TOBACCO CONSUMPTION BEHAVIOUR OF UNDERGRADUATE STUDENTS IN SELECT COLLEGES IN MIZORAM: A SOCIAL MARKETING PERSPECTIVE

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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UNDERGRADUATE STUDENTS IN SELECT COLLEGES IN MIZORAM:
A SOCIAL MARKETING PERSPECTIVE

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Submitted

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CERTIFICATE FROM THE SUPERVISOR

This is to certify that the thesis entitled **"Tobacco Consumption Behaviour of Undergraduate Students in Select Colleges in Mizoram: A Social Marketing Perspective"** submitted by Mr. Shamim Akhtar (MZU/Ph.D./693 of 03.11.2014) for the degree of Doctor of Philosophy (Ph.D.) of the Mizoram University, embodies the record of original investigation carried out by him under my supervision. He has been duly registered and the thesis presented is worthy of being considered for the award of the Ph.D. degree. This work has not been submitted in the past for any degree in this or any other University or Institute of learning.

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DECLARATION

Mizoram University

November, 2021

I Shamim Akhtar, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the Mizoram University for the degree of Doctor of Philosophy in Commerce.

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[X]

ABSTRACT

Drug Abuse, Alcoholism, HIV and high prevalence of tobacco consumption with early tobacco initiation and young generation's addiction to it are among the facts that paint a contrasting and worrying picture about the otherwise beautiful and peaceful state of Mizoram. According to the World Health Organization, "tobacco is the only legal drug that kills many of its users when used exactly as intended by manufacturers". Tobacco consumption kills more than 8 million people every year– an average of one person every six seconds – and accounts for one in 10 adult deaths worldwide. The six out of eight foremost reasons of deaths in the world is also associated with the consumption of tobacco. Various international agencies and organizations are fighting a tough battle against tobacco use and addiction through various policy interventions and social marketing efforts. The high prevalence of tobacco has been a major concern especially for India's northeastern region and particularly for the state of Mizoram. The consecutive national surveys like GATS 1 and GATS 2, shows that the prevalence and problem of tobacco in Mizoram still remains a major challenge for the society and the future generation of Mizoram. Therefore, this study was carried out with the goal to explore the prevalence, pattern of tobacco consumption among the undergraduate students in select colleges in Mizoram, draw a socio-economic profile of the undergraduate students and the tobacco consumers among them, understand and analyze their tobacco consumption behaviour, explore and understand the role of various organizations for the prevention and control of tobacco consumption and finally make conclusion and recommendations based on the findings of the study from a social marketing perspective. The undergraduate students from select colleges were chosen as a target group for conducting primary research due to their vulnerability towards initiation, experimentation, addiction and future implications regarding tobacco use.

From the collective review of relevant literature, analysis of primary data, and findings of the study, it has been concluded that the local consumption psychology, culture, attitude and behaviour of tobacco users among the undergraduate students is

unique in Mizoram and therefore these aspects should be given due consideration to device effective social marketing strategies for prevention and control of tobacco consumption. Accordingly, a comprehensive social marketing framework has been proposed for tobacco control in Mizoram, which if implemented, may potentially improve the state of overall tobacco control in the state. The specific suggestions which were made for making tobacco control strategies more effective in Mizoram broadly included (a) focusing on public communication and engagement, (b) ensuring participation of various organizations, (c) strengthening existing legal environment, (d) making effective and accessible interventions, and (e) monitoring, feedback and control.

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Introduction

1. 1 Overview of Tobacco and its Consumption

The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 (India Code, 2003) defined "tobacco products" in section 3 (*p*) to include the following:

1. Cigarettes
2. Cigars
3. Cheroots
4. Beedis
5. Cigarette tobacco, pipe tobacco and hookah tobacco
6. Chewing tobacco
7. Snuff
8. Pan Masala or any chewing material having tobacco as one of its ingredients
9. Gutka
10. Tooth powder containing tobacco

The section 3 (*b*) of the same act defined "cigarette" which includes:

(i) any roll of tobacco wrapped in paper or in any other substance not containing tobacco,

(ii) any roll of tobacco wrapped in any substance containing tobacco, which, by reason of its appearance, the type of tobacco used in the filter, or its packaging and labelling is likely to be offered to, or purchased by, consumers as cigarette, but does not include beedi, cheroot and cigar.

The U.S. Food and Drug Administration has defined the term "tobacco product" in section 201(rr) of the Federal Food, Drug, and Cosmetic Act as "any product made or derived from tobacco that is intended for human consumption, including any component, part, or accessory of a tobacco product" (Code of Federal Regulations, 2018). This includes, among other products, cigarettes, cigarette tobacco, roll-your-own tobacco, and smokeless tobacco (Code of Federal Regulations, 2018). Federal

law (section 5702(c) of Title 26 of the United States Code) defines tobacco products as "cigars, cigarettes, smokeless tobacco, pipe tobacco and roll-your-own tobacco". The category of smokeless tobacco means any snuff or chewing tobacco (26 USC 5702: Definitions). Both in smoke and smokeless forms, tobacco consumption can be highly addictive for its users. The 1986 Surgeon General report concluded that smokeless tobacco is an addictive drug similar to morphine and cocaine (Henningfield, Fant, & Tomar, 1997). The leaves of the plants in the genus *Nicotiana* (Pain, 2008) is processed to produce Tobacco (Hoof, 2011) which contain the recreational drug nicotine which is a kind of stimulant and sedative (WHO, 2008; Psychology Today, 2019; Ahmed & Peeran, 2016). It is thought that an interaction between nicotine and MAOI beta-carbolines found in tobacco account for its addictive properties (Smith et al., 2015). Tobacco is generally collected and processed from the plant species *Nicotianatabacum* (Hoof, 2011). Apart from *Nicotianatabacum*, which is commonly used for commercial tobacco production, tobacco is also cultivated from *Nicotianaaffinis, Nicotianarustica, NicotianaSanderae, Nicotianaalatagrandiflora, Nicotiana acuminate, Nicotiana Bigelovii (Indian Tobacco), Nicotianalongiflora, Nicotiananoctiflora, Nicotianasuaveolens, Nicotianasylvestris, Nicotiana Tabacum, Nicotianawigandioides* etc. (Kishore, 2014)

Exhibit 1.1
Cultivated Tobacco

Source: https://tobaccoboard.com/ (Retrieved July 07, 2019)

Tobacco consumption kills more than 8 million people every year (WHO, 2019) – an average of one person every six seconds – and accounts for one in 10 adult deaths worldwide (HealthHub, 2018). It is also associated with six of the eight worldwide

leading causes of deaths (WHO, 2009) and its use is the single most preventable cause of mortality (Australia India Institute, 2012; Reddy et al., 2010; WHO, 2011). If global tobacco consumption is left unchecked, it will lead to more than 8 million deaths every year by 2030 (WHO, 2008). Tobacco has caused an estimated 12 million deaths globally over the past four decades which includes 4.1 million deaths from cancer, 5.5 million deaths from cardiovascular diseases, 2.1 million deaths from respiratory diseases, and 94,000 infant deaths related to mothers smoking during pregnancy (Choudhary, 2001). Besides causing cardiovascular disease and lung cancer deaths, tobacco can cause a range of other type of cancers (Bartal, 2001; Mamtani et al., 2017), coronary heart disease, obstructive pulmonary diseases, peripheral vascular disease, stroke, acid peptic disease (Bartal, 2001), respiratory diseases, poor wound healing, cataracts, infertility and conditions such as premature birth, sudden infant death syndrome, respiratory problems to children born to mothers who smoke (Robbins, 2010). Consumption of smokeless tobacco has been also linked with high incidence of oral cancers (Office of Medical Applications, 1986). According to WHO, approximately 1.3 billion smokers exists worldwide and majority are from countries with medium levels of human development (Esson & Leeder, 2004). In recent times the tobacco industry's target and focus has shifted from developed countries to the developing countries due to effective, on-going tobacco control measures in several developed countries (Jatoi et al, 2009) and the opportunity to capture larger potential markets (Australia India Institute, 2012). Therefore, tobacco use is on rise specifically in low- and middle income countries (Esson & Leeder, 2004). According to one study, the total money spent on tobacco consumption in Bangladesh can be effectively used to provide food to 10.5 million children and remove them from their present state of malnutrition (Efroymson et al., 2001). The poorest households in Vietnam spent 2.2 times more on cigarettes than on education and 1.6 times more on cigarettes than on healthcare (Efroymson et al, 2011). In countries like Bulgaria, Egypt, Indonesia, Myanmar and Nepal, the low income households spend 5% to 15% of their disposable income on tobacco (Esson & Leeder, 2004). India is the second largest producer, third largest exporter (Business Wire, March 20, 2019) and second largest consumer of tobacco in the world (Jhanjee, 2011; WHO India, n.d.). The total number of tobacco users in India

exceeds the combined population of Indonesia and Canada, and in terms of population, this number would be equivalent to the fourth largest country in the world (Lal et al., 2015). The Global Adult Tobacco Survey (GATS) Report 2016-2017 has estimated that in India 28.6% adults are active users of tobacco (Ministry of Health and Family Welfare, Government of India, 2017). In spite of adopting tobacco control policies, India has one of the highest tobacco-related morbidity and mortality in the world (Mohan & Lando, 2016). It was estimated in a study that there were close to 100 million premature deaths of adults aged 35 years or more in India during last 100 years from 1910 to 2010 due to smoking (Lal et al., 2012). The consumption of tobacco in India has a complex consumption pattern that varies across region, demographics, socio-economic status and other factors (Lal et al., 2015). The variety of tobacco products being consumed is greater compared to elsewhere, causing additional public health issues such as high incidence of oral cancer due to smokeless tobacco consumption (McKay et al., 2015; Shimkhada & Peabody, 2003). The percentage allocation of tobacco users is shown in Exhibit 1.2.

