

**Factors Influencing Consumer Preferences for Over
–The-Counter (OTC) Allopathic Medicine.**

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1. Introduction

With the present population of 1.3 billion along with growth rate of 1.2% every year, longevity has doubled from 32 years in 1947 to 66 years in 2004 (NCMEH, 2005) India will reach 1.53 billion by the end of 2030 (ORGI 2011). About 60% of the country's' populations live in villages and out of this 65% of the rural populations have no access to medicines and other health care facilities (OPPI, 2013). Moreover, urban and rural populations are more or less dominated by acute ailments, for which they require urgent relief from those diseases.

The waiting time to consult a medical practitioner ranges from 3 hours per patient in Govt. hospital and 45 minutes for the private clinic (Madhav, 2013). Although India accounts for 16.5% of the global population, we contribute to a fifth of the world's share of diseases that can be eradicated by minimum medical care.(NCMEH, 2015). Common people look for faster remedy from illness at a minimum cost and the new market of over the counter medicine has evolved at a rapid space keeping in line with the requirement of the patient for treating minor ailments.

In most countries of the world, medicines are well classified, including the category of OTC medicines. Such a specific category does not exist in India. Different stakeholders exhibit varying understanding and opinions about medicines which can be sold without a prescription, which can be recommended by a pharmacist and which can be sold only on a doctor's prescription (Indian Pharmaceutical Association, 2017). If a prescription drug is approved for certain indications that can be diagnosed and prescribed by a medical practitioner then that drug can never come under over-the-counter promotion. Sometimes consumers learn about the effect of drugs depending on their physical well-being after they have taken it as a remedy of certain ailment. Drugs taken to treat non-chronic ailments are

typically used up or discarded after the patient recovers or when the patient has switched it for another drug because the first drug did not work satisfactorily. This observation allows the conjecture that the recurrent use of a drug creates a learning opportunity at each purchase occasion based on the consumer's perception of the drug (Shohel, 2013).

There are various types of OTC medicines like OTC medicine sold through pharmacies and OTC general sale medicine. Similarly there are OTC medicines for different therapeutic areas also like Allopathic, Unani, Ayurveda and Homeopathy. OTC medicines can be further categorized as per the route of administration and therapeutic effectiveness for a particular disease.

Analgesics are medicines that are used to give relief from pain. They are also known as painkillers or pain relievers. In medical terminology the term analgesic refers to that group of medicine that provides relief from pain without putting a patient to sleep or making loss of consciousness. The topical allopathic analgesic market is segmented based on therapeutic class, type and formulation. The segment will continue to grow throughout the next 2 years due to high preferability and acceptability of non-opioids drugs in India (Srivastava, 2018).

There are three category of analgesic topical medicine **Paracetamol, Non-steroidal anti-inflammatory drugs (NSAIDs) and Opioids.**

With rise in modern lifestyles there is a growing demand for convenience and instant results from pain by providing tailored treatments to patients, without decreasing efficacy of analgesic. This research is regarding understanding the factors influencing consumer for topical formulations of the most widely used OTC allopathic analgesic topical medicines. Some of the most common brands of topical analgesic allopathic medicines are Volitra gel, Volini cream, Nice gel, Moov cream, Clovis gel, Rolex gel, Moveon cream, Voviron gel, Iodex etc.

2. Research Scope

This study is basically focused on OTC allopathic analgesic topical medicines. Thus it will concentrate on the factors that motivate the consumer to purchase such medicines under Indian scenario.

3. Relevance of the Topic

Over the counter allopathic medicines are gaining popularity as we are progressing. People are becoming health conscious, aware of the disease and precautionary measures. But, with respect to India, not much of systematic research happened to understand the rising popularity among the consumers about the over the counter allopathic analgesic topical medicines. So, with respect to existing literature from across the world, there are many factors that can affect consumer behavior for purchasing over the counter allopathic drugs.

In this context, it is important to examine various psychographic and demographic factors that influence the preferences of allopathic analgesic medicines in and around Hooghly district of West Bengal, India. The variables which can be considered for this study will be related to the theories of perception, learning, social stimulation, motivational factors and other behavioral traits often displayed by an individual in selecting particular OTC medicines to combat the ailments. The consumer's perception and the related variables will have to look into for identifying the theory.

4. Review of Literature

An exhaustive literature review has been carried out covering all domains related to the topic. Care has been taken to ensure that the review is not restricted by the narrow geographic boundary to any country or region or on a confined topic.

