29%	34.06%	29.47%	23.68%	43.03%	100.00%
Rarely	31	19	36	4	18	108
	31.95%	20.87%	37.89%	10.52%	22.78%	100.00%
Never	15	4	4	7	5	35
	15.46%	4.39%	4.21%	18.42%	6.32%	100.00%
Total	97	91	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per recommendations made by family to purchase.

H₁: There is a difference among clusters with recommendations made by family to purchase.

Table 4.101

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	76.806	20	0
Likelihood Ratio	78.685	20	0
N of Valid Cases	401		

Chi-Square Calculated= 76.806

df = (r-1) (c-1) = 20

χ^2 Tabulated for df=20 at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.101 shows that Chi-square calculated which is 76.806 greater than Chi-square tabulated for df=20 at 0.05% level of significance which is 31.410 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among clusters with recommendations made by family to purchase.

This table 4.100 shows that recommendation made by family hits different to different people, here are the results. For cluster 1 and 5 they responded to sometimes with 43.29% and 43.03% saying they sometimes take any recommendations. On the other hand, clusters 2 had a mix response of sometimes and often taking recommendations from their family to purchase Ayurvedic OTC medicines. They are 34.06% and 34.06%. Even clusters 3 responded to rarely taking recommendations from family members for buying Ayurvedic

OTC medicines. They are 37.89% respectively. Cluster 4 had similar percentage of responses for very often, often and sometimes with 23.68%.

c.) Operations

Table 4.102

Primary Sources for Information on Most Used OTC Products						
	Cluster1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	
General store	6	3	19	5	4	37
	6.19%	3.26%	20.00%	13.16%	5.06%	100.00%
Internet	27	20	18	2	22	89
	27.84%	21.74%	18.95%	5.26%	27.85%	100.00%
Doctors	10	10	21	12	18	71
	10.31%	10.87%	22.11%	31.58%	22.78%	100.00%
Free Sample Distribution	1	4	9	3	3	20
	1.03%	4.35%	9.47%	7.89%	3.80%	100.00%
Pharmacist	15	24	17	8	4	68
	15.46%	26.09%	17.89%	21.05%	5.06%	100.00%
Friends and relatives	20	20	7	5	17	69
	20.62%	21.74%	7.37%	13.16%	21.52%	100.00%
Newspapers	0	3	2	1	2	8
	0.00%	3.26%	2.11%	2.63%	2.53%	100.00%
Advertisements	18	8	2	2	9	39
	18.56%	8.70%	2.11%	5.26%	11.39%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per how you got to know about the product.

H₁: There is a difference among clusters with how you got to know about the product.

Table 4.103

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	83.46	28	0
Likelihood Ratio	90.735	28	0
N of Valid Cases	401		

Chi-Square Calculated= 83.460

df = (r-1) (c-1) = 28

χ Tabulated for df=28 at 95% level of confidence or 0.05 level of significance = 41.337

The chi-square calculation for table 4.103 shows that Chi-square calculated which is greater than Chi-square tabulated for df=20 at 0.05% level of significance which is 31.410 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among clusters as per how you got know about the product.

The table 4.102 explains that cluster 1 and 5 responded internet as their source with 27.84% and 27.85% respectively. Cluster 2 was dominated by pharmacist as their source of information i.e., 26.09%. Cluster 3 and 4 were dominated by doctors (22.11% and 22.78%).

Table 4.104

Consultation Frequency with Doctor Before Ayurvedic OTC Purchases in the Last Twelve Months						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very often	1	5	12	3	8	29
	1.03%	5.43%	12.63%	7.89%	10.13%	100.00%
Often	14	11	30	9	16	80
	14.43%	11.96%	31.58%	23.68%	20.25%	100.00%
Sometimes	21	39	21	18	15	114
	21.65%	42.39%	22.11%	47.37%	18.99%	100.00%
Rarely	41	25	18	4	23	111
	42.27%	27.17%	18.95%	10.53%	29.11%	100.00%
Never	20	12	14	4	17	67
	20.62%	13.04%	14.74%	10.53%	21.52%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per seeking advice from doctor before buying the product.

H_1 : There is a difference among clusters with seeking advice from doctor before buying the product.

Table 4.105

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	55.95	16	0
Likelihood Ratio	57.356	16	0
N of Valid Cases	401		

Chi-Square Calculated= 55.950

$df = (r-1)(c-1) = 16$

$\chi_{\text{Tabulated}}$ for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.105 shows that Chi-square calculated 55.950 which is greater than Chi-square tabulated for $df=16$ at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among clusters with respect to seeking advice from doctor before buying the product. The table 4.104 explains that cluster 1 was dominated by 36.9%,

saying that they rarely seek advice from the doctor before purchasing Ayurvedic OTC medicines.

Cluster 1 and 5 are dominated by rarely (42.27% and 29.11%) seeking advice from doctor to purchase Ayurvedic OTC medicines. Clusters 2 and 4 with 42.39% and 47.37% were dominated by sometimes seeking advice whereas respondents in cluster 3 often visited doctor to seek their advice.

Table 4.106

Informing OTC Choices: Seeking Friend Advice Frequency in the Last Twelve Months						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very Often	1	3	3	0	2	9
	1.03%	3.26%	3.16%	0.00%	3.85%	100.00
Often	9	15	31	4	7	66
	9.28%	16.30%	32.63%	10.53%	13.46%	100.00
Sometimes	41	47	27	14	29	158
	42.27%	51.09%	28.42%	36.84%	55.77%	100.00
Rarely	41	14	24	9	3	118
	42.27%	15.22%	25.26%	23.68%	5.77%	100.00
Never	5	13	10	11	11	50
	5.15%	14.13%	10.53%	28.95%	21.15%	100.00
Total	97	92	95	38	52	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per seeking advice from friends before buying the product.

H₁: There is a difference among clusters with seeking advice from friends before buying the product.

Table 4.107

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	58.280	16	.000
Likelihood Ratio	56.643	16	.000
N of Valid Cases	401		

Chi-Square Calculated= 58.280

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.107 shows that Chi-square calculated 55.950 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per seek advice from friends before purchasing Ayurvedic OTC medicines.

Clusters 2, 4 and 5 with 51.09%, 36.84% and 55.77% marked sometimes to go seek advice from friends before purchasing Ayurvedic OTC medicines. Cluster 1 had same percentage of responses with 42.27% by indicating that they sometimes and rarely seek advice from their friends before purchasing Ayurvedic OTC medicines. For cluster 3, 32.63% of respondents were often seeking advice from friends.

Table 4.108

Seek advice from your family before buying Ayurvedic OTC medicines in past twelve months						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very often	6	9	4	0	3	22
	6.19%	9.78%	4.21%	0.00%	3.80%	100.00
Often	13	22	25	7	20	87
	13.40%	23.91%	26.32%	18.42%	25.32%	100.00
Sometimes	33	41	37	17	22	150
	34.02%	44.57%	38.95%	44.74%	27.85%	100.00
Rarely	40	15	25	5	31	116
	41.24%	16.30%	26.32%	13.16%	39.24%	100.00
Never	5	5	4	9	3	26
	5.15%	5.43%	4.21%	23.68%	3.80%	100.00
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per seeking advice from family before buying the product.

H₁: There is a difference among clusters with seeking advice from family before buying the product.

Table 4.109

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	50.876	16	0
Likelihood Ratio	50.876	16	0
N of Valid Cases	401		

Chi-Square Calculated= 50.876

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.109 shows that Chi-square calculated 50.876 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per seek advice from family before purchasing Ayurvedic OTC medicines.

The table 4.108 explains cluster 1 and 5 are dominated by 41.24% and 39.24% showing that respondents here rarely seek advice from family whereas cluster 2, 3 and 4 showed they sometimes (34.02%, 38.95% and 44.74%) seek advice from their family.

Table 4.109

	How often have you purchased Ayurvedic OTC for yourself?					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very Often	2	8	3	9	4	26
	2.06%	8.70%	3.16%	23.68%	5.06%	100.00%
Often	31	22	19	3	33	108
	31.96%	23.91%	20.00%	7.89%	41.77%	100.00%
Sometimes	37	48	43	18	21	167
	38.14%	52.17%	45.26%	47.37%	26.58%	100.00%
Rarely	23	12	23	5	20	83
	23.71%	13.04%	24.21%	13.16%	25.32%	100.00%
Never	4	2	7	3	1	17
	4.12%	2.17%	7.37%	7.89%	1.27%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per purchasing Ayurvedic OTC medicines yourself.

H₁: There is a difference among clusters with purchasing Ayurvedic OTC medicines yourself.

Table 4.110

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56.373	16	0
Likelihood Ratio	52.953	16	0
N of Valid Cases	401		

Chi-Square Calculated= 56.373

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.110 shows that Chi-square calculated 50.876 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per purchasing Ayurvedic OTC medicines yourself. The table 4.109 here explains, clusters 1,2,3 and 4 sometimes purchase Ayurvedic OTC for themselves. They are 38.14%, 52.17%, 45.26% and 47.37% respectively. Similarly, cluster 5 often purchased Ayurvedic OTC for self-medication with 41.77%.

Table 4.111

Frequency of Others Purchasing Ayurvedic OTC for You						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Very Often	4	7	21	7	1	40
	4.12%	7.61%	22.11%	18.42%	1.27%	100.00%
Often	15	8	12	5	5	45
	15.46%	8.70%	12.63%	13.16%	6.33%	100.00%
Sometimes	21	36	20	5	22	104
	21.65%	39.13%	21.05%	13.16%	27.85%	100.00%
Rarely	47	33	31	16	40	167
	48.45%	35.87%	32.63%	42.11%	50.63%	100.00%
Never	10	8	11	5	11	45
	10.31%	8.70%	11.58%	13.16%	13.92%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per someone purchasing Ayurvedic OTC medicines for you.

H₁: There is a difference among clusters with someone purchasing Ayurvedic OTC medicines for you.

Table 4.112

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.334	16	0
Likelihood Ratio	47.781	16	0
N of Valid Cases	401		

Chi-Square Calculated= 47.334

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.112 shows that Chi-square calculated 47.334 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per someone purchasing Ayurvedic OTC medicines for you.

The table 4.111 shows cluster 1,3,4 and 5 with 48.45%,32.63%,42.11% and 50.63% had rarely asked somebody else to purchase Ayurvedic OTC for you. Cluster 2 sometimes made somebody else to purchase Ayurvedic OTC for you. It is 39.13% respectively.

Table 4.112

Purchasing Frequency of Ayurvedic OTC During Summer Seasons						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Every Week	1	1	4	0	1	7
	1.03%	1.09%	4.21%	0.00%	1.27%	100.00%
Every Day	1	1	3	5	0	10
	1.03%	1.09%	3.16%	13.16%	0.00%	100.00%
Once a Month	41	42	50	6	27	166
	42.27%	45.65%	52.63%	15.79%	34.18%	100.00%
Once a fortnight	0	3	11	2	7	23
	0.00%	3.26%	11.58%	5.26%	8.86%	100.00%
Less than once a month	54	45	27	25	44	195
	55.67%	48.91%	28.42%	65.79%	55.70%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per how frequent do they buy Ayurvedic OTC in summer season.

H₁: There is a difference among clusters with how frequent do they buy Ayurvedic OTC in summer season.

Table 4.113

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	61.589	16	0
Likelihood Ratio	62.042	16	0
N of Valid Cases	401		

Chi-Square Calculated= 61.589

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.113 shows that Chi-square calculated 61.589 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per how frequent do they buy Ayurvedic OTC in summer season.

The table 4.112 explains purchase for cluster 1,2,4 and 5 was less than once a month with 55.67%, 48.91%, 55.70% and 65.79% respectively. Cluster 3rd purchase was once in a month with 52.63% respectively.

Table 4.114

Purchase Frequency of Ayurvedic OTC During Winter Seasons						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Every once a month	7	1	2	1	0	11
	7.22%	1.09%	2.11%	2.63%	0.00%	100.00%
Every day	0	7	9	3	0	19
	0.00%	7.61%	9.47%	7.89%	0.00%	100.00%
Once a month	35	45	37	18	30	165
	36.08%	48.91%	38.95%	47.37%	37.97%	100.00%
Once a fort night	13	2	26	5	9	55
	13.40%	2.17%	27.37%	13.16%	11.39%	100.00%
Less than once a month	42	37	21	11	40	151
	43.30%	40.22%	22.11%	28.95%	50.63%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

Ho: There is no difference among clusters as per how frequent do they buy Ayurvedic OTC in winter season.

H1: There is a difference among clusters with how frequent do they buy Ayurvedic OTC in winter season.

Table 4.115

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	61.708	16	0
Likelihood Ratio	71.598	16	0
N of Valid Cases	401		

Chi-Square Calculated= 61.708

df = (r-1) (c-1) = 16

χ Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.115 shows that Chi-square calculated 61.708 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per how frequent do they buy Ayurvedic OTC in winter season. The table 4.114 explains cluster 1 purchase was once a month 36.08% respectively. Cluster 2, 3 and 4, purchase was once a month with 48.91%, 38.95% and

47.37% respectively. Whereas cluster 5 with 50.63% was dominated by purchasing less than once a month of Ayurvedic OTC medicines.

Table 4.116

Monthly Frequency of Ayurvedic OTC Medicine Purchases						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Every week	4	1	1	1	1	8
	4.12%	1.09%	1.05%	2.63%	1.27%	100.00%
Every day	0	7	11	3	0	21
	0.00%	7.61%	11.58%	7.89%	0.00%	100.00%
Once a month	34	36	27	12	26	135
	35.05%	39.13%	28.42%	31.58%	32.91%	100.00%
Once a fort night	9	4	24	8	8	53
	9.28%	4.35%	25.26%	21.05%	10.13%	100.00%
Less than once a month	50	44	32	14	44	184
	51.55%	47.83%	33.68%	36.84%	55.70%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per how often do you buy Ayurvedic OTC.

H₁: There is a difference among clusters with how often do you buy Ayurvedic OTC.

Table 4.117

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	48.568	16	0
Likelihood Ratio	55.243	16	0
N of Valid Cases	401		

Chi-Square Calculated= 48.568

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.117 shows that Chi-square calculated 48.568 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per how frequent do they buy Ayurvedic OTC.

The table 4.116 explains frequency in a month you buy Ayurvedic OTC medicines of clusters 1,2,3,4 and 5 with 51.55%, 47.83%, 33.68%, 36.84% and 55.70% respectively.

Table 4.118

Purchased most of your Ayurvedic OTC medicines in last 12 months						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Chemist shop	35	54	50	12	36	187
	36.08%	59.34%	52.63%	31.58%	45.57%	100.00
General Merchant	45	23	31	21	31	151
	46.39%	25.27%	32.63%	55.26%	39.24%	100.00
Online	17	14	14	5	12	62
	17.53%	15.38%	14.74%	13.16%	15.19%	100.00
Total	97	91	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per from where were the Ayurvedic OTC purchased.

H₁: There is a difference among clusters with where were the Ayurvedic OTC purchased.

Table 4.119

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.278	12	4.60
Likelihood Ratio	21.074	12	0.049
N of Valid Cases	401		

Chi-Square Calculated= 21.278

df = (r-1) (c-1) = 12

$\chi^2_{\text{Tabulated}}$ for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.119 shows that Chi-square calculated 21.278 which is greater than Chi-square tabulated for df=12 at 0.05% level of significance which is 21.026 and p value to be .046. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per from where were the Ayurvedic OTC medicines purchased for last 12 months.