Exhibit 1.2
Percentage of Tobacco Users in India
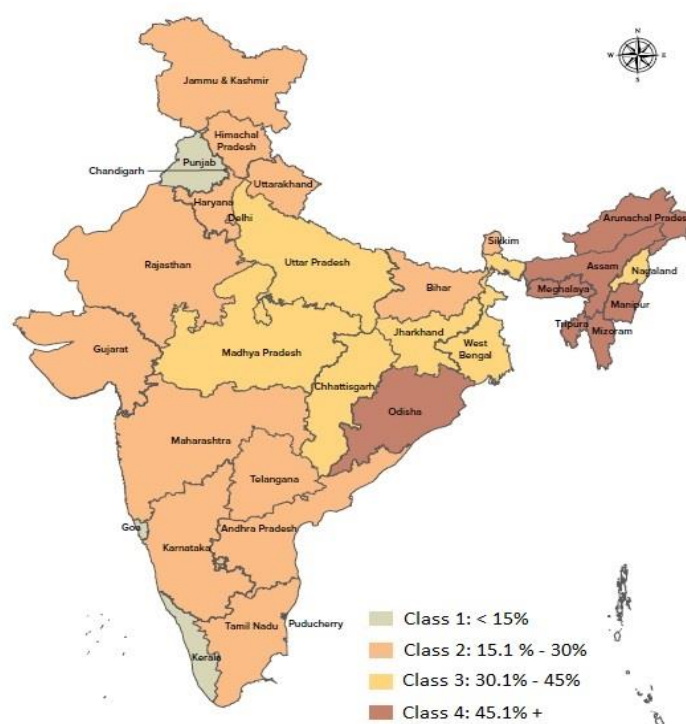
Source: GATS 2 India, 2016-17

Besides the direct consumption of tobacco or smoking which puts the users at the risk of suffering from various illness and serious health conditions (Reddy & Gupta, 2004), exposure to second hand smoke (SHS) can also cause serious health problems such as heart disease, lung cancer (Ghany, 2006), nasal sinus cancer, middle ear infections, asthma, respiratory illnesses (Robbins, 2010), childhood respiratory infections (Mathew et al., 2011), tuberculosis (WHO, 2014), pregnancy related complications (Do et al., 2018) etc. It may also be pointed that apart from all the negative health implications of tobacco use, there are also various accounts of medicinal uses of tobacco being practiced traditionally across the world (Arowolo 2015; Pain, 2008). However, much of these medicinal usages of tobacco still remain to be tested and validated scientifically and the domain of medicinal use of tobacco needs further exploration (Pain, 2008). Therefore, it may be concluded that tobacco consumption in its present forms is a huge problem in India and it has a wide range of implications like social, health, economic, ethical etc. For some reason, the consumption of tobacco in India is continuing to increase despite the existing tobacco control policy (Mohan et al., 2018).

1.2 Historical Background of Tobacco Consumption

Tobacco plants were known to be cultivated first by Native Americans around 6000 BC. The indigenous Americans used to smoke tobacco during religious ceremonies and for medicinal purposes (Randall, 1999; Sadik, 2014). However, tobacco and its uses were largely unknown to the outside world during that early period until in 1492, when Christopher Columbus received dried tobacco leaves as gift from the American Indians (Randall, 1999; Reddy & Gupta, 2004). This was the beginning when tobacco and smoking was introduced to the Europeans. Around 1531, Europeans started cultivating tobacco in Central America (Tobacco-Free Life, 2016). The use of tobacco became popular with many Europeans who started believing that tobacco has significant healing properties (Randall, 1999). In 1571, a Spanish doctor named Nicolas Monardes claimed in his book that tobacco could cure 36 health problems (Randall, 1999). In the following century, tobacco became a popular

commodity for trade and also used as a cash-crop (Jenner, 2014). The European doctors even started to publish papers on medicinal properties and health benefits of tobacco (Charlton, 2004). In 1614, tobacco shops started opening across Britain selling Virginia blend tobacco (Tobacco-Free Life, 2016). However, there were some criticism and actions against tobacco during that time. Like in 1602, King James I condemned tobacco in his treatise *A Counterblast to Tobacco* (1604) and in 1624 the Pope Urban VIII banned the use of tobacco in holy places (Borio, 2001). For a brief period, from 1633 to 1647, Turkey introduced death penalty for tobacco use (Borio, 2001). Around middle of 17th century, European settlers started cultivating tobacco in Africa (Tobacco-Free Life, 2016). The first American tobacco companies open their doors in Virginia in 1730 (Borio, 2001). In 1760, Pierre Lorillard started a company in New York City to process tobacco, cigars, and snuff (Borio, 2001). In 1847, Philip Morris started selling hand-rolled Turkish cigarettes and opened their first shop in Great Britain (Borio, 2001). In 1849, J.E. Liggett and Brother was established in St. Louis, Mo (Borio, 2001). In 1861, the first American cigarette factory produced 20 million cigarettes and by 1890, 4 billion cigarettes were sold (Tobacco-Free Life, 2016). In 1902, British Philip Morris sat up New York headquarters to market and sell cigarettes in America including their iconic brand Marlboro (Borio, 2001). By 1924, 73 billion cigarettes were sold in the US (Borio, 2001). In 1925 Philip Morris and American Tobacco Company started targeting cigarettes to females and the number of female teenage smokers tripled within just 10 years, from 1925 to 1935 (Randall, 1999). The popularity of tobacco and smoking also has a strong connection with war. For example, during the First World War cigarettes were called as the "soldier's smoke". And during Second World War cigarettes sales were at an all-time high where they were supplied to the soldiers as ration and many companies sent millions of free cigarettes to the soldiers and thus strategically creating large number of future loyal customers (Randall, 1999).

The first reported connection between smoking and lung cancer occurred in 1912 when Dr. Isaac Adler strongly suggested that lung cancer is related to smoking (Borio, 2001) and in 1947, Lorillard chemist admits that there is enough evidence that smoking can cause cancer (Tobacco-Free Life, 2016). In 1967, the William H.

Stewart's Surgeon General's Report provides evidence that links smoking to lung cancer and heart problems (Borio, 2001). From 1970 to 1990 tobacco companies faced many lawsuits and many government imposed restrictions on their advertising and marketing. During this time many tobacco companies also started to diversify into other businesses, like for example Phillip Morris bought the Miller Brewing Company and RJ Reynolds Tobacco Company became RJ Reynolds Industries and invested in other unrelated industries such as transportation, energy and consumer products (Alonso, 1988). In 1996, researchers find conclusive evidence that tobacco damages a cancer-suppressor gene (Borio, 2001). For the first time in history a tobacco company CEO, Bennett Lebow admits in 1997 on trial that cigarettes and related tobacco products cause cancer (Levin & Stolberg, 1997). From 1990 onwards, organized efforts were carried out by governments of many countries and international agencies to counter the dangers of tobacco. Strict laws like banning of public smoking and restriction on tobacco marketing came into existence in many countries especially in the west. It has been observed that around 80's and 90's most of the western tobacco companies started to heavily focus outside the US and European market and subsequently gained significant markets in developing and less developed countries of Asia (Randall, 1999). Exploring alternative crop options are often being suggested for supply-side management in tobacco control approach (Hussain, 2008). Researchers have explored the viability of replacement crops that ranges from traditional fruits, vegetables and native wildflower seeds in countries like US and Canada (Wales, 2008; Norcini, 2008). At present, tobacco industries continue to be major industrial forces around the world with substantial revenues earned due to increased demand specifically from low- and middle-income countries. Philip Morris International, British American Tobacco, Japan Tobacco International, and Imperial Tobacco are the four largest multi-national tobacco companies in the world and the China National Tobacco Corporation is the largest state monopoly having largest share of the global tobacco market (Ekpu & Brown, 2015).