Demographic variables such as family size and age composition are major determinants of household consumption patterns. The welfare effects of demographic differences and their effects on consumption patterns might seem two sides of a coin. They are not. Even if households regard demographic variables as fixed or predetermined, observed differences in consumption patterns of households with different demographic profiles only enable us to infer their "conditional preferences". If households regard demographic profiles as decision variables, then unconditional preferences can be inferred from their unconditional choices (e.g., choices of family size and a consumption vector) (Pollak and Wales, 2015). Moderating variables influencing the purchase behavior are gauged based on the research reviewed. According to Mwambete and Shemsika (2014), Young (2013), and Holecka et al (2012), demographic variables are important. Age, income, education, sex, occupation, social class, the standard of living have an effect on the formation of perception for the consumption of over the counter medicines.

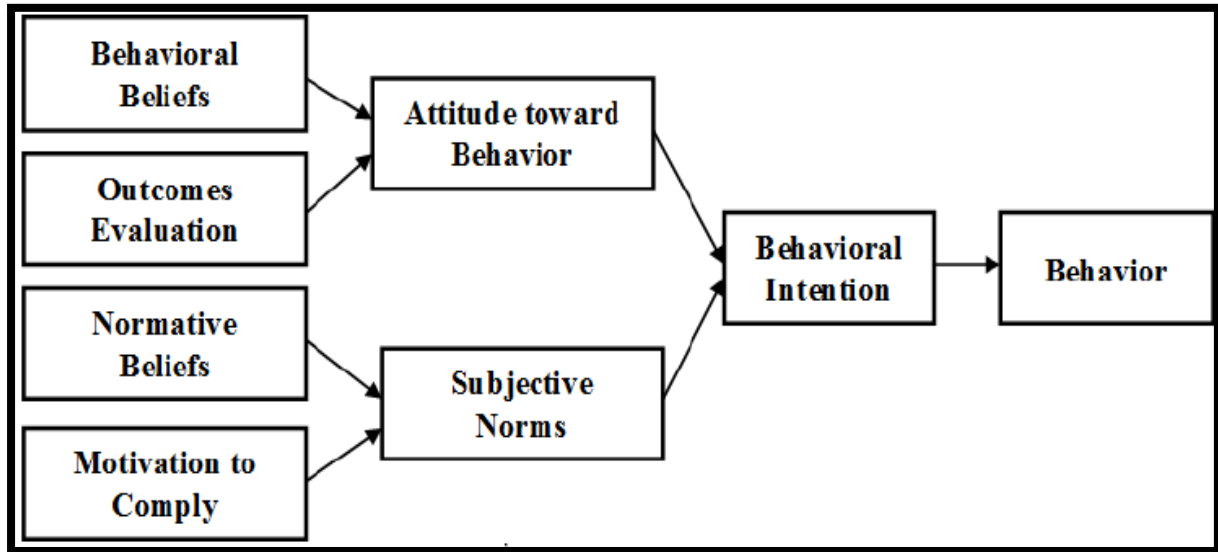
The study of consumer involvement has significance because consumers' information search and the attitude towards the purchase of nonprescription medicines is a function of their involvement in the purchase decision-making process (Gore, 1994). Consumer attitudes are a composite of a consumer's beliefs, feelings and behavioral intentions toward some object within the context of marketing (Perner, 2010). As per Cîrstea et. al (2016) that the purchase decision is influenced by two important factors such as: medical or pharmacist advice and the perceived value of information. The author showed that perceived value of information is determined by previous own experience, views of other reference groups, the written information in the prospectus, product price or existing advertising or marketing activities.

The communications from friends, relatives, family members have more credibility than advertisers can even imagine (Pusateri, 1999). With the latest Euro-barometer survey showing that 58% of Europeans do not trust corporate, relying more on relatives and friends

credibility, honesty and impartially on purchase decision making for a product which will continue to grow (Harris, 2004). Katz and Lazarsfeld (1995) found that a positive word of mouth communication from friends, relatives, the family is seven times more effective than newspaper and magazine advertising, four times more effective than personal selling and twice as effective as radio advertising in influencing consumers to switch brands.