The table 4.118 shows cluster 1, 4 and 5 were dominated by general merchant's shops for buying Ayurvedic OTC medicines. They are 46.39%, 55.26% and 39.24% respectively. Whereas for clusters 2 and 3 with 59.34% and 52.63%, they were dominated by chemist shop for buying Ayurvedic OTC medicines in the last twelve months.

Table 4.120

Distance of retail outlet					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Less than 0.5kms	35	54	50	12	36
	36.08%	59.34%	52.63%	31.58%	45.57%
0.5-2.5 kms	45	23	31	21	31
	46.39%	25.27%	32.63%	55.26%	39.24%
More than 2.5 kms	17	14	14	5	12
	17.53%	15.38%	14.74%	13.16%	15.19%
Total	97	91	95	38	79
Total Percentage	100	100	100	100	100

H₀: There is no difference among clusters as per how far was the retailoutlet.

H1: There is a difference among clusters with how far is the retail outlet.

Table 4.121

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.865	12	0.001
Likelihood Ratio	30.904	12	0.002
N of Valid Cases	401		

Chi-Square Calculated= 31.865

df = (r-1) (c-1) = 12

χ^2 Tabulated for df=12 at 95% level of confidence or 0.05 level of significance = 21.026

The chi-square calculation for table 4.121 shows that Chi-square calculated 31.865 which is greater than Chi-square tabulated for df=12 at 0.05% level of significance which is 21.026 and p value to be .001. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per how far was the retail outlet.

The table 4.120 indicates, cluster 1 and 4 with 46.39%, 55.26% was 0.5-2.5 kms away from retail shop. Cluster 2,3 and 5 have 59.34%, 52.63% and 45.57% indicating that the retail store was less than 0.5 kms away.

Table 4.122

What percentage of your required Ayurvedic OTC medicine do you buy from the same retail shop?						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
0-25%	19	10	19	17	15	80
	20.88%	11.63%	23.46%	47.22%	20.83%	100.00%
25-50%	43	40	35	11	24	153
	47.25%	46.51%	43.21%	30.56%	33.33%	100.00%
50-75%	29	36	27	8	33	133
	31.87%	41.86%	33.33%	22.22%	45.83%	100.00%
75-100%	19	10	19	17	15	35
	20.88%	11.63%	23.46%	47.22%	20.83%	100.00%
Total	91	86	81	36	72	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per required amount of Ayurvedic OTC you buy.

H_1 : There is a difference among clusters with required amount of Ayurvedic OTC you buy.

Table 4.123

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.415	12	0.002
Likelihood Ratio	27.834	12	0.006
N of Valid Cases	401		

Chi-Square Calculated= 30.415

df = (r-1) (c-1) = 12

χ^2 Tabulated for df=12 at 95% level of confidence or 0.05 level of significance = 21.026

The chi-square calculation for table 4.123 shows that Chi-square calculated 30.415 which is greater than Chi-square tabulated for df=12 at 0.05% level of significance which is 21.026 and p value to be .002. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per required amount of Ayurvedic OTC you buy.

The table 4.122 explains that cluster 1,2 and 3 are dominated by 25-50% with 47.25%, 46.51%, 43.21% of required amount of Ayurvedic OTC purchased from the retail shop. Whereas cluster 4 were dominated by purchasing 75-100% of required amount of Ayurvedic OTC medicines you buy. They are 47.22% respectively. Whereas cluster 5 purchases about 50-75% of required amount from the same retail store with 45.83% from the same retail store.

4.8.3 Consumer buying behaviour and Clusters

Table 4.124. Between each cluster with different EKB variables

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Need of non-side effects	3.72	4.12	3.02	2.97	4.41	3.71
Consider symptoms	3.65	3.87	2.99	2.71	3.82	3.49
Seen/Heard Advertisement	3.25	3.83	3.12	1.82	3.13	3.19
Recommendation from Friends	3.21	3.74	3.21	2.03	3.49	3.27
Recommendations from Family	3.13	3.73	3.20	2.26	3.58	3.29
Recommendation from Doctor	3.02	3.62	3.28	3.79	3.41	3.37
Recommendation from Pharmacist	3.00	3.67	3.00	2.89	3.52	3.25
Consider price	3.30	4.08	3.01	2.66	3.08	3.30
Consider Advertisements	3.12	3.66	3.12	2.21	2.99	3.13
Familiar Staff	2.72	3.72	3.32	2.87	2.78	3.12
No one can recognise	2.65	3.13	3.06	2.87	2.83	2.82
Brand important	3.95	4.22	2.75	2.58	3.51	3.51
Influenced by packaging	3.70	3.67	2.71	2.16	3.03	3.18
Brand value	3.88	3.73	3.14	2.45	2.46	3.25
Brand familiarity	3.61	3.87	3.25	2.24	2.68	3.27
Have no energy to look for another option	2.95	3.72	3.13	1.97	2.56	3
Consider dosages	3.57	3.82	3.08	2.66	3.58	3.43
Works best for you	3.92	4.23	3.06	2.79	3.87	3.67
Buy for routine problems	3.51	3.82	3.35	2.74	3.22	3.41
Buy for chronic problems	2.86	3.72	3.25	2.68	2.46	3.05
Buy for seasonal problems	3.56	3.97	3.24	3.53	3.42	3.55
Buy from specific pharmacy	2.94	3.5	2.99	2.97	3.11	3.12
Location important	3.11	3.30	3.18	2.05	2.49	2.95
Staff important	2.99	3.48	3.33	2.37	2.30	2.99
Product range	3.51	3.85	3.35	2.32	2.82	3.30
Extra services	3.18	3.48	3.17	2.11	2.77	3.06
Branded for effectiveness	3.84	4	2.86	2.74	3.65	3.50

The above table 4.124 discusses the means of each cluster in different variables. The first variable, need of non-side effects was more preferred by respondents in cluster 5 i.e., 4.41 and least by cluster 4 i.e., 2.97. When asked to consider symptoms before your purchase, cluster 5 (3.82) preferred it the most and least was preferred by Cluster 4 i.e., 2.71. The customers were seen to be influenced by seeing or just hearing an advertisement. Cluster 2 were seen to be preferring the most with 3.83 and least were preferred by cluster 4 with 1.82. A lot of people are influenced by recommendations made by their family, friends and doctors to purchase an Ayurvedic OTC medicines. The table indicates Cluster 2 preferred recommendation made by friends with 3.74 and least interested respondents belong to cluster 4 with 2.03. Cluster 5(3.58) preferred recommendation from family and cluster 2 was highly involved for recommendations made by doctors. Recommendations by pharmacist was preferred by cluster 2 with 3.67 and least was preferred by cluster 4.

While buying or deciding to buy a product, numerous times customers consider price as an important aspect. Cluster 2 were the ones who were mostly impacted by this with 4.08 and least preferred were the cluster 3 and 4 with 3.01 and 2.66. There are people who consider lot of advertisements before purchase to recall what they were claiming for making rational decision making. For this cluster 2 were the ones who highly consider the same whereas cluster 4 were who least considered them. A study by Bostrom (2011) in Finland revealed that consumers desired a type of relationship with the pharmacy staff, they feel comfortable if the staff at pharmacy shop is familiar to them. So, while we compare the same with people here in Himachal Pradesh, cluster 2 were the only ones who seem interested in this concept with 3.72 and others deny. Similarly, it was only Cluster 2 with 3.13, stating that they want otherwise other cluster do not want them to recognize as they want to stay anonymous.

Cluster 2 respondents states the brand an important variable while deciding to buy with 4.22. Cluster 2 was highly influenced by packaging of Ayurvedic OTC medicines before buying. Brand value, it was considered by all clusters but mostly preferred by cluster 1 with 3.88. Brand familiarity was also preferred mostly by cluster 2 i.e., 3.87. Nowadays, consumers are tired, too busy which ultimately results in buying same Ayurvedic OTC as they have no energy to look for another options. Such kind of behaviour was seen in cluster 2 with 3.72 respectively. When asked about considering dosages Cluster 2 was stated the highest with 3.82 and when stating about buying same medicines which are best for you, cluster 2 was the highest with 4.23. Customer buy Ayurvedic OTC in various occasion such as for

routine problem (3.82), chronic problems (3.72) and for seasonal problems (3.97) for which cluster 2 had highest responses.

Most respondents fall under Cluster 2 with 3.5 which said they run errands in the specific pharmacy. Location, staff, product range and extra services were some other variables in the study of Bostrom (2011) as factor that influence buying decision where the results showed cluster 2 had highest responses for all of these. Location was 3.30, staff importance with 3.48, product range with 3.85 and extra services with 3.48 respectively. Lastly, participants of cluster 2 with 4.00 was highly engaged with buying Ayurvedic OTC for effectiveness.

One-way ANOVA helps to understand whether or not there are significant differences between the means of your independent variables. To check the same, we used the above tool and it statistically proved that the segments with the buying behaviour model i.e., EKB model were found unequal or different from each other.

H₀: There is no significant difference between clusters as per EKB model variables.

H₁: There is significant difference between clusters as per EKB model variables.

From the table in appendix-I, the p value is .000 which is less than 0.05. Therefore, alternate hypothesis (H₁) holds here showing that there is a significant difference between clusters and EKB variables. A post hoc test was done to see what difference can be seen between the clusters and the buying behaviour which is shown in appendix-II.

4.8.4 Factors Influencing and Clusters-Chi-Square

Table 4.125

Pharmaceutical company's country of origin.						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	24	7	16	15	29	
	26.09%	7.69%	16.84%	39.47%	36.71%	100.00%
Somewhat Important	24	33	22	14	30	123
	26.09%	36.26%	23.16%	36.84%	37.97%	100.00%
Important	12	13	23	6	6	60
	13.04%	14.29%	24.21%	15.79%	7.59%	100.00%
Very Important	17	28	18	2	8	73
	18.48%	30.77%	18.95%	5.26%	10.13%	100.00%
Extremely Important	15	10	16	1	6	48
	16.30%	10.99%	16.84%	2.63%	7.59%	100.00%
Total	92	91	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per origin of a pharmaceutical company.

H₁: There is a difference among clusters with origin of a pharmaceutical company.

Table 4.126

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56.591	16	0
Likelihood Ratio	60.171	16	0
N of Valid Cases	401		

Chi-Square Calculated= 56.591

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.126 shows that Chi-square calculated 56.591 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per origin of a pharmaceutical company. The table 4.125 explains that cluster 1 and 2 marked to give somewhat important status to origin of pharmaceutical company with 26.09% and 36.26% respectively. The cluster 3 gave important status with 36.26% and cluster 4 felt it was not important at all (i.e., 39.47%) to know origin country of a pharmaceutical company. Whereas cluster 5 were marked for not important at all to know about the origin country of the pharmaceutical company with 36.71%. For them pharmaceutical company's country origin was not any factor that had importance while deciding to purchase the Ayurvedic OTC medicines.

Table 4.127
Opinions and Recommendations of Pharmacist

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	3	1	4	6	4	18
	3.09%	1.09%	4.21%	15.79%	5.06%	100.00%
Somewhat Important	13	32	23	15	20	103
	13.40%	34.78%	24.21%	39.47%	25.32%	100.00%
Important	37	34	30	11	19	131
	38.14%	36.96%	31.58%	28.95%	24.05%	100.00%
Very Important	39	19	21	5	31	115
	40.21%	20.65%	22.11%	13.16%	39.24%	100.00%
Extremely Important	5	6	17	1	5	34
	5.15%	6.52%	17.89%	2.63%	6.33%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per opinions and recommendations of a pharmacists.

H_1 : There is a difference among clusters with opinions and recommendations of a pharmacists.

Table 4.128

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56.471	16	0.00
Likelihood Ratio	52.677	16	0
N of Valid Cases	401		

Chi-Square Calculated= 56.47

$df = (r-1) (c-1) = 16$

$\chi^2_{\text{Tabulated}}$ for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.128 shows that Chi-square calculated 56.471 which is greater than Chi-square tabulated for $df=16$ at 0.05% level of significance which is 26.296 and p value to be .000. This shows that null hypothesis (H_0) holds, which means there is no significant difference among cluster as per opinions and recommendations of a pharmacists.

Table 4.129

	Family's and friend's opinions and recommendations					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	3	3	8	7	1	22
	3.09%	3.26%	8.42%	18.42%	1.27%	100.00%
Somewhat Important	23	32	22	7	26	110
	23.71%	34.78%	23.16%	18.42%	32.91%	100.00%
Important	43	34	24	18	29	148
	44.33%	36.96%	25.26%	47.37%	36.71%	100.00%
Very Important	25	15	27	4	22	93
	25.77%	16.30%	28.42%	10.53%	27.85%	100.00%
Extremely Important	3	8	14	2	1	28
	3.09%	8.70%	14.74%	5.26%	1.27%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per opinions and recommendations of a family and friends.

H_1 : There is a difference among clusters with opinions and recommendations of a family and friends.

Table 4.130

	Chi-Square Tests		
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	49.653	16	0
Likelihood Ratio	47.986	16	0
N of Valid Cases	401		

Chi-Square Calculated= 49.653

$df = (r-1) (c-1) = 16$

$\chi^2_{\text{Tabulated}}$ for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.130 shows that Chi-square calculated 49.653 which is greater than Chi-square tabulated for $df=16$ at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means

there is significant difference among cluster as per opinions and recommendations of a family and friends.

The table 4.129 shows cluster 1,2,4 and 5 feels that its important (i.e., 44.33%,36.96%, 47.37%, 36.71% respectively) to get recommendation from their reference groups i.e., family and friends. In addition to this with 27%, 3rd cluster feels very important to receive any recommendations from friends and family.

Table 4.131

Product experience						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	0	0	4	6	0	10
	0.00%	0.00%	4.21%	15.79%	0.00%	100.00%
Somewhat Important	6	26	23	3	15	73
	6.19%	28.26%	24.21%	7.89%	18.99%	100.00%
Important	25	12	36	12	12	97
	25.77%	13.04%	37.89%	31.58%	15.19%	100.00%
Very Important	35	27	19	11	26	118
	36.08%	29.35%	20.00%	28.95%	32.91%	100.00%
Extremely Important	31	27	13	6	26	103
	31.96%	29.35%	13.68%	15.79%	32.91%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per product experiences.

H₁: There is a difference among clusters with product experiences.

Table 4.132

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	82.391	16	0
Likelihood Ratio	77.856	16	0
N of Valid Cases	401		

Chi-Square Calculated= 82.391

df = (r-1) (c-1) = 16

$\chi^2_{\text{Tabulated}}$ for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.132 shows that Chi-square calculated 82.391 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per product experience.

The table 4.131 explains cluster 1st had showed very important with 36.08% for product experience. Cluster 2nd and 5th had both same frequency(f=27,29.35%) for very important and extremely important when talking about product experience. Cluster 3rd and 4th says it's important for product experience with 37.89% and 31.58% respectively.

Table 4.134

	Own Recommendation/Experience					Total
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	
Not important at all	2	1	1	7	3	14
	2.06%	1.09%	1.05%	18.42%	3.80%	100.00%
Somewhat Important	18	10	27	5	9	69
	18.56%	10.87%	28.42%	13.16%	11.39%	100.00%
Important	22	43	28	13	16	122
	22.68%	46.74%	29.47%	34.21%	20.25%	100.00%
Very Important	44	22	36	12	32	146
	45.36%	23.91%	37.89%	31.58%	40.51%	100.00%
Extremely Important	11	16	3	1	19	50
	11.34%	17.39%	3.16%	2.63%	24.05%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per own recommendations/experiences.