In India, tobacco was first brought by the Portuguese sailors through the coast of Goa around the 16th century (Kishore, 2014; Reddy & Gupta, 2004; Shimkhada & Peabody, 2003; Rath, 2010) and was initially grown in Kaira and Mehsana districts

of Gujarat (Chikkala, 2014). There is an interesting story of how the *hookah* was invented. Emperor Akbar was offered tobacco by the Portuguese and there was a debate in the court of how the emperor could inhale that unknown substance. The royal hakim suggested that the tobacco will be fit for consumption for the emperor only if its smoke passes through water and that is how the concept of hookah came into existence (Chattopadhayya, 2000; Chadda & Sengupta, 2002; Soni, 2012). By 1610 tobacco became a mass phenomenon and extensively used across all socio-economic and gender groups (Bhonsle et al, 1992; Soni 2012). The Indian subcontinent was also found to be suitable for a variety of tobacco cultivation and soon tobacco was not only produced for domestic supply but also exported to the European countries. In 1901, the British and American Tobacco Company expanded their trade in India ad set up three companies which together, in 1906, became the first Indian cigarette company called the Imperial Tobacco Company (Reddy & Gupta, 2004). By 1930, several other cigarette manufacturing companies came into existence like the Vazir Sultan Tobacco Company Limited in 1930 at Hyderabad, The Golden Tobacco Limited Company in 1930 at Bombay, and Godfrey Cigarette Manufacturing Company in 1936 at Delhi (Chikkala, 2014). In 1945, the Indian Central Tobacco Committee (ICTC) was set up to look after tobacco cultivation in India which established the Central Tobacco Research Institute in 1947 for undertaking research on cigarettes and tobacco (Reddy & Gupta, 2004). In 1956, the Tobacco Export Promotion Council (TEPC) came into existence to take care and promote tobacco exports and in 1966 the Directorate of Tobacco Development was set up to collect information on production, trade, exports, marketing and consumption of tobacco in India (Reddy & Gupta, 2004). To regulate the production, promote overseas marketing and control recurring instances of imbalances in supply and demand of tobacco, the Government of India established the Tobacco Board under the Tobacco Board Act of 1975 which replaced the TEPC. The board came into existence on 1st January 1976 with headquarter located in Guntur, Andhra Pradesh (Chikkala, 2014). The mission of the Tobacco Boards is "to strive for the overall development of tobacco growers and the Indian Tobacco Industry" (Tobacco Board, 2014). India is the 2nd largest producer of tobacco in the world with an estimated annual tobacco production of 800 million kilograms and is also the 3rd

largest producer of Flue-Cured Virginia (FCV) tobacco which is a variety of tobacco used in cigarettes. This is in spite of the fact that only around 0.24% of India's total cultivated land is used for tobacco cultivation (The Tobacco Institute of India, n.d.). In India, tobacco and tobacco products earn approximately ₹20,000 and ₹5000 crores respectively every year to the national exchequer by way of excise duties and foreign exchange (Tobacco Board, 2014).

Tobacco consumption is often being considered as a cultural practice in many parts of India and has been linked with social status and commonality (Rath, 2010). For example, in Kerala, tobacco was offered during big celebrations like marriages (Thankappan & Thresia, 2007) as a cultural tradition. In Northeast India, Tobacco consumption may also have its roots to the long tradition of opium smoking, which was outlawed in the 1960's (Transnational Institute, 2011). Similarly, there is also a definite cultural dimension to tobacco use in Mizoram. In Mizoram, there exists a long and still highly prevalent tradition of consuming *Kuhwa*, which is a combination of betel leaf, raw areca nut and slaked lime. Though *Kuhwa* generally does not contain tobacco, but it is being regarded as highly addictive. It may be pointed that areca nut has been considered as the fourth most psychoactive substance in the world after caffeine, alcohol and nicotine (Gupta & Ray, 2004a). Historically the consumption of tobacco in Mizoram has its roots in agricultural practices. It is generally said that during olden days when the Mizos used to work in the fields they used to smoke tobacco to repel insects and mosquitoes. Even, the women were known to consume the ashes of rolled *zial* to avoid nausea and feeling of discomfort during the early stage of their pregnancy and tobacco leaves were kept home as a first aid disinfectant (Hatzaw, 2014). There were three types of tobacco products that were consumed by Mizos; these were smoking of nicotine roll (Vaihlozial/Zozial), smoking of water pipe tobacco (Vaibel) and taking of tobacco instilled water orally (Tuibur) (Hatzaw, 2014). Exhibit 1.3 shows the various traditional smoking and tobacco consumption tools used in Mizoram.

Exhibit 1.3
Traditional Smoking and Tobacco Consumption Tools Used in Mizoram

Source: Public display at Mizoram State Museum (Photographed on May 2, 2015 with permission)

Foreign tobacco products like cigarettes and cigars became available in Mizoram during the colonial period and continued to grow in popularity thereafter. References of tobacco can be found in number of Mizo folklores, art and music. Smoking of pipes was an old and common practice among the Mizos and there are many candid references of the same which can be found; such as in this following excerpt from a folktale titled *'Mualzavata'* (Pachuau, 2008):

> "One day Mualzavata was smoking a pipe. He placed his pipe in the narrow pass between two hills and some of his friends saw him doing so and they decided to play a practical joke on him. Soon they stuffed the pipe with bamboo and several other pieces of wood that were waiting to be burnt for jhum cultivation. Mualzavata was oblivious to the prank and so he picked up his pipe and puffed away at it with a vehemence. The skies began to darken every time he puffed away and the people became alarmed and cried, "Hey… it is about to rain.""

In traditional Mizo society, it was considered important for women to posses the skill preparing *Zozial* (Vanlalngilneii & Thamilarasan, 2016). One popular song

composed by Pu Vankhama in 1930 glorifies smoking of Mizo tobacco and it goes like this (Chawngthanmawii, 2014):

"Mizo Vailhlo hi zuk ching la
(Cultivate the habit of smoking Mizo tobacco),
Tuiber mai, Aw Sangau, Zurpui leh Kauzing
(The sweetest being Sangau, Zurpui and hauzing brand):
Sen a tlem a hriselna Zoram thil ani bawk
(It is economical, harmless, and besides it is Zoram origin),
Tui ber ah chuan lengi zial tr ang che
(But for the sweetest flavour, ask your fiancé to roll it)"

The practice of tobacco consumption, especially cigarette smoking was further reinforced among the youths and in Mizo culture and lifestyle through the advent of television and movies during the latter half of 20th century. Thus, the embracing of tobacco consumption, particularly smoking eventually became distinctive part of a popular culture in Mizoram. According to Vanlalngilneii and Thamilarasan (2016), tobacco is an important part of Mizo society that "has become an object of commensality, a token of friendship and generosity".

Though traditional way of consuming nicotine through tobacco still remains to be popular among nicotine users, but newer ways of nicotine consumption like e-cigarettes are also on the rise. The increased demand for such non-combustible tobacco products is generally attributed to factors like decline of traditional cigarette sales in some countries coupled with the imposition of smoke-free laws (Agaku & Ayo-Yusuf, 2014). Therefore, during the last decade, e-cigarettes or products categorized under electronic nicotine delivery systems (ENDS) are becoming increasingly available in the market. According to Grana et al. (2014), "Electronic cigarettes (e-cigarettes) are products that deliver a nicotine-containing aerosol (commonly called vapor) to users by heating a solution typically made up of propylene glycol or glycerol (glycerin), nicotine, and flavouring agents". Though such devices were developed way back in 1965 (Lichtenberg, 2017), but the first commercially successful e-cigarette was created only in 2003 in China and later e-

cigarettes were introduced in 2006 in Europe and in 2007 in the US (Lichtenberg, 2017; CASAA, n.d.). According to the market research organisation, Euromonitor International, the global e-cigarette market is estimated to rise 17 times by 2030 (Rawat, 2019).