The attitude behavioral scale shows that there is no necessary relation between beliefs in the existence of an object and the attitude toward that object. This finding was contrary to most social psychological theory since beliefs had traditionally been viewed as a part of attitude (Fishbein & Raven, 1962). It, therefore, became necessary to not only distinguish between beliefs in the existence of an object and beliefs about an object but also to better understand the relations among beliefs about an object and the attitude toward that object. Fishbein found that by conceptualizing a belief system as a habit-family-hierarchy of responses and by relying on notions of mediated generalization, relations among beliefs and attitudes without having to incorporate a need or drive for consistency (Fishbein, 1963). Based on this in the late 1970s and early 1980s, Fishbein and Ajzen expanded expectancy-value theory into the Theory of Reasoned Action (TRA).

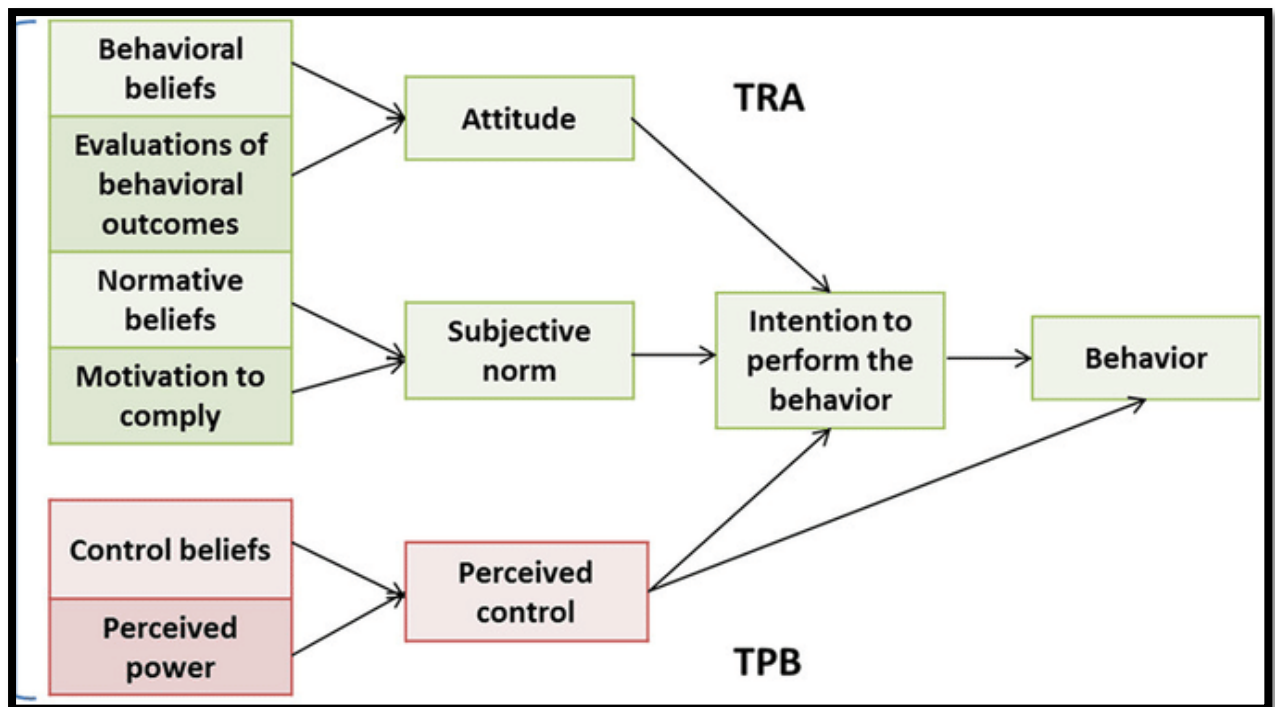
Fig 1: Theory of Reasoned Action



(Source: <https://www.researchgate.net/figure/Theory-of-Reasoned-Action-TRA-Fishbein-Ajzen-1975>)

Theory of Reasoned Action aims to explain the relationship between attitudes and behaviors within human action. It is mainly used to predict how individuals will behave based on their pre-existing attitudes and behavioral intentions. An individual's decision to engage in a particular behavior is based on the outcomes the individual expects will come as a result of performing the behavior. The development and testing of Theory of Reasoned action were predicated on the assumption that behavior being studied are under full volitional control the extension of the model as proposed by Ajzen, the Theory of Planned Behavior explicitly incorporate perceived behavioral control as an antecedent to behavioral intention (Madden and Ajzen, 1992).