H₁: There is a difference among clusters with own recommendations/experiences.

Table 4.135

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	78.639	16	0
Likelihood Ratio	69.037	16	0
N of Valid Cases	401		

Chi-Square Calculated= 78.639

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.135 shows that Chi-square 78.639 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per own recommendations/experiences.

The table 4.134 shows cluster 1st, 3rd and 5th felt very important towards own recommendation and experiences with 45.36%, 37.89% and 40.51% respectively. For clusters 2nd and 4th its important too with 46.74% and 34.21% to consider past experiences and their own recommendations on the Ayurvedic OTC medicines before buying.

Table 4.136

Physician recommendations						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	4	0	1	9	3	17
	4.12%	0.00%	1.05%	23.68%	3.80%	100.00%
Somewhat Important	15	4	23	4	4	50
	15.46%	4.35%	24.21%	10.53%	5.06%	100.00%
Important	33	51	28	12	28	152
	34.02%	55.43%	29.47%	31.58%	35.44%	100.00%
Very Important	33	23	39	7	23	125
	34.02%	25.00%	41.05%	18.42%	29.11%	100.00%
Extremely Important	12	14	4	6	21	57
	12.37%	15.22%	4.21%	15.79%	26.58%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per physician recommendations.

H₁: There is a difference among clusters with physician recommendations.

Table 4.137

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	91.912	16	0
Likelihood Ratio	79.677	16	0
N of Valid Cases	401		

Chi-Square Calculated= 91.912

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.137 shows that Chi-square 91.912 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per physician recommendations. The table 4.136 shows 1st cluster with 34.02% has both very important and important towards physician recommendations. Cluster 2, 4 and 5 felt that it's important to consider recommendations from physicians with 55.43%, 31.58% and 35.44% respectively. Cluster 3 with 41.05% felt it very important to take recommendations from physician.

Table 4.138

Opinion leaders Recommendations						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	6	13	2	6	6	33
	6.19%	14.13%	2.11%	15.79%	7.59%	100.00%
Somewhat Important	24	6	21	6	16	73
	24.74%	6.52%	22.11%	15.79%	20.25%	100.00%
Important	41	46	53	17	42	199
	42.27%	50.00%	55.79%	44.74%	53.16%	100.00%
Very Important	24	22	19	9	15	89
	24.74%	23.91%	20.00%	23.68%	18.99%	100.00%
Extremely Important	2	5	0	0	0	7
	2.06%	5.43%	0.00%	0.00%	0.00%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per Opinion leader recommendations.

H₁: There is a difference among clusters with Opinion leader recommendations.

Table 4.139

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.782	16	0.003
Likelihood Ratio	39.554	16	0.001
N of Valid Cases	401		

Chi-Square Calculated: 35.782

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.139 shows that Chi-square 48.542 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .003. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per opinion leader recommendations.

The table 4.138 shows that all segments 1,2,3,4 and 5 prefer it important to get recommendations from opinion leaders with 42.27%, 50%, 55.79%, 44.74% and 53.16% respectively.

Table 4.140

Relieves multiple symptoms						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	3	0	3	4	4	14
	3.09%	0.00%	3.16%	10.53%	5.06%	100.00%
Somewhat Important	10	17	25	13	8	73
	10.31%	18.48%	26.32%	34.21%	10.13%	100.00%
Important	62	35	39	11	28	175
	63.92%	38.04%	41.05%	28.95%	35.44%	100.00%
Very Important	20	29	28	10	35	122
	20.62%	31.52%	29.47%	26.32%	44.30%	100.00%
Extremely Important	2	11	0	0	4	17
	2.06%	11.96%	0.00%	0.00%	5.06%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per relieves multiple symptoms.

H₁: There is a difference among clusters with relieves multiple symptoms.

Table 4.141

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	65.329	16	0
Likelihood Ratio	66.783	16	0
N of Valid Cases	401		

Chi-Square Calculated: 65.329

df = (r-1) (c-1) = 16

$\chi^2_{\text{Tabulated}}$ for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.141 shows that Chi-square 65.329 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per relieves multiple symptoms.

The table 4.140 shows segments 1,2 and 3 felt it significantly important for Ayurvedic OTC medicines to relieves from multiple symptoms with 63.92%, 38.04% and 41.05%. The

4rd segment found it somewhat important with 34.21% and 5th segment felt it very important with 44.3% to cure multiple symptoms.

Table 4.142

	Are you in medical field/ or related field					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	20	18	12	15	16	81
	21.05%	19.57%	12.63%	39.47%	20.25%	100.00%
Somewhat Important	9	15	23	3	10	60
	9.47%	16.30%	24.21%	7.89%	12.66%	100.00%
Important	42	32	44	15	33	166
	44.21%	34.78%	46.32%	39.47%	41.77%	100.00%
Very Important	22	21	16	4	19	82
	23.16%	22.83%	16.84%	10.53%	24.05%	100.00%
Extremely Important	2	6	0	1	1	10
	2.11%	6.52%	0.00%	2.63%	1.27%	100.00%
Total	95	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per you are in medical field.

H₁: There is a difference among clusters with medical field you are in.

Table 4.143

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.144	20	0.006
Likelihood Ratio	38.227	20	0.008
N of Valid Cases	401		

Chi-Square Calculated: 39.144

df = (r-1) (c-1) = 20

χ^2 Tabulated for df=20 at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.143 shows that Chi-square 39.144 which is greater than Chi-square tabulated for df=20 at 0.05% level of significance which is 31.410 and p value to be .006. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per medical you work in.

The above table 4.142 describes cluster 1, 2,3 and 5 felt it important (44.21%, 34.78%, 46.32% and 41.77%) to be in medical field. Cluster 4 had both not important and important with 39.47% respectively.

Table 4.144

	Reasonable price					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	2	1	1	3	3	10
	2.06%	1.09%	1.05%	7.89%	3.80%	100.00%
Somewhat Important	14	10	22	7	18	71
	14.43%	10.87%	23.16%	18.42%	22.78%	100.00%
Important	50	47	44	16	40	197
	51.55%	51.09%	46.32%	42.11%	50.63%	100.00%
Very Important	26	22	24	11	15	98
	26.80%	23.91%	25.26%	28.95%	18.99%	100.00%
Extremely Important	5	12	4	1	3	25
	5.15%	13.04%	4.21%	2.63%	3.80%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per price.

H₁: There is a difference among clusters with price.

Table 4.145

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.834	16	0.093
Likelihood Ratio	21.6	16	0.157
N of Valid Cases	401		

Chi-Square Calculated: 23.834

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.145 shows that Chi-square 23.834 which is less than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .093. This shows that null hypothesis (H₀) holds, which means there is no significant difference among cluster as per reasonable price.

Table 4.146

	Best value of money					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	1	0	1	5	4	11
	1.03%	0.00%	1.05%	13.16%	5.06%	100.00%
Somewhat Important	6	8	21	6	13	54
	6.19%	8.70%	22.11%	15.79%	16.46%	100.00%
Important	62	38	32	12	32	176
	63.92%	41.30%	33.68%	31.58%	40.51%	100.00%
Very Important	20	33	33	11	25	122
	20.62%	35.87%	34.74%	28.95%	31.65%	100.00%
Extremely Important	8	13	8	4	5	38
	8.25%	14.13%	8.42%	10.53%	6.33%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per best value for money.

H₁: There is a difference among clusters with best value of money.

Table 4.147

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.066	16	0
Likelihood Ratio	48.347	16	0
N of Valid Cases	401		

Chi-Square Calculated: 53.066

$df = (r-1)(c-1) = 16$

$\chi^2_{\text{Tabulated}}$ for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.147 shows that Chi-square 53.066 which is greater than Chi-square tabulated for $df=16$ at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per best value of money. The 4.146 table explains 1,2,4 and 5 felt important with 63.92%, 41.30%, 31.58% and 40.51% respectively. Cluster 3 (34.74%) felt very important for value for money products.

Table 4.148

	Easy availability					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	2	0	1	2	2	7
	2.06%	0.00%	1.05%	5.26%	2.53%	100.00%
Somewhat Important	16	8	21	7	11	63
	16.49%	8.70%	22.11%	18.42%	13.92%	100.00%
Important	44	34	48	15	37	178
	45.36%	36.96%	50.53%	39.47%	46.84%	100.00%
Very Important	28	37	21	10	25	121
	28.87%	40.22%	22.11%	26.32%	31.65%	100.00%
Extremely Important	7	13	4	4	4	32
	7.22%	14.13%	4.21%	10.53%	5.06%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per availability.

H_1 : There is a difference among clusters with availability.

Table 4.149

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.610	16	0.06
Likelihood Ratio	26.15	16	0.052
N of Valid Cases	401		

Chi-Square Calculated: 25.610

$df = (r-1)(c-1) = 16$

$\chi^2_{\text{Tabulated}}$ for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.149 shows that Chi-square 25.610 which is less than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .060. This shows that null hypothesis (H_0) holds, which means there is no significant difference among cluster as per availability.

Table 4.150

Product Safety						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	1	0	4	2	5	12
	1.03%	0.00%	4.21%	5.26%	6.33%	100.00%
Somewhat Important	11	6	9	6	10	42
	11.34%	6.52%	9.47%	15.79%	12.66%	100.00%
Important	44	39	56	16	22	177
	45.36%	42.39%	58.95%	42.11%	27.85%	100.00%
Very Important	24	31	21	12	31	119
	24.74%	33.70%	22.11%	31.58%	39.24%	100.00%
Extremely Important	17	16	5	2	11	51
	17.53%	17.39%	5.26%	5.26%	13.92%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per product safety.

H_1 : There is a difference among clusters with product safety.

Table 4.151

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.442	16	0.003
Likelihood Ratio	39.343	16	0.001
N of Valid Cases	401		

Chi-Square Calculated: 35.442

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.151 shows that Chi-square 25.610 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .003. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per product safety.

The table 4.150 explains the factor product safety. Cluster 1,2,3 and 4 with 45.36%,42.39%,58.95% and 42.11% felt product safety as an important factor whereas cluster 5 said it was very important with 39.24% respectively.

Table 4.152

Advertisement						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	6	0	2	2	9	19
	6.19%	0.00%	2.11%	5.26%	11.39%	100.00%
Somewhat Important	20	10	15	20	19	84
	20.62%	10.87%	15.79%	52.63%	24.05%	100.00%
Important	51	40	45	15	29	180
	52.58%	43.48%	47.37%	39.47%	36.71%	100.00%
Very Important	16	36	31	1	21	105
	16.49%	39.13%	32.63%	2.63%	26.58%	100.00%
Extremely Important	4	6	2	0	1	13
	4.12%	6.52%	2.11%	0.00%	1.27%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per advertisements.

H₁: There is a difference among clusters with advertisements.

Table 4.153

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	65.481	16	0
Likelihood Ratio	69.452	16	0
N of Valid Cases	401		

Chi-Square Calculated: 65.481

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.153 shows that Chi-square 25.610 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per advertisements.

The above table explains the advertisements factor. Cluster 1,2,3 and 5 felt advertisements as an important factor whereas cluster 4 felt it was somewhat important with 52.63% respectively.

Table 4.154

	Company reputation					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	3	0	3	4	1	11
	3.09%	0.00%	3.16%	10.53%	1.27%	100.00%
Somewhat Important	21	6	10	13	21	71
	21.65%	6.52%	10.53%	34.21%	26.58%	100.00%
Important	38	38	46	12	31	165
	39.18%	41.30%	48.42%	31.58%	39.24%	100.00%
Very Important	28	26	33	6	25	118
	28.87%	28.26%	34.74%	15.79%	31.65%	100.00%
Extremely Important	7	22	3	3	1	36
	7.22%	23.91%	3.16%	7.89%	1.27%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per company reputation.

H₁: There is a difference among clusters with company reputation.

Table 4.155

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	68.913a	16	0
Likelihood Ratio	66.296	16	0
N of Valid Cases	401		

Chi-Square Calculated: 68.913

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.155 shows that Chi-square 25.610 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .000. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per company reputation. The table 4.154 explains factor company reputation. Cluster 1,2,3,4 and 5 felt it important with 39.18%,41.30%,48.42%, 31.58% and 39.24%respectively.

Table 4.156

Less side effects						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	0	0	3	2	3	8
	0.00%	0.00%	3.16%	5.26%	3.80%	100.00%
Somewhat Important	6	8	15	5	8	42
	6.19%	8.70%	15.79%	13.16%	10.13%	100.00%
Important	48	26	41	12	24	151
	49.48%	28.26%	43.16%	31.58%	30.38%	100.00%
Very Important	21	32	27	11	33	124
	21.65%	34.78%	28.42%	28.95%	41.77%	100.00%
Extremely Important	22	26	9	8	11	76
	22.68%	28.26%	9.47%	21.05%	13.92%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per less side effects.

H₁: There is a difference among clusters with less side effects.

Table 4.157

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.509	16	0.002
Likelihood Ratio	40.699	16	0.001
N of Valid Cases	401		

Chi-Square Calculated: 37.509

df = (r-1) (c-1) = 16

$\chi^2_{\text{Tabulated}}$ for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.157 shows that Chi-square 37.509 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .002. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per less side effects. The above table shows cluster 1,3 and 4 felt fewer side effects were important factor (49.48%,43.16% and 31.58%). Cluster 2 and 5with 34.78% and 41.77% felt it was very important as factor before making a purchase.

Table 4.158

Taste of the OTC						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	6	2	7	3	5	23
	6.19%	2.17%	7.37%	7.89%	6.33%	100.00%
Somewhat Important	14	19	16	13	18	80
	14.43%	20.65%	16.84%	34.21%	22.78%	100.00%
Important	50	33	40	14	22	159
	51.55%	35.87%	42.11%	36.84%	27.85%	100.00%
Very Important	27	31	30	8	25	121
	27.84%	33.70%	31.58%	21.05%	31.65%	100.00%
Extremely Important	0	7	2	0	9	18
	0.00%	7.61%	2.11%	0.00%	11.39%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per taste of OTC.

H₁: There is a difference among clusters with taste of OTC.

Table 4.159

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.177	16	0.004
Likelihood Ratio	38.851	16	0.001
N of Valid Cases	401		

Chi-Square Calculated: 37.177

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.159 shows that Chi-square 37.177 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .004. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per taste of OTC. The above table reveals that cluster 1,2,3, and 4 said taste of OTC is an important factor with 51.55%, 35.87%, 42.11% and 36.87% respectively whereas cluster 5 felt it was very important with 31.65%.

Table 4.160

	Chemist recommended any vitamin Ayurvedic OTC					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	9	4	10	3	5	31
	9.28%	4.35%	10.53%	7.89%	6.33%	100.00%
Somewhat Important	12	20	27	10	14	83
	12.37%	21.74%	28.42%	26.32%	17.72%	100.00%
Important	54	45	33	13	38	183
	55.67%	48.91%	34.74%	34.21%	48.10%	100.00%
Very Important	15	17	25	10	20	87
	15.46%	18.48%	26.32%	26.32%	25.32%	100.00%
Extremely Important	7	6	0	2	2	17
	7.22%	6.52%	0.00%	5.26%	2.53%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per recommendations made by Chemist for any vitamin.