Exhibit 1.4
Type of Electronic Cigarette Products

Product	Description	Some Brands
Disposable e-cigarette	Cigarette-shaped device consisting of a battery and a cartridge containing an atomizer to heat a solution (with or without nicotine). Not rechargeable or refillable and is intended to be discarded after product stops producing aerosol. Sometimes called an e-hookah.	NJOY OneJoy, Aer Disposable, Flavorvapes
Rechargeable e-cigarette	Cigarette-shaped device consisting of a battery that connects to an atomizer used to heat a solution typically containing nicotine. Often contains an element that regulates puff duration and /or how many puffs may be taken consecutively.	Blu, GreenSmoke, EonSmoke
Pen-style, medium-sized rechargeable e-cigarette	Larger than a cigarette, often with a higher capacity battery, may contain a prefilled cartridge or a refillable cartridge (often called a clearomizer). These devices often come with a manual switch allowing to regulate length and frequency of puffs.	Vapor King Storm, Totally Wicked Tornado
Tank-style, large-sized rechargeable e-cigarette	Much larger than a cigarette with a higher capacity battery and typically contains a large, refillable cartridge. Often contains manual switches and a battery casing for customizing battery capacity. Can be easily modified.	Volcano Lavatube

Source: Grana et al., (2014)

In India e-cigarettes was introduced about 10 years back and it rapidly gained popularity especially among the youth (Yadav, 2019). Though the e-cigarettes and ENDS are often promoted and perceived as safer alternative to traditional smoking due to absence of smoke which may be less harmful for the respiratory system (Foulds et al., 2003), still there is considerable debate over the merits and disadvantages of them as harm reduction approaches (Zatoński & Stokłosa, 2017). . One research concluded that e-cigarettes contain lower levels of toxins than combustible cigarettes (Goniewiczet al., 2014) and other suggested that intensive use of e-cigarettes may help in cessation of combustible cigarette use (Biener & Hargraves, 2014). However, it has been also argued that in reality users of e-

cigarettes are at the same risk of contracting lung diseases and cancer as conventional cigarette users (Yadav, 2019) and such products may pose serious health threat due to their higher nicotine content and presence of many other harmful ingredients such as lead, cadmium, nickel, formaldehyde, hydrocarbons etc (Lichtenberg, 2017). The companies selling ENDS products generally promote them as 'less risky' alternative to conventional smoking which can also be consumed in public places where smoking is banned (Yadav, 2019). According to Nguyen and Aamodt (2019), any claims of e-cigarettes as substitute or support for quitting conventional smoking is unsupported by any scientific evidence till date. In fact, there is a great likelihood that users of ENDS may eventually become dual users of both conventional smoking and e-cigarettes (Agaku et al., 2013; Pearson et al., 2012; Yadav, 2019). Use of alternative tobacco products may also serve as a gateway towards conventional cigarette smoking (Dutra & Glantz, 2014; Klesges et al., 2010; Leventhal et al., 2015). In recent times the Government of India has considered banning e-cigarettes and other electronic nicotine delivery systems (ENDS), as recommended by the Indian Council of Medical Research (ICMR), which argued for a "complete prohibition on ENDS and e-cigarettes in India in the greater interest of protecting public health, in accordance with the precautionary principle preventing public harm from a noxious agent" (Yadav, 2019). Accordingly, on 18th September, 2019, the Government of India announced its decision to ban e-cigarettes in the country by introducing the Prohibition of Electronic Cigarettes (production, manufacture, import, export, transport, sale, distribution, storage and advertisement) Ordinance, 2019 (Rawat, 2019). However, according to Greg Connolly, the real public health concern for the future may not be e-cigarettes but next generation products, such as the Marlboro IQOS, or the R.J. Reynolds VUSE FOB which combines drug delivery with iPhone-like capacity, internet connectivity and digital marketing tools, allowing customized delivery of nicotine for its users (Zatoński and Stokłosa, 2017).

1.3 Tobacco Consumption in India

The use and consumption of tobacco in India is a complex problem because of the diverse patterns in which tobacco is consumed and a consequential burden of tobacco

related deaths and diseases in India (Gupta & Ray, 2004b). The consumption of tobacco also significantly varies across states and regions in India (Singh & Ladusingh, 2014). The different forms in which tobacco is consumed in India includes Cigarette, Beedis, Hookah, Cigar, Pipe smoking, Khaini, Gutkha, Zarda, Paan Masala, etc (Shimkhada & Peabody, 2003; Soni, 2012). Tobacco consumption prevalence in multiple forms in India presents an emerging, significant and growing threat to the health of the adolescents and several factors like peer pressure, exposure to tobacco use in the family, easy access, low cost etc contributes towards the initiation, experimentation and addiction to tobacco among the youth (Soni, 2012).

The first nationally representative household survey to collect data on tobacco consumption in India was the 52nd National Sample Survey conducted by National Sample Survey Organization in 1995-1996. The survey revealed that the prevalence of tobacco use in any form is 51.3% among men and 10.35% among women (Jandoo & Mehrotra, 2008; Jhanjee, 2011). The National Family Health Survey 3, conducted in 2005-2006 also revealed that 57% of males and 11% of females aged 15 to 49 use tobacco in any form (Jhanjee, 2011). According to India GSPS (Global School Personnel Survey) 2006, North-Eastern region still have the highest tobacco consumption (42%) on school premises/property by school personnel, in spite of the fact that 37.3% of the schools in the North-East follow tobacco-free policy. In the same survey 34.3% school personnel from North-East reported using non-smoking tobacco products and 30.2% school personnel reported cigarette smoking. In both the cases, tobacco consumption is found to be highest in India among the school personnel from North-East (Sinha, 2006). According to India GYTS (Global Youth Tobacco Survey) 2006, northeast India also has the highest early initiators to smoking, where 44.9% of cigarettes smoker's age of initiation to smoking is below 10 (Sinha, 2006). North-East also ranks highest in terms of tobacco users in the age group of 13 to 15 years where 18.2% students were found to be smokers of cigarettes and 20.7% students were found to be users of other tobacco products (Sinha, 2006).

The first round of Global Adult Tobacco Survey (GATS) in India was carried out during 2009-2010 by the International Institute for Population Sciences, Mumbai on

behalf of the Ministry of Health and Family Welfare, Government of India with technical support from the US Centers for Disease Control and Prevention (CDC), the World Health Organization, the Johns Hopkins Bloomberg School of Public Health and the RTI International (International Institute of Population Sciences, 2010). The second round of GATS was conducted during August, 2016 to February, 2017 by Tata Institute of Social Sciences, Mumbai, for the Ministry of Health & Family Welfare, Government of India (WHO, 2018). A multi-stage sample design was used for both rounds of GATS. From each of the sampled household, one household member of 15 years of age or older was randomly selected for individual interview. In the first round 69,296 individual interviews were completed with an overall response rate of 91.8%. In the second round, a total of 74,037 individual interviews were completed with an overall response rate of 92.9% (WHO, 2018). Highlights from the findings of the survey may be categorized under the following:

1. **Tobacco Use:** Currently there are 266.8 million adult tobacco users that is 28.6% of all adults who consumes tobacco in any form. Out of all adult tobacco users, 42.4% are men and 14.2% are women. Currently 10.7% (99.5 million) of all adults smoke tobacco out of which 19.0% are men and 2.0% are women. 21.4% (199.4 million) of all adults currently use smokeless tobacco out of which 29.6% are men and 12.8% are women.

2. **Cessation:** There are 55.4% of current smokers and 49.6% of current smokeless tobacco users who are planning or thinking of quitting. There are 48.8% of current smokers and 31.7% of current smokeless tobacco users who were advised by health care provider to quit smoking or use of smokeless tobacco.

3. **Secondhand Smoke:** There are 38.7% and 30.2% of adults who were exposed to second hand smoke at home and at their work place respectively. There are 7.4% of adults who were exposed to second hand smoke at restaurants.

4. **Media:** There are 19.2% and 18.3% of adults who noticed smoking tobacco and smokeless tobacco advertisement. There are 68.0% and 59.3% of adults

who noticed anti-smoking and anti-smokeless tobacco information on television or radio respectively.

5. **Knowledge, Attitudes & Perceptions:** There are 92.4% and 95.6% of adults who believed that smoking or use of smokeless tobacco causes serious illness.