Fig 2: Theory of Planned Behaviour



(Source: <https://www.researchgate.net/figure>)

The theory of planned behavior extends the boundary condition of pure volitional control specified by the theory of reasoned action which is accomplished by including the belief regarding the procession of requisite resources and opportunities for performing the behavior. The more resources and opportunities individual think they possess greater will be the perceived behavioral control over the behavior.

Products satisfy the need or want of a consumer. They are more than tangible objects. Today's consumer view a brand as an important part of a product and branding becomes so strong that no products go unbranded from daily use groceries to medicines. As Ajzen (2011) has opined, "there is no assumption in the TPB model that people carefully and systematically review all the available information before they form an intention to purchase". In line with social psychology research (Petty and Cacioppo, 1986; Carver and Scheier, 1998; Chaiken and Trope, 1999), Ajzen argued that the amount of information processing that people engage while making a purchase decision varies along a range. Hence it has been felt that the study on the importance of branding in addition to TPB model may

help to understand the market sentiment to study the influence of branding which influences the consumer to purchase OTC allopathic analgesic topical medicine.

According to Batra et al. (2012) the influence of brands is so effective in consumer purchase decision making process that the strength of an attitude is logically associated with brand. As an attitude results in more frequent thinking and talking about the brand. Even subjective norms reflect consumer perceptions of whether the feeling of love for a brand is accepted, encouraged or implemented by the consumer's circle of influence. The consumers select brands they believe members of their reference or aspiration group would choose (Karjaluoto et al. 2016). Brands are able to elicit greater brand loyalty when they are able to satisfy consumers' social needs (Vernuccio et al., 2015).

Even though the demand of over the counter allopathic medicines is ever increasing but the theoretical reasons have not been analyzed under the Indian scenario. So the study of consumer involvement has significance because consumers' information search during over the counter medicine purchases is a function of their involvement in the purchase decision.

As the intention is a predictor of actual behaviors, most contemporary theories of human social behaviors utilize intention as an important construct to examine factors that lead to the formation of intention (Ajzen & Fishbein, 2005). Well-known value-expectancy models include the health belief model (Becker et al., 1977). Health Belief Model (HBM) and Theory of Reasoned Action (TRA) were successfully used in the prediction of behavior and intention in a wide range of topics. HBM and TRA were used in predicting behaviors such as dieting (Nejad, 2005) and use of seat belts (Simsekoglu, 2008). From Nejad study it was derived that in predicting the proportion of the variance in dieting and fasting both the models were successful. However, the variance explained in fasting increased when intention was added to the HBM model. Whereas attitude was the strongest predictors of behavioral intention and

intention was the strongest predictor for dieting and fasting for Theory of Planned Behaviour and modified Health Behaviour Model (Hennessy, 2010).

The theory of reasoned action was first developed by Fishbein and Ajzen (1975). Later, Ajzen (1991) extended the model to develop the theory of planned behavior by adding the perceived behavioral control to the model to improve its applicability in partial volitional behaviors. In the latest version of the two theories, Fishbein and Ajzen (2010) renamed the model as reasoned action model. The authors emphasized the addition of the moderating effect of skills, abilities, and environmental factors on the relationship between intention and behavior. The reasoned action model integrates attitude components into a structure that helps explain and predict intention and behavior in a better way.

The theory of planned behavior, are the most powerful and common cognitive models of attitude-behavior relationship in consumer behavior (Ajzen, 2008). Briefly, attitude toward a given behavior is dealt with the evaluation of the likely consequences of the behavior. Subjective norm reflects the likely approval or disapproval of behavior by the subject's friends, relatives, and professional people. Perceived behavioral control deals with the presence or absence of factors that make the behavior easier or more difficult to perform. Furthermore, attitudes, subjective norms, and perceived behavioral control are shown to be related to a set of salient behavioral, normative, and control beliefs about the behavior. Although connected directly to attitude, salient beliefs are not considered as antecedents to attitude. That is because the summed product of behavioral, normative, and control beliefs captures the underlying determinants of attitude, subjective norm, and perceived behavior control constructs (Ajzen, 2008). This conceptualization is useful for exploring the correlations of different salient beliefs with intention and behavior. It helps gain insight into the hidden cognitive foundation to explain certain attitudes, subjective norms, and perceptions of behavioral control (Fishbein & Ajzen, 2010). Lastly, various background

factors influence behavioral, normative, and control beliefs. The theory of reasoned action and theory of planned behavior, which focuses on the constructs of attitude, subjective norm, and perceived control, explain a large proportion of the variance in behavioral intention and predict several different behaviors, including health behaviors (Montaño and Kasprzyk 2008).