H_1 : There is a difference among clusters with recommendation made by chemist for any vitamin.

Table 4.161

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.584	16	0.035
Likelihood Ratio	31.859	16	0.01
N of Valid Cases	401		

Chi-Square Calculated: 27.584

df = (r-1) (c-1) = 16

χ^2 Tabulated for df=16 at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.161 shows that Chi-square 27.584 which is greater than Chi-square tabulated for df=16 at 0.05% level of significance which is 26.296 and p value to be .035. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per recommendations made by Chemist for any vitamin. Table 4.160 showed that clusters 1,2,3,4 and 5 felt recommendation of chemist important with 55.67%, 48.91%, 34.74%,43.21% and 48.10% respectively.

Table 4.162

	Buy any ayurvedic OTC just because you noticed it on your shelf					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	12	12	8	9	17	58
	12.63%	13.04%	8.42%	23.68%	21.52%	100.00%
Somewhat Important	16	15	6	3	17	57
	16.84%	16.30%	6.32%	7.89%	21.52%	100.00%
Important	13	15	23	8	17	76
	13.68%	16.30%	24.21%	21.05%	21.52%	100.00%
Very Important	53	44	57	14	28	196
	55.79%	47.83%	60.00%	36.84%	35.44%	100.00%
Extremely Important	1	6	1	4	0	12
	1.05%	6.52%	1.05%	10.53%	0.00%	100.00%
Total	95	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per any OTC you noticed.

H_1 : There is a difference among clusters with any OTC you noticed.

Table 4.163

Chi-square Test			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	49.517	20	0
Likelihood Ratio	49.17	20	0
N of Valid Cases	401		

Chi-Square Calculated: 49.517

$df = (r-1)(c-1) = 20$

$\chi_{\text{Tabulated}}$ for df=20 at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.163 shows that Chi-square 49.517 which is greater than Chi-square tabulated for $df=20$ at 0.05% level of significance which is 31.410 and p value to be .000. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per any OTC you noticed. Table 4.162 explains clusters 1,2,3,4 and 5 felt it very important with 55.79%,47.83%, 60%,36.84% and 35.44% respectively.

Table 4.164

	Effectiveness of OTC					
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	5	1	6	1	3	16
	5.15%	1.09%	6.32%	2.63%	3.80%	100.00%
Somewhat Important	8	4	5	1	2	20
	8.25%	4.35%	5.26%	2.63%	2.53%	100.00%
Important	12	7	17	6	23	65
	12.37%	7.61%	17.89%	15.79%	29.11%	100.00%
Very Important	31	45	38	22	32	168
	31.96%	48.91%	40.00%	57.89%	40.51%	100.00%
Extremely Important	41	35	29	8	19	132
	42.27%	38.04%	30.53%	21.05%	24.05%	100.00%
Total	97	92	95	38	79	
Total Percentage	100	100	100	100	100	

H_0 : There is no difference among clusters as per effectiveness of OTC.

H_1 : There is a difference among clusters with effectiveness of OTC.

Table 4.165

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.440	16	0.006
Likelihood Ratio	33.64	16	0.006
N of Valid Cases	401		

Chi-Square Calculated: 33.440

$df = (r-1)(c-1) = 16$

χ^2 Tabulated for $df=16$ at 95% level of confidence or 0.05 level of significance = 26.296

The chi-square calculation for table 4.165 shows that Chi-square 33.440 which is greater than Chi-square tabulated for $df=16$ at 0.05% level of significance which is 26.296 and p value to be .006. This shows that alternate hypothesis (H_1) holds, which means there is significant difference among cluster as per effectiveness of OTC. The above table shows that cluster 1 felt it extremely important (42.27%) when effectiveness of OTC is considered. Clusters 2,3,4 and 5 with 48.91%,40%,57.89% and 40.51% showed very important to be considered.

Table 4.166

Degree of Sickness(mild)						
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
Not important at all	6	1	4	0	1	12
	6.32%	1.09%	4.21%	0.00%	1.27%	100.00%
Somewhat Important	5	2	11	2	7	27
	5.26%	2.17%	11.58%	5.26%	8.86%	100.00%
Important	15	19	26	14	19	93
	15.79%	20.65%	27.37%	36.84%	24.05%	100.00%
Very Important	44	48	36	15	41	184
	46.32%	52.17%	37.89%	39.47%	51.90%	100.00%
Extremely Important	25	22	18	7	11	83
	26.32%	23.91%	18.95%	18.42%	13.92%	100.00%
Total	95	92	95	38	79	
Total Percentage	100	100	100	100	100	

H₀: There is no difference among clusters as per degree of sickness.

H₁: There is a difference among clusters with degree of sickness.

Table 4.167

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.534	20	0.029
Likelihood Ratio	34.26	20	0.024
N of Valid Cases	401		

Chi-Square Calculated: 33.534

df = (r-1) (c-1) = 20

χ^2 Tabulated for df=20 at 95% level of confidence or 0.05 level of significance = 31.410

The chi-square calculation for table 4.167 shows that Chi-square 33.534 which is greater than Chi-square tabulated for df=20 at 0.05% level of significance which is 31.410 and p value to be .029. This shows that alternate hypothesis (H₁) holds, which means there is significant difference among cluster as per degree of sickness. The above table shows cluster 1,2,3,4 and 5 all believes that degree of sickness is a very important factor with 46.32%,52.17%,37.89%,39.47% and 51.90% respectively.

4.8.5 Profile of Clusters found

Cluster 1: They are young people between 20-29 years with 43.29% population. All the respondents in this profile have public occupation which is 32.98% out of the whole lot and are working in education sector with 44.32% of whole population. Respondents from Kasauli Tehsil were majorly included in this cluster. These section of people mostly preferred Ayurvedic OTC medicines which is 51% and bought Patanjali products (36.08%). Most

purchases were of Immunity booster (i.e., 26.8%), preferred in the form of tablets (29.9%). These people used the dose for regular basis as it counts to be 59.38% as they prefer natural ingredients (46.39%). It seems to be unnecessary for sample to visit the doctor with 45.83%. They sometime (64.94%) inquire about specific brands as they have rarely (29.89%) got themselves a prescription written by a physician in last twelve months. They sometimes tend to take advice from both family and friends. Their major source of information is Internet. They rarely allow other people to buy Ayurvedic OTC for themselves. They have purchased Ayurvedic OTC less than once a month in both summer and winter season and are the once who prefer to buy from a general merchant. Suited by the behaviour, we can name this cluster as **Conservative Time Starred**.

Cluster 2: They have a mix population of the people having age 20-29 years with 47.82% and 30-49 years with 41.30% population. They belong to private sector mostly in the field of academics. Their most preferred OTC medicine type is Allopathic medicines. They somewhat if asked to choose among Ayurvedic OTC brands would buy Himalaya products. This set of people often purchase OTC for Cold-flu and prefer to administer in Tablets form. They would prefer Ayurvedic OTC do be purchased on regular basis as they want medicines which have less side-effects. Due to their prior experiences, they sometime visit the doctor for any advice and sometime purchase specific brand. They often take advice from their family and friends. They became aware of lots of OTC medicines from the pharmacist and have occasionally consulted a doctor before buying any Ayurvedic OTC. They tend to buy less in a month for both summer season and purchase once in a month in winter seasons. They prefer buying from a Chemist shop. Therefore, the suitable is **Allopathic inclined private employees Himalaya patrons**.

Cluster 3: This set of respondents are mostly of the age 20-29 years in public fields in other sector may be agriculture allied jobs. They purchase Ayurvedic OTC medicines and most preferable is Patanjali products. These participants buy Allergy related medicines and fond of administering syrups (liquid form). They tend to buy Ayurvedic OTC for immediate cure as they believe in consuming natural ingredients. They sometimes visit a doctor to consult and sometimes inquire about a specific brand of Ayurvedic OTC. These participants occasionally talk to their friends about Ayurvedic OTC but rarely have taken any recommendations from family. As they consult more with the doctors, it's by them only they come to know about various Ayurvedic OTC medicines. The frequency of purchase is once a

month in both summer and winter season and buy it from Chemist shop. They would be called as **Ayurvedic inclined allergy sensitives**.

Cluster 4: They belong to 20-29 age group who are self-employed and buy Ayurvedic OTC. Their favourite brand is Himalaya and mostly prefer Vitamins in syrups forms. They need Ayurvedic OTC both for immediate cure and on regular basis and consume them due to less side effects. They have sometimes consulted a doctor in last 12 months and sometimes inquire about specific brands while purchasing Ayurvedic OTC. Rarely has the doctor prescribed anything in last 12 months but they do take recommendations from both family and friends. They have sometime consulted a doctor from where they are aware of different Ayurvedic OTC medicines. They buy less in summer season and more in winter season and would be administer them on monthly basis. They like to buy these medicines from general merchant and would be named as **Independent Himalaya Patrons consuming Vitamins**.

Cluster 5: They belong both to 20-29 and 30-49 years of age, are mostly public sector workers in academics. Ayurvedic is the preferred medicine type and preferably buy Patanjali products for Skincare needs. They prefer the product as creams and use them for regular use as they want natural ingredients. They have sometimes consulted a doctor and inquired about a specific brand. They get to know about these products from Internet. The frequency of purchasing Ayurvedic OTC is less than once a month both in summer and winter season and mostly buy it from chemist shop. They are titled as **Patanjali patrons cream consuming administrative people**.

Chapter-5

SUMMARY AND CONCLUSION

Ayurveda stands as the oldest traditional system of medicine which is preferred by a huge population (Gaur 2017). The Ayurvedic industry is growing at higher rate than that of allopathic industry. The advantage for this system is that among all such systems, there is absence of side effects which is the most important factor that leads to purchase of Ayurvedic products (Khan and Khan 2013). This led to more choices in lifestyle for customer segment which are favoring traditional Ayurvedic products. Recent outbreak of Covid-19 caused havoc, various rules/ guidelines were enforced on people to stay at home and avoid movement. This setup caused more population to invest in self-medication, which are called as Over-the-Counter (OTC) medicines (Bond 2021, Wazaify et al 2005, Hossain et al 2020). According to Awasthi (2021), Ayurvedic industry saw rise in their sales which was mostly due to Ayurvedic OTC formulation. The above adoption of Ayurvedic OTC was saving people from taking time off to visit a doctor to obtain remedies. In addition, they were finding Ayurvedic OTC affordable, low-cost treatment (Kanthé and Uttam,2010).

Himachal Pradesh has a sizeable population that has diverse interests and consumer behaviour. It is obvious that there are market segments that behave differently with regard to Ayurvedic OTC products. It was important to study this diverse population to understand how they behave differently to identify behavioural market segments for Ayurvedic OTC. Keeping all this in mind the present study entitled “Consumer Behaviour for the purchase of Ayurvedic Over-the-Counter Medicines in the state of Himachal Pradesh” was conducted to identify behavioural market segments for Ayurvedic OTC and identifying possible marketing implications with following objectives:

- To study the manifest consumer behaviour for Ayurvedic OTC medicines, the consumer decision making process along with the factors influencing the purchase of Ayurvedic OTC medicines.
- To segment the market for Ayurvedic OTC medicines on the basis of consumer behaviour.
- To identify the demographic parameters of the market segment identified.

5.1 The Following Conclusions Were Made

- **Sample profile** depicts that the age group of most of the respondents was 20-49 years, in the sample males were more than the females. It was seen that most of the respondents live in nuclear families. This may be attributed to presence of nuclear family structure in the study area. More than half of the respondents' monthly income was between the range of Rs 20,000-60,000. The educational profile of the sample respondents revealed nearly half were graduates. Most of the respondents were educated reflecting high literacy rate of Himachal Pradesh.
- **Manifest Consumer Behaviour** was studied by using seven O's framework regarding the **Object**, it was observed respondents preferred Ayurvedic OTC over Allopathic OTC. The most purchased Ayurvedic OTC brand were Patanjali and Himalaya. The sample purchased Ayurvedic OTC mostly for skincare, cold-flu remedies and as an immunity booster. In addition, syrups and creams were the main purchased form of Ayurvedic OTC. Most preferred packing was bottles.
- In respect of **Objectives**, more than half of respondents use these products on regular basis as they feel it has no side effects. Whereas, nearly half of the sample liked that they are made of natural products. A small proportion of sample helped avoid to visit the doctor for remedies. Mostly the sample purchased Ayurvedic OTC for skincare, cold-flu remedies and immunity.
- Regarding **Organisations** influencing purchase, nearly half of respondents would sometimes visit the doctor. Nearly half of sample consider taking recommendations from friends and family. About half of the respondents inquired about specific brands while purchasing Ayurvedic OTC medicines, based on the recommendations received.
- In respect to **Operations** influencing purchase behaviour, internet is considered the main source of information for sample respondents. This is probably the reason for only half the sample seek advice from doctor, friends and family. Half of the respondents purchased Ayurvedic OTC for themselves and would rarely allow somebody else to purchase it for them.
- Regarding the **Occasions** of purchase, overall, it was observed that Ayurvedic OTC is purchased more in summer and less in winter. Most of the sample purchasing Ayurvedic OTC was more than once a month in summer season and in winter season

the same falls to once a month. Overall, a half of respondents buy Ayurvedic OTC once in a month.

- In reference to **Outlets**, nearly half of the sample bought Ayurvedic OTC from chemist shop. For most of sample these retail outlets were within 0.5-2.5 kms and they bought about 25-75% of their purchase from these outlets.
- Factor Analysis was applied to the data collected from the 27 questions related to manifest consumer behaviour. This was done to identify these questions (variables) on which the responses were correlated. The first factor, showed that responses related to questions on frequency of purchase formed one factor. The question related to, Frequency of Purchase as the sample were frequently buying Ayurvedic OTC and the frequency increased in winter and was observed less in summer season. The second factor, defined as professional advice showed that responses on question related to seeking advice and information on Ayurvedic OTC were correlated. The third factor Social Influences displays high communality in responses on questions related to the recommendations made by friends, family and purchase for self. The fourth factor named as Objects and Outlets displays correlation between the type and forms of Ayurvedic OTC medicines with the outlet preferred to buy. The fifth factor, quantity purchased of Ayurvedic OTC referred to seeking advice from reference groups. Mostly purchased them for regular basis. The sixth factor, indicates that questions related to brand preferred objectives have related responses. These are main factors to discuss about manifest consumer behaviour whenever Ayurvedic OTC is concerned.
- Behavioural market segments were formed by applying Cluster as per the EKB model of consumer behaviour. Five behavioural market segments were identified i.e., Cluster 1 had 97 cases, cluster 2 had 92 cases, cluster 3 had 95 cases, cluster 4 had 38 cases and 79 cases were there in 5th cluster.
- **Market Segment (Cluster 1):** This market segment comprises of young people between 20-29 years, most of them were mostly in public occupation and were working in the education sector. This market segment had predominance of respondents residing in Kasauli Tehsil. This market segment mostly preferred Ayurvedic OTC medicines over Allopathic medicines and bought Patanjali products. Most purchases were of immunity boosters and preferred form was tablets. This segment uses Ayurvedic OTC on regular basis, and they prefer natural ingredients. They avoid visit to the doctor and would more frequently inquire about specific brands

from the retailers. They mostly take advice from both family and friends. Their major source of information is advertisements. They have purchased Ayurvedic OTC once a month in summer season and less than a month in winter season and they who prefer to buy ayurvedic OTC from general merchants. On basis of the behaviour, we can name this cluster as **Conservative Time Starred**.