Exhibit 1.5
Comparison of GATS 1 & GATS 2
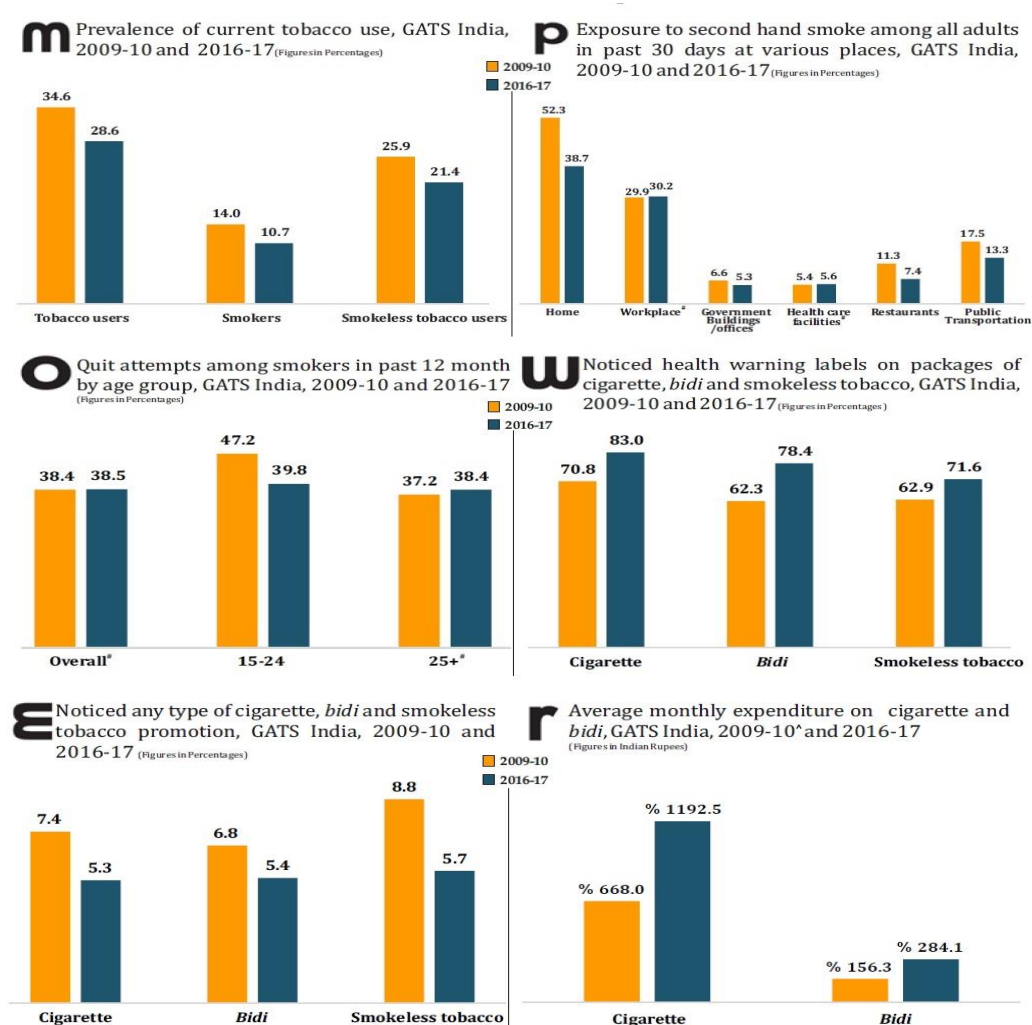
Source: Global Adult Tobacco Survey Fact Sheet India 2016-17 (WHO, 2018)

1.4 Tobacco Consumption in Northeast India

The northeastern part of India comprises of eight small states that includes Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

This entire northeastern region covers almost 8 per cent of India's total land mass and is distinct in terms geography, culture and socio-economic factors. The northeastern states together as a region is having highest prevalence of tobacco use in India (Dutt, 2018). The Northeast region has been covered extensively in the Global Adult Tobacco Survey during 2009-2010 and 2016-2017. The surveys highlighted that in some northeastern states, like Manipur, Assam, and Tripura, the overall prevalence of tobacco use among the population has increased since the last GATS was carried out first time (Times of India, November 25, 2017). One of the most worrying factors about the tobacco prevalence in Northeast is that there is a high percentage of young tobacco users in the region. The adults in the north-east region of India are among the most vulnerable population subgroups in India (Singh & Ladusingh, 2014). According to Sulabha Parasuraman, the Consultant for GATS 2 and a Faculty Member at the Tata Institute of Social Science, "The exact reason so as to why minors in this region are using tobacco more than their counterparts in other parts of the country is yet to be ascertained. Maybe it is due to the cultural and traditional acceptance of tobacco. Minors here are seeing their adults resorting to the use of tobacco and are influenced by it" (Times of India, November 25, 2017). Some of the highlights on Northeast India from the Global Adult Tobacco Surveys of 2009-2010 and 2016-2017 have been presented below:

1. Tripura leads in terms of tobacco consumption in the country with 64.5% of its population using various types of tobacco products, which has increased from its earlier record of 55.9%. This is an increase of 8.6 percentage points over the state's prevalence in 2009-10 (Dutt, 2018).

2. The prevalence of current tobacco use among all age groups in Manipur, Tripura and Assam recorded 55.1%, 64.5% and 48.2% respectively. The prevalence went up in Manipur by 1 percentage point and went up in Assam by 8.9 percentage points, from 39.3% to 48.2% (Dutt, 2018).

3. With 48.5%, Tripura has the highest prevalence of smokeless tobacco users and with 34.4%, Mizoram has the highest number of smokers (Dutt, 2018).

4. Sikkim achieved rapid progress by registering a decline from 41.6% to 17.9% which is lower than the national average (The Morung Express, November 27, 2017).

5. While Sikkim, Mizoram and Meghalaya achieved remarkable progress in mitigation of tobacco use, Arunachal Pradesh and Manipur achieved no major progress (The Morung Express, November 27, 2017).

6. There are more tobacco consumers in all forms in the 15 to 17 years age group in the northeast compared to anywhere in the country. The national tobacco prevalence in this age group is 4.4%. Mizoram tops the table where 27% of the population in this age bracket is a tobacco-user contrasting Sikkim which recorded zero users. The minor consolation in this regard for Mizoram is that it had recorded a higher rate (35.4%) in the GATS 1 survey of 2009-10. Sikkim on the other hand had 11.6% users in the last survey (Times of India, November 25, 2017).

7. Only Arunachal Pradesh showed an increase in tobacco users among people aged 15 to 17 years from 14.3% recorded in GATS 1 to 25.1% as recorded in the latest survey. Lagging behind Mizoram and Arunachal Pradesh are the sates like Meghalaya with 12.6% users, Tripura with 11.6% users, Nagaland with 11.3% users, Assam with 9.1% users and Manipur with 9% users (Times of India, November 25, 2017).

1.5 Tobacco Consumption in Mizoram

Mizoram has gained recognition for doing well in certain areas of public health like becoming the best performed state in the country in terms of percentage of underweight children below 5 years of age according to the National Family Health Survey 4 (2015-2016) and topping the Health Index in the small States Category and ranked second among all states according to "Health States, Progressive India" report of NITI Aayog and the World Bank Group which was released on 9[th]February 2018 (Planning & Programme Implementation Department, Government of Mizoram, 2018). However, there remain many challenges to public health in Mizoram. Firstly, the "Aizawl Syndrome" that is, Mizoram has been struggling to have adequate health

infrastructure in the state, especially because of the fact that most modern healthcare facilities are largely concentrated in and around the Aizawl city and thus people from remote places does not have proper access to them (Chakraborty, 2017). And secondly, the high incidences of life-threatening diseases like Cancer, HIV, AIDS etc. Moreover the incidences of drug abuse and alcoholism are also high among the Mizo population.

Mizoram tops in highest cancer cases in the country with nearly 1,400 new cancer cases and nearly 700 deaths reported every year (Karmakar, 2018). According to the Department of Economics and Statistics, Government of Mizoram (n.d.), cancer was ranked as the second most killer disease after malaria killing 600 people in the year 2006 alone. According to a study conducted by the doctor on males in Mizoram between 1994 and 1998, cancer afflicted 347 men per 100,000 which was much higher than ICMR's 1996 figures of 79.3 men per 100,000 in Chennai, 74.5 men per 100,000 in Delhi and 36.7 men per 100,000 in the rural areas of Maharashtra (Varshney, 2015). Mizoram, thus, has the infamous distinction as being the 'cancer capital of India. According to the Population Based Cancer Registries (PBCR) report, released in May 2016 in ICMR, New Delhi, there were on an average 1,552 new cancer cases per year in Mizoram (Bhonde, 2016). According Tonsing et al (2018), "The cause of such high incidence rates of these cancers may be inherited or genetic and environmental factors such as life style and food habits, especially high consumption of tobacco and alcohol". Therefore, there is a need for further research to explore any possible genetic susceptibility towards cancer (Ankathil, 2010) which may get aggravated due to tobacco consumption particularly among Mizo population.

According to GATS India Report 2016-2017, Mizoram has the second highest prevalence of tobacco users at 58.7%, which is more than double the national average of 28.6 per cent in the country (Ministry of Health and Family Welfare, 2017; Khojol, 2018; The Morung Express, May 2, 2018). According to the earlier GATS India Report of 2009-2010, Mizoram ranked first, having the maximum percentage of tobacco users (67.2%) in the country. In Mizoram, various types of

tobacco consumption can be observed, both in smoke (*Cigarette and Zial or local cigar*) and smokeless (*Tuibur or liquid tobacco, Sahdah, Khaini, Zarda, Gutkha* etc.) forms. However, the GATS 2 India Report 2016-2017 shows a significant decline in tobacco use prevalence from 67.2% (GATS-1) to 58.7% (GATS-2) (The Morung Express, November 27, 2017; Khojol, 2018; Health & Family Welfare Department, Government of Mizoram, 2018). According to GATS 2 India Report 2016-2017, 25.1% of the tobacco users in Mizoram use only smoke tobacco, 24.3% uses only smokeless tobacco and 9.2% consumes both smoke and smokeless tobacco together. In terms of gender among the adult smokers, 54% were males and 14.3% were females. Similarly for smokeless tobacco users, 52.4% were males and 21.3% were females (The Morung Express, November 27, 2017).