The relative importance of the three categories of theoretical constructs (attitude, subjective norms, perceived behavioral control) in determining behavioral intention may vary for different behaviors of consumers and for different populations and different geographical locations. For example, the intention to perform one behavior may be determined by attitude toward the behavior, while other behavioral intentions may be determined largely by normative belief. Similarly, the intention to perform a particular behavior may be primarily under attitudinal influence in one population, while more influenced by normative influence or personal agency in another population.(Kasprzyk, and Montaño, 2001) Thus, to design effective interventions to influence behavioral intentions, it is important first to determine the degree to which that intention is influenced by attitude, subjective norms, perceived behavioral control. Once this is identified for a particular behavior and population, an understanding of the determinants of those constructs can be confirmed.

5. Research Gap

Based on the review of literature, research gaps have been identified where limited research studies have been done on the following areas:

- The majority of the studies have been done regarding efficacy, generic medicines, consumer awareness etc. of prescribed medicines.

- Limited studies have been identified on consumer behavior for allopathic over the counter medicines for analgesic segments in the Indian context.
- There are certain studies globally on over the counter medicines. But results and findings of these global studies will be different from Indian scenario due to the different socio-economic and cultural structures.
- Limited studies that exist on Indian context on over the counter medicines are general studies about consumer behavior. There are no theoretical approaches or significant implications or testing of any consumer behavior models in those studies.
- Theory of Planned Behaviour has been successfully implemented to understand consumer behavior in AIDS control activity, smoking behavior, social power, condom usage, counterfeit drugs in developing countries. But the implication or testing of the model has not been observed in understanding consumer behavior for over the counter medicines.

Though there are studies on the influence of branding and promotion on general medicine globally but those studies cannot be directly considered. Because the marketing, promotion, branding of OTC allopathic analgesic topical medicine is completely different from general medicine under Indian context

6. Research Methodology

The research methodology adopted for this research is described in the following sub-sections: research flow, research design , research objectives , research hypotheses , area of study, sampling techniques, focus group discussions, pilot study, final survey questionnaire for respondents, reliability analysis, exploratory factor analysis are being explained.

6.1 Research Flow

Like any other research, this research also followed the systematical and sequential steps of analysis and field survey. The research objectives were formulated through an exhaustive review of the literatures to study past research work in that domain in order to understand their findings, limitations, gaps and directions for further research. Hypotheses were developed based on the objective of the research. In the next stage, research methodology was finalized which include the development of research instruments in terms of structured questionnaires.

6.2 Research design

The purpose of this research design is to identify the factors influencing the consumer preferences to purchase allopathic over the counter medicines for analgesic segments. Therefore, the descriptive research design has been used as it is deemed to be the most appropriate.

6.3 Research Objectives

Research objectives have been developed from research problem statements in chapter one and review of literature detailed in chapter two. The primary objective of this research was to examine the factors influencing consumer buying behavior with respect to OTC allopathic analgesic topical medicine. In order to support the primary objective specific secondary objectives have been developed. Through these specific secondary objectives, researcher try to understand consumer behavior dynamics, the role of the societal influence, expert opinion influence, marketer influence in the consumer decision making process.

The specific objectives can be further detailed as :

Objective 1	To examine the impact of attitude on the consumers decision-making
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	process while purchasing OTC allopathic analgesic topical medicines.
Objective 2	To analyze the influence of social factors on the consumer decision-making process while purchasing OTC allopathic analgesic topical medicines.
Objective 3	To understand the impact of demographic factors on consumer decision making process while purchasing OTC allopathic analgesic topical medicine.
Objective 4	To evaluate how marketer influences the consumer decision making process with respect to purchase of OTC allopathic analgesic topical medicines.

6.4 Research Hypotheses

To achieve the objectives mentioned above a set of nine hypotheses have been formulated, which have been tested and conclusions are drawn based on the test results. The hypotheses are given below in

Hypothesis 1. Demography has an influence on intention of the consumer to purchase OTC allopathic analgesic topical medicines.

Hypothesis 2. Consumer expectation of favorable outcome belief for OTC allopathic analgesic topical medicines has relationship with personal attitude.

Hypothesis 3. A favorable outcome evaluation of OTC allopathic analgesic topical medicine has an influence on the personal attitude of the consumer.