- **Market Segment (Cluster 2):** Ones with age 20-29 years and 30-49 years. They belong to private sector and are mostly in the field of academics. Their most preferred OTC medicine type is Allopathic medicines. If asked to choose among Ayurvedic OTC brands they would buy Himalaya products. This set of people often purchase OTC for cold-flu and prefer to OTC in Tablets form. They buy the purchased Ayurvedic OTC on regular basis and not for immediate cure. Due to their prior experiences, they visit the doctor for any advice and they purchase a specific brand of Ayurvedic OTC. They often take advice from their family and friends. They became aware of most used OTC medicines from the internet. They buy Ayurvedic OTC less in once a month during both summer and winter seasons. They prefer buying OTC from a Chemist shop. Therefore, they suitably christened **Allopathic inclined private employees Himalaya patrons**.
- **Market Segment (Cluster 3):** This behavioural market was mostly comprised of people in the age of 20-29 years in public occupation. They purchase Ayurvedic OTC medicines and most preferred brand is Patanjali products. These participants buy Allergy related medicines and syrups (liquid) form. They tend to buy Ayurvedic OTC for immediate cure. They mostly visit a doctor to consult and mostly inquire about a specific brand of Ayurvedic OTC at the retail outlet. These participants occasionally talk to their friends about Ayurvedic OTC but have rarely taken any recommendations from family. As they consulted more with the doctors, it's from them only they come to know about various Ayurvedic OTC medicines. The frequency of purchase is once a month in both summer and winter season and they buy Ayurvedic OTC from Chemist shop. They would be called as **Ayurvedic inclined allergy sensitives**.
- **Market Segment (Cluster 4):** The behavioural market belongs to 20-29 years age group, are self-employed and buy Ayurvedic OTC. Their favourite brand is Himalaya and mostly prefer Vitamins in powder forms. They need Ayurvedic OTC both for immediate cure and on regular basis. Mostly inquired about specific brands of Ayurvedic OTC. They do take recommendations from both family and friends. They

buy less in summer season and more in winter season. Most of them prefer Ayurvedic OTC on monthly basis. They like to buy these medicines from general merchant and would be named as **Independent Himalaya Patrons consuming Vitamins**.

- **Market Segment (Cluster 5):** They belong to the age group of 20-29 and 30-49 years, are mostly public sector workers in academics. Mostly prefer Ayurvedic medicine type. They preferably buy Patanjali products and major reason for purchase is Skincare needs. They prefer the product in cream formulation. Mostly used them on regular basis, and prefer products with natural ingredients. Mostly they inquire about a specific brand. Major sources of information are from internet. They buy Ayurvedic OTC less in once a month during both summer and winter seasons. Mostly buy it from general merchant. They are titled as **Patanjali Patrons cream consuming administrative people**.

5.2 Marketing Implications

- **Market Segment 1:** Industries need to improve their packaging and aesthetics of the product. Industries need to be rigorous with advertising themselves as this segment solely rely on advertisements for information flow. Kasauli being a cold tehsil normally people are facing with cold-flu which is related to low immunity. Therefore, industries should work more on their immunity booster so that in this segment people are inclined to buy them for its best effects. For this segment industries need to innovate their Ayurvedic OTC products by adding more natural ingredients having therapeutic value.
- **Market Segment 2:** Ayurvedic OTC industry needs to appeal to foster brand recognition, loyalty and increased market share. This segment may not be familiar with Ayurvedic benefits. Thus, the marketing strategy should focus on educating potential customers about principles and advantages of Ayurvedic OTC. Providing clear and concise information about ingredients can help build trust and credibility. Since this segment relies on Internet for information, it is crucial for Ayurvedic OTC brands to have a strong online presence. This includes having a user-friendly website, active social media profiles and engaging content to educate and attract potential customers. Since this segment prefers purchasing from chemist-shops, building strong relationships with pharmacists is essential. Ayurvedic OTC brands can provide training and information to pharmacists about their products, ensuring they are well-equipped to recommend and promote them to customers. Encourage trial usage of Ayurvedic

OTC products by offering samples or introductory discounts. Positive experiences may lead to word-of mouth recommendations and increased adoption.

- **Market Segment 3:** Since the age group in this segment is young working officials, community engagement is a must. Foster a sense of community by creating online forums or groups where Ayurvedic inclined people having allergies can connect, share experiences and support each other. Highlight specific Ayurveda OTC products known for their fast-acting properties. Use languages that communicate the products ability to provide relief and immediate benefits. Back up claims of immediate cure with scientific evidence, clinical studies or customer testimonials that demonstrate the effectiveness of Ayurvedic OTC. Use phrases like “rapid relief”, “Instant action” or “quick healing” to resonate with their needs. Educate this segment about holistic approach to healing and aims for long-term balance and well-being. Utilize online advertising channels like google ads and social media to target user searching for immediate relief from specific health issues.
- **Market Segment 4:** On this segment it is essential to focus on differentiation, convenience and building brand loyalty. Offer subscription-based services that allow customers to receive Ayurvedic OTC products on monthly basis. This ensures convenience and encourages regular usage, enhancing brand loyalty. Engage with young target market through digital and social media platforms where they are most active. Use engaging content, visuals and influencers to create brand awareness and interest. Create product bundles that include a mix of Ayurvedic OTC, targeting specific health needs of the young consumers. Bundles can be cost-effectives way to encourage more extensive usage.
- **Market segment 5:** The industry needs to optimize your website and product pages with relevant keywords to ensure your cream product appears in search engine results looking for skincare solution. Leverage popular social media platforms to reach target market. Be transparent about your product ingredients and sourcing, to built trust with environmentally conscious consumers.

Overall marketing Implications:

- Collaborate with healthcare professionals or wellness experts to provide credible information and guidance on incorporating Ayurvedic OTC into healthy lifestyle.

- Ensure that product labels contain clear and comprehensive information about ingredients, health benefits and usage instructions. Transparency fosters trust among health-conscious consumers.
- Work with retailers to ensure eye-catching in-store displays and point-of-sale (POS) materials that emphasize the immediate benefits of Ayurvedic OTC products.
- Offer responsive customer support to address queries and concerns promptly, as customers seeking immediate cure may have urgent questions.

Future Research Ideas:

Future research ideas for consumer behaviour regarding the purchase of Ayurvedic Over-the-Counter (OTC) products can provide valuable insights into factors influencing consumer decisions as through this research it can be seen, substantial people are using internet as source of information and have mixed emotions while taking recommendations from their family, friends depending upon the profession. Moreover, it can assist in addressing potential challenges and ensuring responsible use of these products by consumers. Here are some potential research ideas:

- The industry work well to understand what causes influencing professional people. It may be due to the reference groups/social bonding in their workplace which is probably more than friends and family.
- Since more people are using internet, it becomes important to analyse the growing trend of online purchase of Ayurvedic OTC products and identify the factors that influence consumer decisions in digital marketplace.
- Packaging was a concern for respondents when deciding for purchase, therefore to study and examine the influence of product labelling and information on consumer choices. Assess what kind of information consumers seek.
- Labelling and packaging go hand in hand. To understand this, we need to know how does the influence of product labelling impact the decision-making process.
- For further study it is important to understand preferences of different consumer segments which can lead to target marketing approaches in metro cities as this research was in small cities of Himachal Pradesh.

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APPENDIX-I

The significance of markets segments with EKB variables which shows significant difference or are unequal in nature.

Table: ANOVA with EKB variables with 5 Cluster formed						
		Sum of Squares	df	Mean Square	F	Sig.
Do you buy Ayurvedic OTC in need of non-side effects medicines?	Between Groups	119.305	4	29.826	38.708	0
	Within Groups	305.139	396	0.771		
	Total	424.444	400			
Do you consider symptoms at the time of purchase of Ayurvedic OTC medicines?	Between Groups	71.358	4	17.839	26.083	0
	Within Groups	270.842	396	0.684		
	Total	342.2	400			
Do you buy Ayurvedic OTC medicines for the ones which you have seen/heard advertisement?	Between Groups	110.146	4	27.536	39.302	0
	Within Groups	277.45	396	0.701		
	Total	387.596	400			
Do you take recommendation from friends to buy Ayurvedic OTC medicines?	Between Groups	83.7	4	20.925	32.607	0
	Within Groups	254.125	396	0.642		
	Total	337.825	400			
Do you take recommendation from family to buy Ayurvedic OTC medicines?	Between Groups	67.615	4	16.904	26.643	0
	Within Groups	251.248	396	0.634		
	Total	318.863	400			
Do you take recommendation from a doctor while buying Ayurvedic OTC medicines?	Between Groups	25.053	4	6.263	6.961	0
	Within Groups	356.324	396	0.9		
	Total	381.377	400			
Do you take recommendations from pharmacist while buying Ayurvedic OTC medicines?	Between Groups	39.041	4	9.76	12.25	0
	Within Groups	315.518	396	0.797		
	Total	354.559	400			
Do you consider price before you buy Ayurvedic OTC medicines?	Between Groups	82.999	4	20.75	25.687	0
	Within	319.884	396	0.808		

	Groups					
	Total	402.883	400			
Do you consider the advertisements before you purchase Ayurvedic OTC medicines?	Between Groups	59.896	4	14.974	17.034	0
	Within Groups	348.099	396	0.879		
	Total	407.995	400			
Do you wish to be familiar with pharmacy staff?	Between Groups	63.144	4	15.786	20.54	0
	Within Groups	304.347	396	0.769		
	Total	367.491	400			
Do you want pharmacy location where no one can recognise you?	Between Groups	36.421	4	9.105	8.348	0
	Within Groups	431.923	396	1.091		
	Total	468.344	400			
Is product brand important for you?	Between Groups	152.878	4	38.22	64.862	0
	Within Groups	233.341	396	0.589		
	Total	386.219	400			
Does package design influence my purchasing decision?	Between Groups	111.776	4	27.944	42.028	0
	Within Groups	263.297	396	0.665		
	Total	375.072	400			
Do you buy branded Ayurvedic OTC for its brand value?	Between Groups	134.628	4	33.657	49.931	0
	Within Groups	266.933	396	0.674		
	Total	401.561	400			
Do you buy branded Ayurvedic OTC for its brand familiarity?	Between Groups	111.93	4	27.982	43.38	0
	Within Groups	255.442	396	0.645		
	Total	367.372	400			
Do you buy the same Ayurvedic OTC because you don't have any energy to explore other option?	Between Groups	104.651	4	26.163	33.6	0
	Within Groups	308.346	396	0.779		
	Total	412.998	400			
Do you consider the packaging while buying Ayurvedic OTC medicines?	Between Groups	122.344	4	30.586	42.626	0
	Within Groups	284.15	396	0.718		
	Total	406.494	400			
Do you consider brand name while buying Ayurvedic OTC medicines?	Between Groups	74.718	4	18.68	27.245	0

	Within Groups	271.501	396	0.686		
	Total	346.219	400			
Do you consider dosages before buying Ayurvedic OTC medicines?	Between Groups	51.313	4	12.828	17.592	0
	Within Groups	288.767	396	0.729		
	Total	340.08	400			
Do you buy same Ayurvedic OTC medicines as it works best for you?	Between Groups	102.331	4	25.583	47.738	0
	Within Groups	212.218	396	0.536		
	Total	314.549	400			
Do you purchase Ayurvedic OTC medicines fir routine problems?	Between Groups	36.575	4	9.144	13.295	0
	Within Groups	272.353	396	0.688		
	Total	308.928	400			
Do you purchase Ayurvedic OTC medicines for Chronic problems?	Between Groups	81.526	4	20.382	22.905	0
	Within Groups	352.374	396	0.89		
	Total	433.9	400			
Do you purchase Ayurvedic OTC medicines for Seasonal problems?	Between Groups	26.436	4	6.609	8.873	0
	Within Groups	294.961	396	0.745		
	Total	321.397	400			
Do you purchase Ayurvedic OTC medicines from one specific pharmacy?	Between Groups	18.925	4	4.731	5.375	0
	Within Groups	348.567	396	0.88		
	Total	367.491	400			
Do you consider location important while you visit the pharmacy?	Between Groups	66.172	4	16.543	18.888	0
	Within Groups	346.83	396	0.876		
	Total	413.002	400			
Do you consider the staff important while you visit a pharmacy?	Between Groups	84.556	4	21.139	31.191	0
	Within Groups	268.381	396	0.678		
	Total	352.938	400			
Do you consider product range important while you visit a pharmacy?	Between Groups	86.706	4	21.677	28.294	0
	Within Groups	303.383	396	0.766		
	Total	390.09	400			
Do you consider extra services important while you visit a pharmacy?	Between Groups	59.681	4	14.92	19.711	0
	Within	299.76	396	0.757		

	Groups					
	Total	359.441	400			
Do you consider consuming same Ayurvedic OTC brands?	Between Groups	61.536	4	15.384	27.037	0
	Within Groups	225.322	396	0.569		
	Total	286.858	400			
Do you consider buying branded OTC for its effectiveness?	Between Groups	96.223	4	24.056	33.539	0
	Within Groups	284.026	396	0.717		
	Total	380.249	400			

APPENDIX -II

Tukey's analysis explaining the comparisons between clusters and the buying behavior of the respondents

Dependent Variable	(I) Cluster Number	(J) Cluster Number	Mean Difference (I-J)	Std. Error	Sig.
Do you buy Ayurvedic OTC in need of non-side effects medicines?	1	2	-.398*	0.128	0.017
		3	.701*	0.127	0
		4	.748*	0.168	0
		5	-.683*	0.133	0
	2	1	.398*	0.128	0.017
		3	1.099*	0.128	0
		4	1.146*	0.169	0
		5	-0.285	0.135	0.213
	3	1	-.701*	0.127	0
		2	-1.099*	0.128	0
		4	0.047	0.168	0.999
		5	-1.384*	0.134	0
	4	1	-.748*	0.168	0
		2	-1.146*	0.169	0
		3	-0.047	0.168	0.999
		5	-1.431*	0.173	0
	5	1	.683*	0.133	0
		2	0.285	0.135	0.213
		3	1.384*	0.134	0
		4	1.431*	0.173	0
Do you consider symptoms at the time of purchase of Ayurvedic OTC medicines?	1	2	-0.22	0.12	0.359
		3	.660*	0.119	0
		4	.939*	0.158	0
		5	-0.173	0.125	0.639
	2	1	0.22	0.12	0.359
		3	.880*	0.121	0
		4	1.159*	0.159	0
		5	0.047	0.127	0.996
	3	1	-.660*	0.119	0
		2	-.880*	0.121	0
		4	0.279	0.159	0.4
		5	-.833*	0.126	0
	4	1	-.939*	0.158	0
		2	-1.159*	0.159	0
		3	-0.279	0.159	0.4
		5	-1.112*	0.163	0
	5	1	0.173	0.125	0.639
		2	-0.047	0.127	0.996