As part of the Global Adult Tobacco Survey, Mizoram has been covered extensively in the two surveys. The first round of GATS was conducted between June 2009 and January 2010. The second round of GATS was conducted between August 2016 to February 2017 by Tata Institute of Social Sciences, Mumbai for the Ministry of Health & Family Welfare, Government of India (Ministry of Health & Family Welfare, Government of India, 2018). The major findings from the Global Adult Tobacco Survey (GATS 2) India 2016-2017 Report in connection with its 2009-2010 report have been summarized below:

1. Mizoram has the second highest prevalence of tobacco use among all the States in India at 58.7%, which is more than double of the national average at 28.6% (Khojol, 2018; The Morung Express, May 2, 2018).

2. In general the tobacco consumption in Mizoram has come down from 67.2% to 58.7% registering 8.5 per cent decrease. Also from GATS 1 to GATS 2, the prevalence of smoking and smokeless tobacco usage has decreased by 5.3% and 7.2% respectively (Ministry of Health & Family Welfare, Government of India, 2018).

3. The maximum percentages of smokers are still from Mizoram. Out of the 34.4% adult smokers in Mizoram, 54.1% are men and 14.3% are women (Ministry of Health & Family Welfare, Government of India, 2018).

4. Mizoram is still having the highest tobacco users among all states in India in the age group of 15 to 17. 27% of its population in the age group of 15-17 is a tobacco-user, which is way above the national average of 4.4%. It has however come down since GATS 1 survey of 2009-2010, when 35.4% of Mizoram's population in the 15 to 17 age group were tobacco users (Times of India, November 25, 2017).

5. 25.1% of the tobacco consumers in Mizoram used smoke tobacco, while 24.3% used smokeless tobacco and 9.2% used both (The Morung Express, November 27, 2017).

6. 64.9% of men, 52.4% of women and 58.7% of all adults in Mizoram either smoke tobacco and/or use smokeless tobacco. 54.1% of men, 14.3% of women and 34.4% of all adults currently smoke tobacco. 21.3% of men, 46.0% of women and 33.5% of all adults currently use smokeless tobacco (Ministry of Health & Family Welfare, Government of India, 2018).

7. Consumption of smoke tobacco decreased by 5.3%, while smokeless tobacco decreased by 7.2% (The Morung Express, November 27, 2017).

8. The percentage of tobacco consumption among youths in the age group of 15 to 17 years registered declining trend as it was decreased from 35.4% in GATS 1 to 27.0% in GATS 2 (Ministry of Health & Family Welfare, Government of India, 2018).

9. Age of initiation of tobacco use was 17.4 years in GATS 1 which has increased to 17.8 years in GATS 2 (Ministry of Health & Family Welfare, Government of India, 2018).

10. The percentage of people exposed to second hand smoke at home, work place and public places has reduced from 96.5% to 84.1%, 64.6% to 44.4% and 27.3% to 18.2%, respectively (Ministry of Health & Family Welfare, Government of India, 2018).

11. In Mizoram, the monthly expenditure by current cigarette smokers on cigarettes has come down to ₹712.6 in GATS 2 from ₹1201.5 in GATS 1, while monthly expenditure by current bidi smokers on bidis has increased to ₹256.1 in GATS 2 from ₹189.8 in GATS 1 (Ministry of Health & Family Welfare, Government of India, 2018).

12. 51.8% of smokers and 37.5% of smokeless tobacco users were advised by a health care provider to quit smoking/use of smokeless tobacco (Ministry of Health & Family Welfare, Government of India, 2018).

13. 17.2% of cigarette smokers and 26.0% of smokeless tobacco users thought of quitting smoking/smokeless tobacco because of warning label (Ministry of Health & Family Welfare, Government of India, 2018).

14. The most commonly used tobacco products in Mizoram are cigarette and tobacco for oral applications. 29.1% of the adults smoke cigarette and 21.6 percent use tobacco for oral application (Ministry of Health & Family Welfare, Government of India, 2018).

1.6 Controlling Tobacco Consumption in Mizoram

The various arguments which are used to de-prioritize or neglect tobacco control includes considering tobacco consumption as a personal choice rather than an addiction, lack of relevant data on tobacco use from poor countries, positive economic factors related to tobacco cultivation (Esson & Leeder, 2004), high cost of implementing tobacco control measures, loss of employment and livelihood generated by tobacco industry (Jandoo & Mehrotra, 2008), and loss of revenues earned by government from tobacco industry. However, each of these arguments or excuses can be refuted with hard evidences. For instance, the 1986 Surgeon General report concluded that smokeless tobacco is an addictive drug similar to morphine and cocaine (Henningfield, Fant & Tomar, 1997) and In India, the total cost of tobacco which includes health costs and cost due to loss of productivity caused by illness and/or death far outweigh the revenue earned by government form taxes on tobacco (Lal, Goel & Sharma, 2015). Further, the economic contributions from the tobacco industry can be substituted by alternative crops or industries (Hussain, 2008); like for example, jobs lost in retailing of tobacco will lead to jobs gained in retailing of other products (Jacobs et al., 2001). Therefore, tobacco control is being considered as one of the most rational and evidence-based policies in medicine (Bettcher, Yach & Guindon, 2000). Given the enormous threat to public health caused by tobacco, tobacco control initiatives have become a huge priority for international

organizations, government agencies and NGOs. In South East Asia, Bhutan, Thailand and India were among the first countries to have successfully enforced smoking ban in public places (Singh, 2017). Bhutan also has the distinction of being the only nation in the world with a comprehensive ban on the sale of tobacco, and historically, the country is also known to had one of the world's oldest tobacco control laws in 1651 (ITC Project, 2011).

The first global health treaty on tobacco control was negotiated in 2003 under the auspices of the World Health Organization called the WHO Framework Convention on Tobacco Control (WHO FCTC). In 2004, India officially became a party to the Convention and has exercised full efforts to implement all provisions of this international treaty. The first legislation to control tobacco consumption in India was introduced way back in 1975, but it was only limited to health warnings on packaging which was largely considered to be insufficient and ineffective (Jandoo & Mehrotra, 2008; Shimkhada & Peabody, 2003). To combat the growing menace of tobacco in India, the government came up with a comprehensive legislation for tobacco control and passed the Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill, 2003 in April 2003. The National Tobacco Control Programme (NTCP) was also launched by the Ministry of Health and Family Welfare, Government of India in 2007-2008 as a comprehensive national level program to create awareness about the harms of tobacco, reduce production and supply of tobacco products, implement the provisions under COTPA, and offer facilities for people to quit tobacco (Kaur & Jain, 2011). The pilot phase of the programme was launched in 18 districts from 9 states across India (Jhanjee, 2011). The Government of Mizoram has implemented the National Tobacco Control Programme in Mizoram as Mizoram State Tobacco Control Programme (MSTCP). The two dedicated organizations that work for tobacco control and promoting tobacco related health awareness in Mizoram is the Mizoram State Tobacco Control Society (MSTCS) and the Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC). Besides these, there are many prominent and influential NGOs in Mizoram like YMA (Young Mizo Association), MHIP (Mizo Hmeichhe Insuihkhawm Pawl), MZP

(Mizo Zirlai Pawl) etc which in their respective capacities and on a number of occasions have undertaken tobacco control initiatives.