Hypothesis 4. Personal attitude has an influence on intention of the consumer to purchase OTC allopathic analgesic topical medicine.

Hypothesis 5. Stronger normative belief leads to higher intention of the consumer to purchase OTC allopathic analgesic topical medicine.

Hypothesis 6. Stronger motivation to comply for OTC allopathic analgesic topical medicines leads to higher intention to purchase.

Hypothesis 7. Higher perceived behavioral control leads to a significant impact on intention to purchase OTC allopathic analgesic topical medicine.

Hypothesis 8. Perceived behavioral control is more dominant than attitude and subjective norms in determining behavioral intention.

Hypothesis 9. Availability is a more dominant factor than any other factor in Perceived Behavioural Control.

Hypothesis 10. Purchase intention of consumer is determined by loyalty towards brand of OTC allopathic analgesic topical medicine.

6.5 Area of study and sampling techniques

The target population for the study has been considered on the basis of demographic segmentation. Where the primary consideration was an age in the category of 18 years and above with a minimum educational qualification was of 12th standard.

Confidence interval approach method and subject to variable ratio method have been used to determine sample size. The total sample size finally considered for analysis was 441.

6.6 Focus Group Discussions

A focus group study has been conducted among the selected respondents in order to understand the consumer mindset for purchasing OTC allopathic analgesic topical medicines within a social context. The main purpose was to draw upon the attitude of the respondent and their feeling, belief, experience, the reaction in such a way which would not be feasible in any other method.

A structured questionnaire has been prepared by the researcher and personally administered to respondents to collect primary data. The questionnaire is the main research instrument. The questionnaire has been developed both in English and Bengali for a better understanding of the respondent. A structured questionnaire was formed. The concept of OTC allopathic analgesic topical medicine was explained to the participants. To ensure homogeneity of the group and to use the experience of the respondents, the focus group was formed comprising of three doctors, three pharmacists, two sales executives dealing with OTC allopathic analgesic topical medicines, one psychologist and last member of the group is an expert in the domain of general and OTC allopathic analgesic topical medicines.

6.7 Pilot survey and final questionnaire

After developing a thorough understanding of the consumer perception about purchasing behavior of OTC allopathic analgesic topical medicines, the next step is to generate statements/questions for the questionnaire for the pilot survey. To assess the factors influencing the consumer behavior for purchasing over the counter allopathic medicines thirty respondents were chosen for the pilot study. The questionnaire developed based on the objectives of the research were distributed among the respondents for their feedback. Based on the suggestions of the respondents of pilot study, the corrections were incorporated and reconfirmed before rolling out the final survey questionnaire with maximum factual accuracy.

6.8 Reliability Statistics

The factors that emerged in the questionnaire for the collection of responses were tested for internal reliability using Cronbach's alpha. A reliability coefficient of .7 or higher is considered "acceptable" in most social science research situations. The score is **.813** which is obviously above .7 and are considered to be very strong.

7. Data Analysis

The demography consists of several factors like age, income, gender, occupation, qualification and members in the household. In the quantitative research method, analysis of different variables requires to identify the relationship between a dependent variable and one or more independent variables using regression analysis.

'R square' is defined as coefficient of determination by regression line, in this case the 'P' value is 0.024 which is less than 0.05 at 5% level of significance, 'R' value is 0.33 and adjusted 'R² value is .019 which is very negligible. This implies demographic variables have nominal impact on the purchase of OTC allopathic analgesic topical medicines. In fact, it may be inferred that this variable is not apt for ascertaining frequency of purchase of OTC allopathic medicine. Thus null hypothesis is rejected and research hypothesis is accepted.

For measuring internal consistency and to uncover the underlying structure of large set of variables, to provide evidence that the scale in question is uni-dimensional, additional analyses have been performed. In this research, exploratory factor analysis technique has been used for checking dimensionality. KMO & Bartlett's Test is a measure of sampling adequacy that is recommended to check the case to variable ratio for the analysis being conducted. 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. Here, the value of KMO = .689 and Bartlett's Test of Sphericity = .000. Factor analysis of outcome belief, outcome evaluation, normative belief, motivation to Comply, accessibility, availability, affordability was done.

The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) variables.

Regression analysis and descriptive statistics has been used to determine the relationship between consumer expectation of favorable outcome belief with personal attitude, outcome evaluation with consumer attitude, attitude with frequency of purchase, normative belief with intention of purchase, motivation to comply with intention of purchase, relationship between PBC with intention of purchase, to determine the most dominant factors among availability, affordability and assessability in PBC. To determine loyalty towards a particular brand was statistically verified using Chi-Square Method. Statistical analysis between less frequent users and more frequent users was determined by T-test in order to determine a significance difference between the mean of 2 groups on the basis of different independent variables.