		3	.833*	0.126	0
		4	1.112*	0.163	0
Do you buy Ayurvedic OTC medicines for the ones which you have seen/heard advertisement?	1	2	-.579*	0.122	0
		3	0.132	0.121	0.812
		4	1.432*	0.16	0
		5	0.121	0.127	0.876
	2	1	.579*	0.122	0
		3	.710*	0.122	0
		4	2.010*	0.161	0
		5	.700*	0.128	0
	3	1	-0.132	0.121	0.812
		2	-.710*	0.122	0
		4	1.300*	0.161	0
		5	-0.011	0.127	1
	4	1	-1.432*	0.16	0
		2	-2.010*	0.161	0
		3	-1.300*	0.161	0
		5	-1.311*	0.165	0
	5	1	-0.121	0.127	0.876
		2	-.700*	0.128	0
		3	0.011	0.127	1
		4	1.311*	0.165	0
Do you take recommendation from friends to buy Ayurvedic OTC medicines?	1	2	-.533*	0.117	0
		3	-0.004	0.116	1
		4	1.180*	0.153	0
		5	-0.287	0.121	0.126
	2	1	.533*	0.117	0
		3	.529*	0.117	0
		4	1.713*	0.154	0
		5	0.245	0.123	0.269
	3	1	0.004	0.116	1
		2	-.529*	0.117	0
		4	1.184*	0.154	0
		5	-0.283	0.122	0.14
	4	1	-1.180*	0.153	0
		2	-1.713*	0.154	0
		3	-1.184*	0.154	0
		5	-1.467*	0.158	0
	5	1	0.287	0.121	0.126
		2	-0.245	0.123	0.269
		3	0.283	0.122	0.14
		4	1.467*	0.158	0
Do you take recommendation from family to buy Ayurvedic OTC medicines?	1	2	-.594*	0.116	0
		3	-0.066	0.115	0.979
		4	.871*	0.152	0

		5	-.448*	0.121	0.002
	2	1	.594*	0.116	0
		3	.528*	0.117	0
		4	1.465*	0.154	0
		5	0.146	0.122	0.754
	3	1	0.066	0.115	0.979
		2	-.528*	0.117	0
		4	.937*	0.153	0
		5	-.382*	0.121	0.015
	4	1	-.871*	0.152	0
		2	-1.465*	0.154	0
		3	-.937*	0.153	0
		5	-1.319*	0.157	0
	5	1	.448*	0.121	0.002
		2	-0.146	0.122	0.754
		3	.382*	0.121	0.015
		4	1.319*	0.157	0
Do you take recommendation from a doctor while buying Ayurvedic OTC medicines?	1	2	-.599*	0.138	0
		3	-0.264	0.137	0.306
		4	-.769*	0.182	0
		5	-0.384	0.144	0.06
	2	1	.599*	0.138	0
		3	0.335	0.139	0.113
		4	-0.17	0.183	0.886
		5	0.215	0.146	0.58
	3	1	0.264	0.137	0.306
		2	-0.335	0.139	0.113
		4	-.505*	0.182	0.045
		5	-0.121	0.144	0.919
	4	1	.769*	0.182	0
		2	0.17	0.183	0.886
		3	.505*	0.182	0.045
		5	0.384	0.187	0.243
	5	1	0.384	0.144	0.06
		2	-0.215	0.146	0.58
		3	0.121	0.144	0.919
		4	-0.384	0.187	0.243
Do you take recommendations from pharmacist while buying Ayurvedic OTC medicines?	1	2	-.674*	0.13	0
		3	0	0.129	1
		4	0.105	0.171	0.972
		5	-.519*	0.135	0.001
	2	1	.674*	0.13	0
		3	.674*	0.131	0
		4	.779*	0.172	0
		5	0.155	0.137	0.79

	3	1	0	0.129	1
		2	-.674*	0.131	0
		4	0.105	0.171	0.973
		5	-.519*	0.136	0.001
	4	1	-0.105	0.171	0.972
		2	-.779*	0.172	0
		3	-0.105	0.171	0.973
		5	-.624*	0.176	0.004
	5	1	.519*	0.135	0.001
		2	-0.155	0.137	0.79
		3	.519*	0.136	0.001
		4	.624*	0.176	0.004
Do you consider price before you buy Ayurvedic OTC medicines?	1	2	-.777*	0.131	0
		3	0.288	0.13	0.173
		4	.641*	0.172	0.002
		5	0.223	0.136	0.474
	2	1	.777*	0.131	0
		3	1.066*	0.131	0
		4	1.418*	0.173	0
		5	1.000*	0.138	0
	3	1	-0.288	0.13	0.173
		2	-1.066*	0.131	0
		4	0.353	0.173	0.247
		5	-0.065	0.137	0.989
	4	1	-.641*	0.172	0.002
		2	-1.418*	0.173	0
		3	-0.353	0.173	0.247
		5	-0.418	0.177	0.13
	5	1	-0.223	0.136	0.474
		2	-1.000*	0.138	0
		3	0.065	0.137	0.989
		4	0.418	0.177	0.13
Do you consider the advertisements before you purchase Ayurvedic OTC medicines?	1	2	-.539*	0.136	0.001
		3	0.008	0.135	1
		4	.913*	0.179	0
		5	0.136	0.142	0.873
	2	1	.539*	0.136	0.001
		3	.547*	0.137	0.001
		4	1.453*	0.181	0
		5	.676*	0.144	0
	3	1	-0.008	0.135	1
		2	-.547*	0.137	0.001
		4	.905*	0.18	0
		5	0.128	0.143	0.897
	4	1	-.913*	0.179	0

		2	-1.453*	0.181	0
		3	-.905*	0.18	0
		5	-.777*	0.185	0
	5	1	-0.136	0.142	0.873
		2	-.676*	0.144	0
		3	-0.128	0.143	0.897
		4	.777*	0.185	0
Do you wish to be familiar with pharmacy staff?	1	2	-.996*	0.128	0
		3	-.594*	0.127	0
		4	-0.147	0.168	0.906
		5	-0.063	0.133	0.99
	2	1	.996*	0.128	0
		3	.402*	0.128	0.016
		4	.849*	0.169	0
		5	.933*	0.134	0
	3	1	.594*	0.127	0
		2	-.402*	0.128	0.016
		4	0.447	0.168	0.062
		5	.531*	0.133	0.001
	4	1	0.147	0.168	0.906
		2	-.849*	0.169	0
		3	-0.447	0.168	0.062
		5	0.084	0.173	0.989
	5	1	0.063	0.133	0.99
		2	-.933*	0.134	0
		3	-.531*	0.133	0.001
		4	-0.084	0.173	0.989
Do you want pharmacy location where no one can recognise you?	1	2	-.481*	0.152	0.014
		3	-.414*	0.151	0.05
		4	-0.219	0.2	0.809
		5	0.32	0.158	0.256
	2	1	.481*	0.152	0.014
		3	0.067	0.153	0.992
		4	0.262	0.201	0.691
		5	.801*	0.16	0
	3	1	.414*	0.151	0.05
		2	-0.067	0.153	0.992
		4	0.195	0.2	0.868
		5	.734*	0.159	0
	4	1	0.219	0.2	0.809
		2	-0.262	0.201	0.691
		3	-0.195	0.2	0.868
		5	0.539	0.206	0.069
	5	1	-0.32	0.158	0.256
		2	-.801*	0.16	0

		3	-.734*	0.159	0
		4	-0.539	0.206	0.069
Is product brand important for you?	1	2	-0.269	0.112	0.115
		3	1.201*	0.111	0
		4	1.370*	0.147	0
		5	.442*	0.116	0.002
	2	1	0.269	0.112	0.115
		3	1.470*	0.112	0
		4	1.638*	0.148	0
		5	.711*	0.118	0
	3	1	-1.201*	0.111	0
		2	-1.470*	0.112	0
		4	0.168	0.147	0.783
		5	-.759*	0.117	0
	4	1	-1.370*	0.147	0
		2	-1.638*	0.148	0
		3	-0.168	0.147	0.783
		5	-.927*	0.152	0
	5	1	-.442*	0.116	0.002
		2	-.711*	0.118	0
		3	.759*	0.117	0
		4	.927*	0.152	0
Does package design influence my purchasing decision?	1	2	0.027	0.119	0.999
		3	.996*	0.118	0
		4	1.543*	0.156	0
		5	.676*	0.124	0
	2	1	-0.027	0.119	0.999
		3	.969*	0.119	0
		4	1.516*	0.157	0
		5	.649*	0.125	0
	3	1	-.996*	0.118	0
		2	-.969*	0.119	0
		4	.547*	0.157	0.005
		5	-0.32	0.124	0.076
	4	1	-1.543*	0.156	0
		2	-1.516*	0.157	0
		3	-.547*	0.157	0.005
		5	-.867*	0.161	0
	5	1	-.676*	0.124	0
		2	-.649*	0.125	0
		3	0.32	0.124	0.076
		4	.867*	0.161	0
Do you buy branded Ayurvedic OTC for its brand value?	1	2	0.148	0.119	0.729
		3	.739*	0.119	0
		4	1.429*	0.157	0

		5	1.421*	0.124	0
	2	1	-0.148	0.119	0.729
		3	.591*	0.12	0
		4	1.281*	0.158	0
		5	1.273*	0.126	0
	3	1	-.739*	0.119	0
		2	-.591*	0.12	0
		4	.689*	0.158	0
		5	.681*	0.125	0
	4	1	-1.429*	0.157	0
		2	-1.281*	0.158	0
		3	-.689*	0.158	0
		5	-0.008	0.162	1
	5	1	-1.421*	0.124	0
		2	-1.273*	0.126	0
		3	-.681*	0.125	0
		4	0.008	0.162	1
Do you buy branded Ayurvedic OTC for its brand familiarity?	1	2	-0.261	0.117	0.169
		3	.356*	0.116	0.019
		4	1.371*	0.154	0
		5	.925*	0.122	0
	2	1	0.261	0.117	0.169
		3	.617*	0.117	0
		4	1.633*	0.155	0
		5	1.186*	0.123	0
	3	1	-.356*	0.116	0.019
		2	-.617*	0.117	0
		4	1.016*	0.154	0
		5	.569*	0.122	0
	4	1	-1.371*	0.154	0
		2	-1.633*	0.155	0
		3	-1.016*	0.154	0
		5	-.447*	0.159	0.04
	5	1	-.925*	0.122	0
		2	-1.186*	0.123	0
		3	-.569*	0.122	0
		4	.447*	0.159	0.04
Do you buy the same Ayurvedic OTC because you don't have any energy to explore other option?	1	2	-.769*	0.128	0
		3	-0.178	0.127	0.63
		4	.975*	0.169	0
		5	.391*	0.134	0.03
	2	1	.769*	0.128	0
		3	.591*	0.129	0
		4	1.744*	0.17	0
		5	1.160*	0.135	0

	3	1	0.178	0.127	0.63
		2	-.591*	0.129	0
		4	1.153*	0.169	0
		5	.569*	0.134	0
	4	1	-.975*	0.169	0
		2	-1.744*	0.17	0
		3	-1.153*	0.169	0
		5	-.583*	0.174	0.008
	5	1	-.391*	0.134	0.03
		2	-1.160*	0.135	0
		3	-.569*	0.134	0
		4	.583*	0.174	0.008
Do you consider the packaging while buying Ayurvedic OTC medicines?	1	2	-.588*	0.123	0
		3	.570*	0.122	0
		4	1.317*	0.162	0
		5	0.309	0.128	0.116
	2	1	.588*	0.123	0
		3	1.158*	0.124	0
		4	1.906*	0.163	0
		5	.897*	0.13	0
	3	1	-.570*	0.122	0
		2	-1.158*	0.124	0
		4	.747*	0.163	0
		5	-0.261	0.129	0.256
	4	1	-1.317*	0.162	0
		2	-1.906*	0.163	0
		3	-.747*	0.163	0
		5	-1.009*	0.167	0
	5	1	-0.309	0.128	0.116
		2	-.897*	0.13	0
		3	0.261	0.129	0.256
		4	1.009*	0.167	0
Do you consider brand name while buying Ayurvedic OTC medicines?	1	2	0.111	0.121	0.887
		3	.854*	0.12	0
		4	1.317*	0.158	0
		5	.531*	0.125	0
	2	1	-0.111	0.121	0.887
		3	.742*	0.121	0
		4	1.205*	0.16	0
		5	.419*	0.127	0.009
	3	1	-.854*	0.12	0
		2	-.742*	0.121	0
		4	.463*	0.159	0.031
		5	-0.323	0.126	0.08
	4	1	-1.317*	0.158	0

		2	-1.205*	0.16	0
		3	-.463*	0.159	0.031
		5	-.786*	0.163	0
	5	1	-.531*	0.125	0
		2	-.419*	0.127	0.009
		3	0.323	0.126	0.08
		4	.786*	0.163	0
Do you consider dosages before buying Ayurvedic OTC medicines?	1	2	-0.248	0.124	0.269
		3	.483*	0.123	0.001
		4	.909*	0.163	0
		5	-0.015	0.129	1
	2	1	0.248	0.124	0.269
		3	.731*	0.125	0
		4	1.157*	0.165	0
		5	0.233	0.131	0.388
	3	1	-.483*	0.123	0.001
		2	-.731*	0.125	0
		4	0.426	0.164	0.072
		5	-.498*	0.13	0.001
	4	1	-.909*	0.163	0
		2	-1.157*	0.165	0
		3	-0.426	0.164	0.072
		5	-.924*	0.169	0
	5	1	0.015	0.129	1
		2	-0.233	0.131	0.388
		3	.498*	0.13	0.001
		4	.924*	0.169	0
Do you buy same Ayurvedic OTC medicines as it works best for you?	1	2	-.311*	0.107	0.03
		3	.854*	0.106	0
		4	1.128*	0.14	0
		5	0.044	0.111	0.995
	2	1	.311*	0.107	0.03
		3	1.165*	0.107	0
		4	1.439*	0.141	0
		5	.355*	0.112	0.015
	3	1	-.854*	0.106	0
		2	-1.165*	0.107	0
		4	0.274	0.141	0.294
		5	-.810*	0.111	0
	4	1	-1.128*	0.14	0
		2	-1.439*	0.141	0
		3	-0.274	0.141	0.294
		5	-1.084*	0.145	0
	5	1	-0.044	0.111	0.995
		2	-.355*	0.112	0.015

		3	.810*	0.111	0
		4	1.084*	0.145	0
Do you purchase Ayurvedic OTC medicines fir routine problems?	1	2	-0.31	0.121	0.078
		3	0.158	0.12	0.68
		4	.768*	0.159	0
		5	0.29	0.126	0.145
	2	1	0.31	0.121	0.078
		3	.468*	0.121	0.001
		4	1.078*	0.16	0
		5	.600*	0.127	0
	3	1	-0.158	0.12	0.68
		2	-.468*	0.121	0.001
		4	.611*	0.159	0.001
		5	0.132	0.126	0.833
	4	1	-.768*	0.159	0
		2	-1.078*	0.16	0
		3	-.611*	0.159	0.001
		5	-.478*	0.164	0.03
	5	1	-0.29	0.126	0.145
		2	-.600*	0.127	0
		3	-0.132	0.126	0.833
		4	.478*	0.164	0.03
Do you purchase Ayurvedic OTC medicines for Chronic problems?	1	2	-.862*	0.137	0
		3	-.397*	0.136	0.031
		4	0.171	0.181	0.877
		5	.400*	0.143	0.043
	2	1	.862*	0.137	0
		3	.465*	0.138	0.007
		4	1.033*	0.182	0
		5	1.262*	0.145	0
	3	1	.397*	0.136	0.031
		2	-.465*	0.138	0.007
		4	.568*	0.181	0.016
		5	.797*	0.144	0
	4	1	-0.171	0.181	0.877
		2	-1.033*	0.182	0
		3	-.568*	0.181	0.016
		5	0.229	0.186	0.736
	5	1	-.400*	0.143	0.043
		2	-1.262*	0.145	0
		3	-.797*	0.144	0
		4	-0.229	0.186	0.736
Do you purchase Ayurvedic OTC medicines for Seasonal problems?	1	2	-.411*	0.126	0.01
		3	0.315	0.125	0.087
		4	0.03	0.165	1