The associated risk to the population due to high prevalence of tobacco consumption in Mizoram has compelled the government and NGOs to take initiatives like policy formulation, state-wide anti-tobacco campaigns, community involvement and sensitizing program etc. The MSTCS, grantee of Bloomberg Initiative to Reduce Tobacco Use was constituted under the Health and Family Welfare Department, Government of Mizoram on 9th April, 2009 and was entrusted to implement the project *"Advocacy and mobilization for smoke free Mizoram and effective tobacco control implementation in the State"*. The project aims were to create 100% smokefree places in Mizoram, raising public awareness of the harmful effects of tobacco, mobilising community support for eliminating exposure to second-hand smoke, preventing youth initiation of tobacco use, and implementing and enforcing the 2003 legislation within 2 years (Tobacco Control Grants, n.d.). The Society also looks after the National Tobacco Control Programme (NTCP) under the Ministry of Health and Family Welfare, Government of India and Tobacco Cessation Clinic funded by World Health Organization (Mizoram State Tobacco Control Society, n.d.). After the inauguration of Tobacco Cessation Clinic at State Referral Hospital, Falkawn on 26th September 2017, there are now ten active Tobacco Cessation Clinics, with nine in Health and Family Welfare District Hospitals and one at the Cancer Hospital in Mizoram (Health & Family Welfare Department, Government of Mizoram, 2018). The current quit rate is 24.82% for the total 2771 clients who visited Tobacco Cessation Clinics from April 2017 till March 2018 (Health & Family Welfare Department, Government of Mizoram, 2018). Since 1st July 2011, the society has implemented another two years project on *"Advancing tobacco control in Mizoram through capacity Building, strengthening National Tobacco Control Programme and Effective enforcement of tobacco control laws"*, which was funded by Bloomberg initiative to reduce tobacco use (Mizoram State Tobacco Control Society, 2018). The project's objective was to reduce tobacco prevalence in Mizoram, strengthen and expand the NTCPs institutional framework for tobacco control in all eight districts and capacity building in organizations and workforce to

conduct effective implementation of tobacco control strategies. The Implementation and enforcement focus was based on COTPA which addresses prohibition on smoking in public places, advertisement of tobacco products, sales to minors and restrictions on trade, commerce, production, supply and distribution of tobacco products (Tobacco Control Grants, n.d.). The society has so for successfully undertaken activities like training and sensitization workshops, anti-tobacco awareness campaigns and programmes, anti-tobacco club and spot-the-smoker activities, meetings, talk shows etc. The pro-tobacco mindset and societal acceptance of tobacco, low awareness, tobacco users among health professionals and enforcement officials, and low priority given to tobacco control by most departments are highlighted as the major challenges and problems in enforcing "The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003" (or COTPA in short) in Mizoram by the Society in its initiative towards the "Smoke Free Mizoram" (Mizoram State Tobacco Control Society, n.d.). In recent times the Mizoram State Tobacco Control Society has increased activities to strengthen the national Tobacco Control Programme in Mizoram.

1.7 Consumer Behaviour in the Context of Tobacco Consumption

It is not only necessary to understand the extent of tobacco consumption but also the factors and motives behind such an overwhelming consumption phenomenon in Mizoram. The dynamics of tobacco consumption should be explored from the mixed interaction of biological, psychological, socio-cultural and economic factors (Glanz & Bishop, 2010). Therefore, a systematic study of the tobacco consumption behaviour is needed to explain the social, psychological, economic, and cultural factors contributing to increased tobacco consumption, its initiation, addiction, and cessation.

According to Loudon and Bitta (2002), "Understanding consumer (consumption) behaviour from a macro perspective can provide insight into aggregate economic and social trends and can perhaps even predict such trends. In addition, this understanding may suggest ways to increase the efficiency of the market system and

improve the well-being of people in society". Consumer behaviour may be defined as "the decision process and physical activity individuals engage in when evaluating, acquiring, using, or disposing of goods and services" (Loudon & Bitta, 2002). "The field of consumer behaviour is the study of individuals, groups, or organizations and the process they use to select, secure, use and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society" (Hawkins et al, 2007). The consumer behaviour and decision-making related to consumption of any good (even for demerit goods like tobacco) or service can be explained by three distinct but interlocking stages: the input stage, the process stage, and the output stage as shown in Exhibit 1.6.

Exhibit 1.6
A Model of Consumer Decision Making
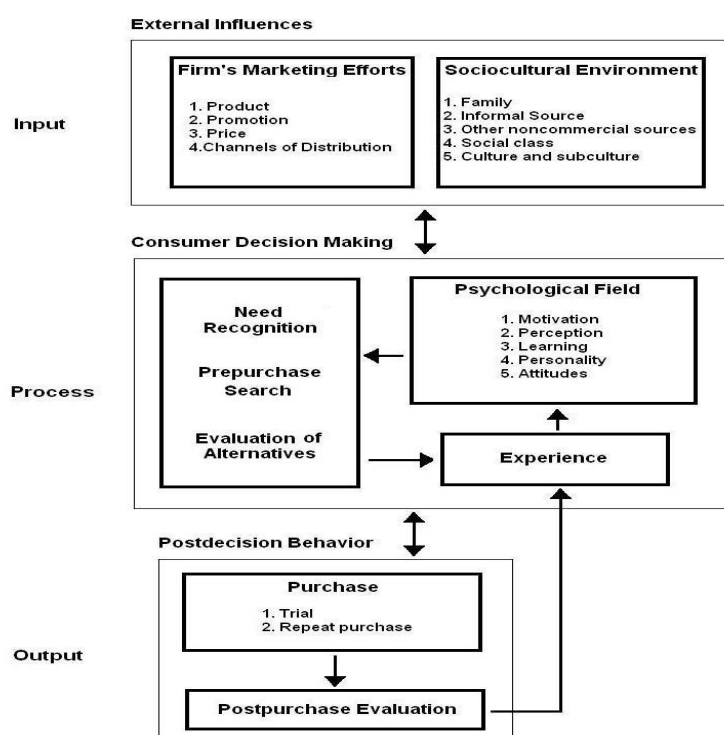
Source: Schiffman & Kanuk (2007), pp. 35-36

The protuberant reason for studying consumption behaviour relating to tobacco is to construct an understanding of the consumption dynamics, as the adverse effects of tobacco on health and wellbeing has become a major concern around the world. Various international organizations, governments and non-governmental

organizations are fighting a tough battle against tobacco use and addiction through social marketing efforts. The consumption psychology, attitude and behaviour of tobacco users need to be studied in a systematic manner to device effective social marketing strategies for tobacco consumption control. Therefore, just like commercial marketing, social marketing too requires a sound understanding of consumer behaviour (Hawkins et al, 2007).

1.8 The Concept and Evolution of Social Marketing

Social Marketing is a systematic process of influencing and persuading a target community to ensure awareness, support and/or participation from them for a cause that brings certain desirable benefits to the society. It is seen as a part of an effort to broaden the domain of marketing beyond its traditional commercial roots and to establish something that may be called generic marketing (Kotler & Levy, 1969; Kotler & Zaltman, 1971). Social marketing is related to the promotion of ideas for bringing social changes which benefits the society. According to Andreasen (1994), "Social Marketing is the adaptation of commercial technologies to influence the voluntary behaviour of target audiences to improve their personal welfare and that of the society of which they are a part." At the very outset it may be necessary to differentiate between social marketing and cause-related marketing or cause marketing. 'Cause marketing', refers to a commercial entity forming a partnership with a pro-social cause such that sales of the commercial organization's products benefits the pro-social cause (Webb & Mohr, 1998). Social marketing is different from cause-related marketing in a sense that in case of the latter there is some kind of profit-making motive or indirect commercial objectives associated with the promotion of social cause.

The question *"Why can't you sell brotherhood like you sell soap?"* raised by G.D. Weibe in 1952 (Weibe, 1952) and the Joe McGinnis's bestselling book titled *"The Selling of the President 1968"* (McGinnis, 1969) lead Philip Kotler and Gerald Zaltman to explore and coin the term *"Social Marketing"* (Kotler & Zaltman, 1971). However the concept of social marketing perhaps dates back to historic times when human beings first learned to utilize and organize their efforts to influence people's

behaviour. One of the earliest forms of social marketing is religion. Christianity was marketed by early missionaries across the world as a faith which paves the way for a civilized and noble human life. A church for example markets their basic product which is human fellowship. The religious head and members acts as *"salesmen"* in terms of attracting potential members (Kotler & Levy, 1969). Gautam Budhha throughout his life preached and prescribed a path of practice through which people can realize 'enlightenment' for themselves. Later, Emperor Asoka adopted Buddhism and took special zeal in marketing the same to South Asia and beyond. The Sufis during 12th century and later emphasized on the philosophy of selfless experiencing and actualization of the 'Truth' by means of 'Love' and 'Devotion' and promoted it through their preaching, poetry and music. The collective works by artists, writers, philosophers and scientists roughly during the 15th - 17th century renaissance of Europe was also early forms of social marketing and so was other later social reforms started by different people across the world. In India, for example, Raja Rammohan Roy, Ishwar Chandra Vidyasagar, Mahatma Gandhi, B.R. Ambedkar were among some of the most distinguished social reformers who fought against social evils like *sati pratha* and cast system. Aspects of social marketing may also be found in the sphere of mass political ideologies like communism or socialism. Though, it may be noted that modern theorists have largely supported the idea of seeking 'common good' like as per the UN Universal Declaration of Human Rights to be the legitimate goal of social marketing (Donovan & Henley, 2010). Therefore, it may be fairly accepted that the concept of social marketing became more evident and looked like to take up the shape of an organized formal discipline directed to specific social causes when countries started social campaigns like family planning, health campaigns, environmental conservation programs etc. Some big social movements were also started by international organizations such as WHO, World Bank, UNESCO etc. In fact, by1980s the World Bank, WHO and Centre for Disease Control and Prevention started using the term social marketing and promote greater interest in the area (Kotler et al, 2002). Today however, marketing of social causes are not only limited or undertaken by government, philanthropists or non-profit organizations alone but other organizations across the world are increasingly adopting it as a mean to enhance their public image. The societal marketing

programs in this regard has been defined as "company initiatives involving the provision of money, resources and/or publicity to socially beneficial causes in a way that seeks to create an association in the minds of consumers between the cause and the company or one of its brands (Bloom et al, 2006)".