8. Summary of Research Findings

There are limited number of research that have implemented the theory of planned behavior to understand the motivational factors influencing consumers for purchasing OTC allopathic analgesic topical medicine under the Indian context. The reliability and validity of the data have has been tested before proceeding for any statistical analysis. In order to meet the purpose of the study as envisaged in the earlier sections, factor analysis is used to know important factors which insist buyers to purchase OTC allopathic analgesic topical medicines. Concerning the facet - impact Outcome Belief towards purchase decision making process of OTC allopathic topical medicines factors such as; experience about OTC analgesic allopathic topical medicines plays a decisive role in decision making process followed by purchase of OTC analgesic allopathic topical medicine due to previous successful results. Relating to the relevance of outcome evaluation factors such as, quick relief in curing minor health

problems, quick relief in curing chronic health problems, complete relief in minor health problems, provide no relief in curing major health problems, temporary relief in curing my chronic health problems plays the most important role. Attitudes are restricted to those that are salient and therefore easily brought to mind by consumers (Hegner,2017). Thus it can be conclude that overall attitude has a positive influence towards intention to purchase OTC allopathic analgesic topical medicine. These attitudes are more accessible, certain and based on more knowledge (Cooke and Sheeran, 2014). The more positive the attitude towards the behaviour, higher should be the individual's intention to perform it (Armitage and Conner, 2001).

In the context of studying normative belief about consumer behavior for OTC allopathic topical medicine, it has been found that idea of purchasing OTC allopathic topical medicine is supported by friends, idea of purchasing OTC allopathic analgesic topical medicine is supported by colleagues, idea of purchasing OTC allopathic topical medicine is supported by networks on social media i.e Facebook, Twitter etc are the three important factors motivates the intention to purchase. Whereas pharmacists or retailers don't have significant influences among the factors under normative belief. Regarding motivation to comply; consumers feel motivated by the suggestion received from relatives with regards to OTC allopathic analgesic topical medicine plays important role. Under the factors of perceived behavioral control; non availability of allopathic prescription medicine may cause to buy OTC allopathic topical medicine, OTC allopathic topical medicine wouldn't be a option if prescription allopathic medicines are accessible are the dominant factors.

One-Way ANOVA is used to know whether any facet of demographic profile of the consumers has significant impact on the purchasing behavior. Participatory observation method followed in uncovering the logic behind our findings reveals that demography has a nominal impact on consumer purchasing decision making process. In fact, it may be inferred

that this variable is not apt for ascertaining frequency of purchase of OTC allopathic topical medicine .Out of the six facets of demographic profile considered, apart from income none of the factors like gender, age, education, qualification and family member has significant statistical relationship with OTC allopathic analgesic topical medicine purchase. Only income has considerable level of impact on OTC allopathic topical medicine purchase but in a negative direction. Which signify as the income rises consumers prefer more on prescription medicines from doctors and less willing to consume OTC allopathic analgesic topical medicine. However, in-depth study on facet-wise demographic profile on preference may bring forth some exceptional result which may be considered for future research.

On the basis of the research findings from this study, it is inferred that, among all the factors which are categorized under the Theory of Planned Behaviour, perceived behavioral control is the most influencing one for purchasing OTC allopathic topical medicine . Of the different variables which are identified and analyzed under PBC the availability of the OTC allopathic analgesic topical medicines motivates the consumer most for their purchasing behavior. Similarly, attitude of the consumer also has significant influence in purchase decision making process. Whereas the factors under subjective norms has nominal influence in decision making process for purchasing OTC allopathic analgesic topical medicine.