		5	0.139	0.131	0.826
	2	1	.411*	0.126	0.01
		3	.725*	0.126	0
		4	0.441	0.166	0.064
		5	.550*	0.132	0
	3	1	-0.315	0.125	0.087
		2	-.725*	0.126	0
		4	-0.284	0.166	0.425
		5	-0.176	0.131	0.669
	4	1	-0.03	0.165	1
		2	-0.441	0.166	0.064
		3	0.284	0.166	0.425
		5	0.109	0.17	0.969
	5	1	-0.139	0.131	0.826
		2	-.550*	0.132	0
		3	0.176	0.131	0.669
		4	-0.109	0.17	0.969
Do you purchase Ayurvedic OTC medicines from one specific pharmacy?	1	2	-.562*	0.137	0
		3	-0.051	0.135	0.996
		4	-0.036	0.18	1
		5	-0.176	0.142	0.73
	2	1	.562*	0.137	0
		3	.511*	0.137	0.002
		4	.526*	0.181	0.031
		5	0.386	0.144	0.058
	3	1	0.051	0.135	0.996
		2	-.511*	0.137	0.002
		4	0.016	0.18	1
		5	-0.124	0.143	0.907
	4	1	0.036	0.18	1
		2	-.526*	0.181	0.031
		3	-0.016	0.18	1
		5	-0.14	0.185	0.943
	5	1	0.176	0.142	0.73
		2	-0.386	0.144	0.058
		3	0.124	0.143	0.907
		4	0.14	0.185	0.943
Do you consider location important while you visit the pharmacy?	1	2	-0.191	0.136	0.627
		3	-0.066	0.135	0.989
		4	1.061*	0.179	0
		5	.620*	0.142	0
	2	1	0.191	0.136	0.627
		3	0.125	0.137	0.891
		4	1.252*	0.18	0
		5	.811*	0.144	0

	3	1	0.066	0.135	0.989
		2	-0.125	0.137	0.891
		4	1.126*	0.18	0
		5	.685*	0.142	0
	4	1	-1.061*	0.179	0
		2	-1.252*	0.18	0
		3	-1.126*	0.18	0
		5	-0.441	0.185	0.121
	5	1	-.620*	0.142	0
		2	-.811*	0.144	0
		3	-.685*	0.142	0
		4	0.441	0.185	0.121
Do you consider the staff important while you visit a pharmacy?	1	2	-.489*	0.12	0.001
		3	-.337*	0.119	0.039
		4	.621*	0.158	0.001
		5	.686*	0.125	0
	2	1	.489*	0.12	0.001
		3	0.152	0.12	0.715
		4	1.110*	0.159	0
		5	1.174*	0.126	0
	3	1	.337*	0.119	0.039
		2	-0.152	0.12	0.715
		4	.958*	0.158	0
		5	1.023*	0.125	0
	4	1	-.621*	0.158	0.001
		2	-1.110*	0.159	0
		3	-.958*	0.158	0
		5	0.065	0.163	0.995
	5	1	-.686*	0.125	0
		2	-1.174*	0.126	0
		3	-1.023*	0.125	0
		4	-0.065	0.163	0.995
Do you consider product range important while you visit a pharmacy?	1	2	-0.343	0.127	0.057
		3	0.158	0.126	0.723
		4	1.189*	0.168	0
		5	.682*	0.133	0
	2	1	0.343	0.127	0.057
		3	.500*	0.128	0.001
		4	1.532*	0.169	0
		5	1.025*	0.134	0
	3	1	-0.158	0.126	0.723
		2	-.500*	0.128	0.001
		4	1.032*	0.168	0
		5	.525*	0.133	0.001
	4	1	-1.189*	0.168	0

		2	-1.532*	0.169	0
		3	-1.032*	0.168	0
		5	-.507*	0.173	0.029
	5	1	-.682*	0.133	0
		2	-1.025*	0.134	0
		3	-.525*	0.133	0.001
		4	.507*	0.173	0.029
Do you consider extra services important while you visit a pharmacy?	1	2	-0.303	0.127	0.119
		3	0.007	0.126	1
		4	1.070*	0.167	0
		5	.403*	0.132	0.02
	2	1	0.303	0.127	0.119
		3	0.31	0.127	0.108
		4	1.373*	0.168	0
		5	.706*	0.133	0
	3	1	-0.007	0.126	1
		2	-0.31	0.127	0.108
		4	1.063*	0.167	0
		5	.396*	0.132	0.024
	4	1	-1.070*	0.167	0
		2	-1.373*	0.168	0
		3	-1.063*	0.167	0
		5	-.667*	0.172	0.001
	5	1	-.403*	0.132	0.02
		2	-.706*	0.133	0
		3	-.396*	0.132	0.024
		4	.667*	0.172	0.001
Do you consider consuming same Ayurvedic OTC brands?	1	2	-.603*	0.11	0
		3	-0.133	0.109	0.741
		4	.878*	0.144	0
		5	0.008	0.114	1
	2	1	.603*	0.11	0
		3	.471*	0.11	0
		4	1.481*	0.145	0
		5	.611*	0.116	0
	3	1	0.133	0.109	0.741
		2	-.471*	0.11	0
		4	1.011*	0.145	0
		5	0.14	0.115	0.738
	4	1	-.878*	0.144	0
		2	-1.481*	0.145	0
		3	-1.011*	0.145	0
		5	-.870*	0.149	0
	5	1	-0.008	0.114	1
		2	-.611*	0.116	0

		3	-0.14	0.115	0.738
		4	.870*	0.149	0
Do you consider buying branded OTC for its effectiveness?	1	2	-0.165	0.123	0.667
		3	.972*	0.122	0
		4	1.098*	0.162	0
		5	0.189	0.128	0.579
	2	1	0.165	0.123	0.667
		3	1.137*	0.124	0
		4	1.263*	0.163	0
		5	0.354	0.13	0.052
	3	1	-.972*	0.122	0
		2	-1.137*	0.124	0
		4	0.126	0.163	0.937
		5	-.782*	0.129	0
	4	1	-1.098*	0.162	0
		2	-1.263*	0.163	0
		3	-0.126	0.163	0.937
		5	-.909*	0.167	0
	5	1	-0.189	0.128	0.579
		2	-0.354	0.13	0.052
		3	.782*	0.129	0
		4	.909*	0.167	0

APPENDIX-III

The below table explains the cluster membership i.e., distance of each segment from each other

Cluster Membership			Cluster Membership			Cluster Membership		
Case Number	Cluster	Distance	Case Number	Cluster	Distance	Case Number	Cluster	Distance
1	1	5.982	49	2	4.383	101	5	3.96
2	2	4.216	50	4	5.829	102	3	2.446
3	1	3.322	51	1	4.163	103	3	6.123
4	1	4.02	52	2	5.314	104	5	7.642
5	2	3.569	53	1	5.922	105	1	4.181
6	3	4.592	54	2	2.839	106	4	5.989
7	1	3.311	55	5	5.409	107	3	4.54
8	2	2.395	56	5	2.83	108	4	4.923
9	3	2.738	57	5	2.697	109	5	4.098
10	2	3.9	58	2	1.587	110	1	4.42
11	2	3.485	59	4	7.869	111	1	5.428
12	1	3.596	60	1	4.65	112	5	4.12
13	2	3.27	61	1	4.07	113	1	3.875
14	3	1.148	62	1	3.337	114	3	1.148
15	2	3.06	63	3	5.014	115	3	3.727
16	1	2.891	64	2	3.479	116	1	2.564
17	3	3.212	65	5	5.32	117	3	3.499
18	3	1.945	66	1	4.427	118	3	4.873
19	2	2.404	67	5	6.577	119	1	4.735
20	2	4.62	68	2	4.912	120	2	4.423
21	4	4.782	69	2	1.587	121	2	4.653
22	5	5.847	70	5	2.877	122	1	3.921
23	1	5.694	71	4	5.269	123	1	5.341
24	2	4.316	72	5	3.115	124	2	4.986
25	5	7.739	73	5	2.695	125	2	5.002
26	5	4.07	74	5	3.039	126	2	4.232
27	2	5.467	75	5	2.83	127	4	3.43
28	4	6.471	76	5	3.436	128	2	4.141
29	1	3.292	77	5	3.041	129	1	3.995
30	4	4.32	78	2	4.577	130	1	6.321
31	3	5.405	79	2	2.274	131	3	4.941
32	3	5.209	80	2	2.274	132	5	3.765
33	3	5.089	81	1	2.557	133	5	3.623
34	1	6.03	82	2	2.758	134	3	4.341
35	3	5.172	83	2	2.274	135	2	4.554
36	2	3.629	84	2	3.127	136	4	4.732
37	2	4.856	85	1	2.942	137	3	3.336
38	1	4.643	86	2	7.59	138	1	6.147
39	2	5.845	87	5	2.978	139	1	3.414
40	3	4.178	88	5	4.069	140	2	5.268
41	1	4.717	89	5	2.787	141	3	3.838
42	4	7.559	90	1	3.731	142	5	5.442
43	2	3.983	91	5	3.27	143	2	4.51
44	4	4.853	92	5	2.794	144	3	2.61
45	3	6.948	93	5	3.475	145	5	3.465
46	4	4.842	94	2	6.664	146	5	3.041
47	1	3.15	95	5	4.578	147	4	6.268
48	2	7.531	96	4	5.765	148	4	6.9
49	2	4.383	97	5	4.263	149	5	3.761
50	4	5.829	98	5	4.891	150	5	5.123

Cluster Membership				Cluster Membership				Cluster Membership		
Case Number	Cluster	Distance		Case Number	Cluster	Distance		Case Number	Cluster	Distance
201	2	2.395		251	5	4.12		301	1	3.491
202	1	4.186		252	1	3.875		302	2	2.781
203	2	7.155		253	3	1.597		303	1	4.186
204	2	3.223		254	3	3.727		304	2	7.155
205	2	3.256		255	1	2.564		305	2	3.223
206	3	5.019		256	3	3.499		306	2	3.256
207	5	4.588		257	3	4.873		307	3	5.019
208	2	2.974		258	1	4.735		308	5	4.588
209	5	5.884		259	2	4.423		309	2	2.974
210	2	3.872		260	2	4.653		310	5	5.884
211	5	6.487		261	1	3.921		311	2	3.872
212	5	4.266		262	1	5.341		312	5	6.487
213	3	5.809		263	2	4.986		313	5	4.266
214	2	4.363		264	2	5.002		314	3	5.809
215	3	4.62		265	2	4.232		315	2	4.363
216	3	4.4		266	4	3.43		316	3	4.62
217	1	5.317		267	2	4.141		317	3	4.4
218	3	4.131		268	1	3.995		318	1	5.317
219	1	6.408		269	1	6.321		319	3	4.131
220	3	5.236		270	3	4.941		320	1	6.408
221	3	4.919		271	5	3.765		321	3	5.236
222	1	4.265		272	5	3.623		322	3	4.919
223	3	4.217		273	3	4.341		323	1	4.265
224	3	4.974		274	2	4.554		324	3	4.217
225	4	5.901		275	4	4.732		325	3	4.974
226	3	6.834		276	3	3.336		326	4	5.901
227	3	6.6		277	1	6.147		327	3	6.834
228	4	7.162		278	1	3.414		328	3	6.6
229	4	7.162		279	2	5.268		329	4	7.162
230	5	2.805		280	3	3.838		330	2	3.945
231	5	3.741		281	5	5.442		331	5	2.805
232	1	2.172		282	2	4.51		332	5	3.741
233	1	2.391		283	3	2.61		333	1	2.172
234	1	2.529		284	5	3.465		334	1	2.391
235	1	1.98		285	5	3.041		335	1	2.529
236	3	7.324		286	4	6.268		336	1	1.98
237	1	2.06		287	4	6.9		337	1	6.498
238	1	2.397		288	5	3.761		338	1	2.06
239	2	4.506		289	3	2.801		339	1	2.397
240	5	3.96		290	3	1.148		340	2	4.506
241	3	2.446		291	2	3.06		341	5	3.96
242	3	6.123		292	1	2.891		342	3	2.446
243	5	7.642		293	3	3.212		343	3	6.123
244	1	4.181		294	3	1.945		344	5	7.642
245	4	5.989		295	3	1.148		345	1	4.181
246	3	4.54		296	4	4.19		346	4	5.989
247	4	4.923		297	3	6.353		347	3	4.54
248	5	4.098		298	1	5.008		348	4	4.923
249	1	4.42		299	5	5.175		349	5	4.098
250	1	5.428		300	2	1.458		350	1	4.42

Cluster Membership			Cluster Membership		
Case Number	Cluster	Distance	Case Number	Cluster	Distance
301	1	3.491	351	1	5.428
302	2	2.781	352	5	4.12
303	1	4.186	353	5	3.645
304	2	7.155	354	3	1.148
305	2	3.223	355	2	3.06
306	2	3.256	356	1	2.891
307	3	5.019	357	3	3.212
308	5	4.588	358	3	1.945
309	2	2.974	359	3	1.148
310	5	5.884	360	4	4.19
311	2	3.872	361	3	6.353
312	5	6.487	362	1	5.008
313	5	4.266	363	5	5.175
314	3	5.809	364	2	1.458
315	2	4.363	365	1	3.491
316	3	4.62	366	2	2.706
317	3	4.4	367	1	4.186
318	1	5.317	368	2	7.155
319	3	4.131	369	2	3.223
320	1	6.408	370	2	3.256
321	3	5.236	371	3	5.019
322	3	4.919	372	5	4.588
323	1	4.265	373	2	2.974
324	3	4.217	374	5	5.884
325	3	4.974	375	2	3.872
326	4	5.901	376	5	6.487
327	3	6.834	377	5	4.266
328	3	6.6	378	3	5.809
329	4	7.162	379	2	4.363
330	2	3.945	380	3	4.51
331	5	2.805	381	3	4.4
332	5	3.741	382	1	5.317
333	1	2.172	383	3	4.131
334	1	2.391	384	1	6.408
335	1	2.529	385	3	5.236
336	1	1.98	386	3	4.919
337	1	6.498	387	1	4.265
338	1	2.06	388	3	4.217
339	1	2.397	389	3	4.974
340	2	4.506	390	4	5.901
341	5	3.96	391	3	6.834
342	3	2.446	392	3	6.6
343	3	6.123	393	4	7.162
344	5	7.642	394	1	4.732
345	1	4.181	395	5	2.805
346	4	5.989	396	5	3.741
347	3	4.54	397	1	2.172
348	4	4.923	398	1	2.391
349	5	4.098	399	1	2.529
350	1	4.42	400	1	1.98
			401	1	6.498

APPENDIX -IV

ANOVA						
	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
V28	29.826	4	0.771	396	38.708	0
V29	17.839	4	0.684	396	26.083	0
V30	27.536	4	0.701	396	39.302	0
V31	20.925	4	0.642	396	32.607	0
V32	16.904	4	0.634	396	26.643	0
V33	6.263	4	0.9	396	6.961	0
V34	9.76	4	0.797	396	12.25	0
V35	20.75	4	0.808	396	25.687	0
V36	14.974	4	0.879	396	17.034	0
V37	15.786	4	0.769	396	20.54	0
V39	38.22	4	0.589	396	64.862	0
V40	27.944	4	0.665	396	42.028	0
V41	33.657	4	0.674	396	49.931	0
V42	27.982	4	0.645	396	43.38	0
V43	26.163	4	0.779	396	33.6	0
V44	30.586	4	0.718	396	42.626	0
V45	18.68	4	0.686	396	27.245	0
V46	12.828	4	0.729	396	17.592	0
V47	25.583	4	0.536	396	47.738	0
V48	9.144	4	0.688	396	13.295	0
V49	20.382	4	0.89	396	22.905	0
V50	6.609	4	0.745	396	8.873	0
V51	4.731	4	0.88	396	5.375	0
V52	16.543	4	0.876	396	18.888	0
V53	21.139	4	0.678	396	31.191	0
V54	21.677	4	0.766	396	28.294	0
V55	14.92	4	0.757	396	19.711	0
V56	15.384	4	0.569	396	27.037	0
V57	24.056	4	0.717	396	33.539	0

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

APPENDIX- V

The significance level should be more than 0.05. In this case, the values were less than 0.05. Hence no ANOVA can be applied to these variables.