While comparing the above mentioned results with that of the existing literature, the results obtained from this research are in line with that of the existing literature, except few cases of purchasing behaviour towards OTC allopathic analgesic topical medicines. While evaluating the differences among user to lesser user for outcome evaluation it has been observed that only ‘temporary relief in curing my minor health problems’ under outcome evaluation exist a considerable difference in opinion among lesser users and users. Among the factors under normative belief it has been found that ‘my idea of purchasing OTC allopathic analgesic topical medicine is supported by my colleagues and my idea of purchasing OTC allopathic

analgesic topical is supported by my networks on social media' have differences in opinion among the user and lesser users. This difference among user and lesser user is more prominent when the idea of purchasing is supported by social media for purchasing OTC allopathic analgesic topical medicines. Similarly under motivation to comply users and lesser users have differences in opinion when they received suggestion from social media. Among the items under affordability it has been found the differences among opinion among user and lesser user is based on 'higher cost of remedy with prescribe allopathic medicines make me to go for OTC allopathic analgesic topical medicines'. Under availability there is no significant difference in the responses from lesser user to user of OTC allopathic analgesic topical medicines. For accessibility it has been found user and lesser user are differentiating themselves when they try to access OTC allopathic analgesic topical medicines within 1 km from their residence to shopping mall.

9. Application of the Concept in Management

The findings of the research will help the organizations to identify the key factors influencing consumer for purchasing allopathic over the counter medicines in the Indian market.

Some specific suggestions are listed below:

- 1) In India large number of consumers lack the ability to self-diagnose themselves accurately so the marketer should build primary awareness and interest and sometimes educate consumers about OTC allopathic medicines so the companies who are involved in marketing and promotion of OTC allopathic analgesic topical medicines should take elaborative steps in consumer awareness programme about the usage of the drugs and indication of the therapeutic areas along with their adverse effect (if exist).
- 2) When consumers hold hesitant attitudes toward OTC allopathic analgesic topical medicines, high effort should be given by the marketers to remove the discomfort of the

consumers regarding buying OTC allopathic analgesic topical medicines. So, while going for OTC allopathic analgesic topical medicines advertising, pharmaceutical companies should assess the ambivalence of their target consumers' attitude toward buying OTC allopathic analgesic topical medicines.

- 3) The research also helps to understand the varying behavior pattern between the urban and rural consumers. Study shows the availability of the OTC allopathic analgesic topical medicine is a significant factor for OTC allopathic analgesic topical medicines purchase. So OTC allopathic analgesic topical medicines should be made more available. The availability should target all the geographies starting from urban to rural areas.
- 4) Health care organizations can benefit by developing programs to promote greater consumer involvement in OTC allopathic medicine purchase decisions. Their target should be to run the programs to provide consumers with information about the importance of appropriate use of OTC allopathic medicine, and the role that accessible health professionals like pharmacists can help consumers with their nonprescription medicine purchases.

10. Limitations of the Research

Limitations of the research study are as follows:

- The research study is limited to respondent's related to only over the counter allopathic medicines for analgesic topical segment products. The other types of OTC allopathic analgesic medicines users are not being studied in this research project.
- This research was conducted solely in Hooghly district of West Bengal. Therefore the composition of the sample may not be analogous to the wider OTC allopathic medicine consumer population due to the specific region used in the sampling

technique. So, a large volume of samples and multinational studies are needed to investigate the hypothesis.

- The awareness about OTC allopathic analgesic topical medicines with respect to the consumers have changed dramatically during the research period. So, the population size of 441 may be not sufficient with respect to the current scenario.
- Branding is a vast chapter of consumer behaviour. So the amount of research done in the thesis to understand the influence of brands in understanding purchase intention is not sufficient due to paucity of time and money. So an elaborate research is required in this regard.

11. Scope of future research

- This exploratory study focused on consumer involvement in allopathic OTC allopathic medicine purchases in a particular therapeutic segment. Future research should investigate how the product category influenced consumer involvement in the purchase decision making process. The relationships among the factors—consumer involvement, the credibility of the source of information, compliance with a source's recommendations, and post-purchase satisfaction in relation to OTC allopathic analgesic topical medicine purchase and use— is not studied and needs to be investigated.
- One of the future directions of the research is represented by extending the study at the national level. Also, in future paper it would be interesting to study how consumer evaluates their health status and the correlation of this aspect with the frequency with which they buy OTC allopathic analgesic topical medicines with the budget they allocate for pharmaceuticals expenditure.

- Among the 4 Ps' of marketing promotion plays an important role and brand loyalty plays a significant role in repurchase decision making process. A statistical analysis was also done related with brand loyalty; still the researcher is not satisfied with the depth of research related with brand loyalty due to paucity of time and fund. So an elaborative study is required to understand the influence of brand loyalty in OTC allopathic analgesic topical medicine.
- Pharmaceutical companies are constantly changing their marketing strategies towards retailers and chemist in order to promote their respective brands. So future research is required to track any changes in retailer's level.

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