Test of Homogeneity of Variances	Levene Statistic	df1	df2	Sig.
Do you buy Ayurvedic OTC in need of non-side effects medicines	3.892	4	396	0.004
Consider symptoms at the time of purchase.	17.027	4	396	0
Buy the ones which have seen in ads/heard.	3.748	4	396	0.005
Recommendation from friends to buy Ayurvedic OTC medicines	0.959	4	396	0.43
Recommendation from family to buy Ayurvedic OTC medicines	3.128	4	396	0.015
Recommendation from a doctor while buying Ayurvedic OTC medicines	2.015	4	396	0.092
Recommendations from pharmacist while buying Ayurvedic OTC medicines	1.82	4	396	0.124
Consider price before you buy Ayurvedic OTC medicines	5.271	4	396	0
Consider the advertisements before you purchase Ayurvedic OTC medicines	2.105	4	396	0.079
Wish to be familiar with pharmacy staff	10.443	4	396	0
Pharmacy location where no one can recognize you	11.782	4	396	0
Product brand important for you	6.112	4	396	0
Package design influence my purchasing decision	0.821	4	396	0.512
Branded Ayurvedic OTC for its brand value	12.448	4	396	0
Buy branded Ayurvedic OTC for its brand familiarity	2.278	4	396	0.06
Buy the same Ayurvedic OTC because you don't have any energy to explore other option	5.251	4	396	0
Consider the packaging while buying Ayurvedic OTC medicines	2.316	4	396	0.057
Consider brand name while buying Ayurvedic OTC medicines	10.934	4	396	0
Consider dosages before buying Ayurvedic OTC medicines	1.524	4	396	0.194
Buy same Ayurvedic OTC medicines as it works best for you	10.535	4	396	0
Purchase Ayurvedic OTC medicines fir routine problems	3.388	4	396	0.01
Purchase Ayurvedic OTC medicines for Chronic problems	5.831	4	396	0
Purchase Ayurvedic OTC medicines for Seasonal problems	10.38	4	396	0
Purchase Ayurvedic OTC medicines from one specific pharmacy	7.656	4	396	0
Consider location important while you visit the pharmacy	4.11	4	396	0.003
Consider the staff important while you visit a pharmacy	1.771	4	396	0.134
Consider product range important while you visit a pharmacy	11.381	4	396	0
Consider extra services important while you visit a pharmacy	1.495	4	396	0.203
Consider consuming same Ayurvedic OTC brands	8.598	4	396	0
Consider buying branded OTC for its effectiveness	16.43	4	396	0

APPENDIX- VI

Department of Business Management

Dr Y.S. Parmar University of Horticulture and Forestry

**Title of Research: Consumer Behaviour for Ayurvedic Over the Counter
Medicines in the state of Himachal Pradesh**

Name of Student: Monica Negi

Admission No.: BM-2019-06-D

Name of Guide: Dr. Kapil Kathuria, Professor

Questionnaire

Over-the-counter: In this questionnaire, OTC means Over-the-counter medicines which can be bought without any prescription written by a medical physician

Section-A

Ques 1: What is the most preferred OTC medicines type:

- Ayurvedic
- Allopathatic
- Homoeopathic
- Other, please specify _____

Ques 2: How often do you purchase an Ayurvedic OTC medicine?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques3: Which Ayurvedic OTC brand did you purchase mostly in last 12 months?

- Dabur
- Himalaya
- Patanjali
- Zandu
- Hamdard India
- Baidyanath
- Others, please specify _____

Ques.4: What type of OTC medicines have you purchased most often in the past twelve months?

- Vitamins
- Lozenges

- Cold-flu remedies
- Allergy remedies
- Immunity booster
- Skincare

Ques 5: What forms of Ayurvedic OTC medicines you bought the most in past twelve months?

- Tablets
- Syrups
- Powder
- Creams
- Capsules

Ques 6: What kind of packaging you bought the most in past twelve months?

- Sachets
- Bottles
- Tube
- Blister packs

Ques 7: What quantity of Ayurvedic OTC have you bought in last twelve months?

- Dose for immediate cure
- Dose for regular basis

Ques 8: Mostly you buy Ayurvedic OTC for?

- Skincare
- Immunity
- Pain relief
- Mental growth
- Cough & cold
- Supplements
- Gastritis/Acidity
- Any other, please specify _____

Ques 9: For which benefit do you buy Ayurvedic OTC medicines for?

- Need of non-side effect medicines
- Need any kind of natural ingredients
- High rate of therapeutic efficiency

Ques 10. Why don't you go to the doctor rather than buying an OTC product?

- It's expensive
- Kills my valuable time
- It's unnecessary because I already have previous experience
- Depends on my mood
- It's a minor ailment

Ques 11. How often have you gone to the doctor instead buying OTC medicines in past twelve months?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 12. How often have you inquired about specific brand available for Ayurvedic OTC medicines in past twelve months?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 13. How often have your doctor prescribed Ayurvedic OTC medicines in past twelve months?

- Very Often
- Often
- Sometimes
- Rarely
- Never

Ques 14. How often have you purchased an Ayurvedic OTC medicines on recommendation of your friend in last twelve months?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 15. How often have you purchased an Ayurvedic OTC medicine on recommendation of your family in last twelve months?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 16. From where did you get to know about the most often used OTC product?

- General store
- Internet

- Doctors
- Free sample distribution
- Pharmacist
- Friends and relatives
- Newspapers
- Advertisement

Ques 17. How often have you seek advice from your doctor before buying Ayurvedic OTC medicines in past twelve months?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 18. How often have you seek advice from your friend before buying Ayurvedic OTC medicines in past twelve months?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 19. How often have you seek advice from your family before buying Ayurvedic OTC medicines in past twelve months?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 20. How often have you purchased Ayurvedic OTC for yourself?

- Very Often
- Often
- Sometimes
- Rarely
- Never

Ques 21. How often has somebody else purchased Ayurvedic OTC for you?

- Very often
- Often
- Sometimes
- Rarely
- Never

Ques 22. How frequent have you bought Ayurvedic OTC in summer season?

- Every week
- Every day
- Once a month
- Once a fort night
- Less than once a month

Ques 23. How frequent have you bought Ayurvedic OTC in winter season?

- Every week
- Every day
- Once a month
- Once a fort night
- Less than once a month

Ques 24. How often in a month do you buy Ayurvedic OTC medicines?

- Every week
- Every day
- Once a month
- Once a fort night
- Less than once a month

Ques 25. You purchased most of your Ayurvedic OTC medicines in last 12 months from?

- Chemist Shop
- General merchant
- Online

Ques 26. How far is the retail outlet mentioned above?

- Less than 0.5 kms
- 0.5-2.5 kms
- More than 2.5 kms

Ques 27. What percentage of your required Ayurvedic OTC medicine do you buy from the same retail shop?

- 0-25%
- 25-50%
- 50-75%
- 75-100%

Section- B

Ques. Mark the following factors which are important for you while deciding the purchase?

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
28.	Do you buy Ayurvedic OTC in need of non-side effects medicines?					
29.	Do you consider symptoms at the time of purchase of Ayurvedic OTC medicines?					
30.	Do you buy Ayurvedic OTC medicines for the ones which you have seen/heard advertisement?					
31.	Do you take recommendation from friends to buy Ayurvedic OTC medicines?					
32.	Do you take recommendation from family to buy Ayurvedic OTC medicines?					
33.	Do you take recommendation from a doctor while buying Ayurvedic OTC medicines?					
34.	Do you take recommendations from pharmacist while buying Ayurvedic OTC medicines?					
35.	Do you consider price before you buy Ayurvedic OTC medicines?					
36.	Do you consider the advertisements before you purchase Ayurvedic OTC medicines?					
37.	Do you wish to be familiar with pharmacy staff?					
38.	Do you want pharmacy location where no one can recognise you?					
39.	Is product brand important for you?					
40.	Does package design influence my purchasing decision?					
41.	Do you buy branded Ayurvedic OTC for its brand value?					
42.	Do you buy branded Ayurvedic OTC for its brand familiarity?					
43.	Do you buy the same Ayurvedic OTC because you don't have any energy to explore other option?					

44.	Do you consider the packaging while buying Ayurvedic OTC medicines?					
45.	Do you consider brand name while buying Ayurvedic OTC medicines?					
46.	Do you consider dosages before buying Ayurvedic OTC medicines?					
47.	Do you buy same Ayurvedic OTC medicines as it works best for you?					
48.	Do you purchase Ayurvedic OTC medicines fir routine problems?					
49.	Do you purchase Ayurvedic OTC medicines for Chronic problems?					
50.	Do you purchase Ayurvedic OTC medicines for Seasonal problems?					
51.	Do you purchase Ayurvedic OTC medicines from one specific pharmacy?					
52.	Do you consider location Important while you visit the pharmacy?					
53.	Do you consider the staff important while you visit a pharmacy?					
54.	Do you consider product range important while you visit a pharmacy?					
55.	Do you consider extra services important while you visit a pharmacy?					
56.	Do you consider consuming same Ayurvedic OTC brands?					
57.	Do you consider buying branded OTC for its effectiveness?					

Section-C

Ques. Mark the following factors on basis of their importance while deciding to purchase the Ayurvedic Over-the-Counter medicines?

(Rank the answers from 1 to 5 where 1) Not important at all. 2) Somewhat important. 3) Important 4) Very important. 5) Extremely important)

S.No.		Not important at all	Somewhat Important	Important	Very Important	Extremely Important
		1	2	3	4	5
58.	Pharmaceutical company's country of origin.					
59.	Pharmacist's opinion and recommendations					
560.	Family's and friend's opinions / Recommendations					
61.	Product experience					

Ques. How important are these following factors while you purchase Ayurvedic OTC medicines?

(Rank the below asked question from 1-5 where (1) Not important at all. 2) Somewhat important. 3) Important 4) Very important. 5) Extremely important)

	Factors	Not important at all	Somewhat Important	Important	Very Important	Extremely Important
		1	2	3	4	5
62.	Own recommendations/ experience					
63.	Friend's recommendations					
64.	Physician					
65.	Family recommendations					
66.	Other's (opinion leader) recommendations					
67.	Colleagues' recommendation					
68.	Relieves multiple					
69.	Are you in medical field/ or related field					
70.	Reasonable price					
71.	Best value of money					
72.	Easy availability					
73.	Product safety					

74.	Advertisement					
75.	Company reputation					
76.	Less side effects					
77.	Taste of the OTC					
78.	If the chemist recommended					
79.	Did you buy any Ayurvedic OTC just because you noticed it on the shelf?					
80.	Effectiveness of the OTC					
81.	Degree of sickness (mild)					

Section-D

Ques 82. Name: _____

Ques 83. Age: - under 20

- 20-29 years
- 30-49 years
- 50-65 years
- Over 65 years

Ques 84. Employment status: -

- Full time work
- Part-time work
- Unemployed
- Retired
- Student

Ques 85. Occupation Type: -

- -Public sector
- - Private sector
- -Self-employed
- - Professional
- - Businessman

Ques 86. In which sector do you work?

- -Academics
- -Banking
- -Health Services
- - Administrative Services
- - Corporate Sector
- -Others_____

Ques 87. Gender: -

- Female
- Male

Ques 88. Place of residence Rural_____

Ques 89. Monthly Income: -

- -below Rs.20,000
- -Rs.20.000-60,000
- -above Rs.60,000

Ques 90. Education:

- 8th grade or less
- Attended high school
- High school graduate
- Some college
- College students
- Graduate/professional degree

Ques 91. What type of family do you live?

- Joint Family
- Nuclear Family

Ques 92. What type of schooling did you receive?

- English medium
- Hindi medium

Ques 93. Which district you belong to originally _

Ques 94. Which district are you residing in_____

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Title of the Thesis : **Consumer Behaviour for Ayurvedic Over the Counter Medicines in the state of Himachal Pradesh**
Name of the Student : Monica Negi
Admission Number : BM-2019-06-D
Degree Awarded : Ph.D. Business Management
Year of Award of Degree : 2023
Major Advisor : Dr Kapil Kathuria
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Minor Discipline : Business Management
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ABSTRACT

A trend can be seen amongst the consumers who have started shifting more towards healthy consumption. Over the period of time, we see the most of them have started expressing positive opinion towards Ayurvedic OTC products. Yet, in the case of medicines the Ayurvedic medicines are yet to make a strong position. Hence, the consumption & use of Ayurvedic over the counter (OTC) medicines merits an investigation. The aim of the study is to manifest consumer behaviour and segment the market of Ayurvedic OTC medicines among the consumers of Himachal Pradesh. Decisions making process with focus on roles and influence strategies, with regard to Ayurvedic OTC medicines was also a subject of research. The study was descriptive in nature. The reasons influencing the purchases and use of these medicines were studied. For this research a well-structured questionnaire was made where closed ended questions were asked. Factor analysis and Cluster analysis were used on the primary data obtained to understand manifest the consumer behaviour and further segment the markets accordingly. Through factor analysis six factors and five clusters were found which were named according to the behaviour they exhibited. The six factors found were named as frequency of purchase, professional advice, social influences, objects and outlets, quantity purchased, brands & objectives. The effort was to relate the purchase and consumption to relevant demographic variables and define the five segments found. Furthermore, these five segments are were named as Conservative time Starred, Allopathic inclined private employees Himalaya patrons, Ayurvedic inclined Allergy sensitives, Independent Himalaya Patrons consuming Vitamins and Patanjali patrons cream consuming administrative people.

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Name: Monica Negi
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Signature of Major Advisor
Name: Dr Kapil Kathuria
Date:

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Academic Qualification:

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10	2008	CBSE	75.00	First
10+2	2010	CBSE	56.40	Second
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MBA (Pharmaceutical Management)	2018	Panjab University, Chandigarh	69.90	First

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