1.9 Scope and Significance of the Study

The field of commerce from its basic concept has been defined by James Stephenson as "an organized system for the exchange of goods (or services) between the members of the industrial world" (Qureshi, 2014). From a broader perspective, according to Chen (2020), "nations are concerned with managing commerce in a way that enhances the well-being of citizens, by providing jobs and producing beneficial goods and services". Though, in many ways the world of commerce is driven by consumption and the growth of consumption is often regarded as an obvious sign of economic progress and prosperity for a given population. On the other hand, not all consumption phenomenons can be regarded as beneficial for the society, especially from a long-term perspective. Consumption of unwholesome products like tobacco increases health costs for the society and becomes huge burden for its long-term progress and sustainability. Therefore, it is necessary, to explore and find ways to control such consumption phenomenon which are detrimental for the society.

Drug Abuse, Alcoholism, HIV and high tobacco consumption with early tobacco initiation and young generation's addiction to it are among the facts that paints a significant, contrasting and worrying picture about the otherwise beautiful, serene and peaceful state of Mizoram. The high prevalence of tobacco consumption in Mizoram has been a matter of concern for a long time as it has adversely affected the physical wellbeing of society and put future generation at risk. To reduce susceptibility to disease and premature death, there is a need for comprehensive tobacco control measures (Hussain, 2008). It may be assumed that there are many underlying factors for which the problem and prevalence of tobacco in Mizoram appears to be complex. This study is an attempt to find out important behavioural aspects related to tobacco consumption by undergraduate students in Mizoram. The information from the findings of this study can be used to have a specially suited yet

comprehensive social marketing strategy for prevention and control of tobacco consumption in Mizoram.

Novotny and Mamudu (2008) has rightly remarked that, "the production of new knowledge, the consistent dissemination of information to the public and policy makers about the health consequences of tobacco use, commitment of multinational organizations and investments by philanthropy and bilateral donors will continue to be the cornerstone of effective tobacco control programs". According to Lantz (2018), "Research on tobacco control program and policy efforts has demonstrated that a comprehensive approach is needed, including, as recommended by the Centers for Disease Control and Prevention, interventions aimed at knowledge/attitudes, increased cost through taxation, youth access restrictions, environmental exposure reduction, and cessation".

Reddy et al., (2010), suggested that much remains to be learned about "the effectiveness of integrated efforts to prevent and control tobacco use among disadvantaged populations". According to GATS India Report 2009-2010 (Ministry of Health and Family Welfare, 2010), the average age at initiation of tobacco use in India is 17.8 years, which is a vulnerable age group. Consequently, this study attempts to explore the tobacco consumption behaviour of undergraduate students (generally falling in the age group of 18-23 years) who may be assumed to fall or have just surpassed the age of initiation. It is necessary to study the behaviour of the young population between ages 18-23 years regarding tobacco consumption because the outcome of such study can be effectively utilized to design proactive social marketing strategies for prevention and control of tobacco consumption. Therefore, this study seeks to understand the consumption behaviour of these young adults in Mizoram who choose to consume tobacco products in spite of the perceived health risks. It is obviously understood that the prevalence of addictive behaviour of the student community regarding tobacco products can significantly damage the overall wellbeing and development of the society. Thus this study, though primarily addresses the areas of social marketing and consumer behaviour in marketing discipline, has in its view a wider scope and objectives and thus adopts a cross-

disciplinary approach. The outcome of this study will not only enrich our understanding of social marketing from intellectual and academic point of view, but at the same time it will also provide valuable inputs for the social marketers and policy makers to formulate strategies and policies for designing successful social marketing campaigns.

1.10 Research Design

The research design for the study has been prepared with a clearly identified problem statement, followed by a precisely envisioned aim, well defined objectives and focused research questions. The research design further addresses the various other aspects of the research methodology like data collection, sampling, analysis, presentation etc that has been carried out during the entire course of the research work and subsequent phases of report writing.

1.10.1 Statement of the Problem

Addiction of tobacco is one of the major problems that have adversely affected the physical and social wellbeing of the Mizo society and it is a matter of concern that there exists a very high prevalence of tobacco use especially among the young population in Mizoram. According to Stewart and Moreno (2013), "tobacco use during the college years can lead to physical, mental, and emotional harm as well as addiction." According to GATS India Report 2009-2010, Mizoram is having the highest percentage of active tobacco users in the country (Ministry of Health and Family Welfare, 2010) and according to GATS India Report 2016-2017 (Ministry of Health and Family Welfare, 2017), Mizoram is having the highest number of smokers and second highest tobacco users in the country after Tripura (Dutt, 2018). In spite of the efforts and proactive role played by organizations such as Mizoram State Tobacco Control Society and NGOs such as the Indian Society on Tobacco and Health (Mizoram Chapter), there has not been a significant progress in combating tobacco consumption among the people. Therefore, for effective social marketing, the social marketers need to not only understand the pattern of existing undesirable behaviour of the target segment but also investigate the underlying causes and

motives behind such behaviours. Further, due to uniqueness of lifestyle, psychology, socio-economic and cultural factors, the social marketing strategies which are effective elsewhere may not necessarily be equally effective in the context of Mizoram. Mohan et al., (2018) has suggested-culture based strategies for effective penetration of tobacco control polices. Reddy et al., (2010), has pointed that "interdisciplinary research that enables multispectral interventions is of particular importance" and suggested for continuous and comprehensive tobacco related surveillance efforts. This study therefore intends to explore the various aspects of tobacco consumption behaviour by the undergraduate students in Mizoram and expected to provide an appropriate strategic framework for effective planning and execution of social marketing efforts with respect to tobacco consumption in Mizoram.

1.10.2 Aim of the Study

Tobacco consumption is "the single greatest preventable cause of death in the world today" (WHO, 2008; Reddy et al., 2010). The aim of the study is to explore the tobacco consumption behaviour of the undergraduate students in Mizoram, understand the role of various organizations in controlling tobacco consumption in Mizoram and suggest a comprehensive social marketing strategy for prevention and control of tobacco consumption, especially among the student community in Mizoram.

1.10.3 Objectives of the Study

1. To study the socioeconomic background of tobacco consumers among undergraduate students in Mizoram.
2. To study the decision-making process and tobacco consumption habits among the undergraduate students.
3. To identify the factors affecting consumption behaviour in respect of tobacco products among the undergraduate students.
4. To study the social marketing practices undertaken by different organizations in Mizoram for prevention and control of tobacco consumption.

5. To suggest an appropriate strategic social marketing framework for the prevention and control of tobacco consumption in Mizoram.

1.10.4 Research Questions

1. What are the prevalence, pattern and habits regarding tobacco consumption by undergraduate students in Mizoram?
2. What is the decision-making process adopted for consuming tobacco products by undergraduate tobacco consumers in Mizoram?
3. How socio-economic backgrounds, cultural and psychological factors influence attitudes and behaviour towards tobacco consumption by undergraduate students in Mizoram?
4. What is the role of different organisations regarding prevention and control of tobacco consumption in Mizoram?
5. How can we improve the social marketing efforts and strategies and have a comprehensive and integrated approach for prevention and control of tobacco consumption in Mizoram?

1.10.5 Research Methodology

An explorative study has been undertaken to explore the tobacco consumption behaviour and motives of the undergraduate students of Mizoram. An extensive review has been undertaken on the relevant literatures that are available in the field. All the relevant data for the study has been collected from both primary and secondary sources and subsequent necessary empirical analysis has been done to answer the research questions of the study.

1.10.5.1 Sources of Data Collection

(a) Primary Data: The primary data has been collected through a set of questionnaire designed for the undergraduate students identified as target respondents for the purpose of the study. Suitable close ended and open ended questions along with proper scaling techniques has been used to collect in-depth information related to tobacco consumption behaviour and motivation and

demographic profile of the respondents. Before final administration of the questionnaires, a pilot study was conducted on 50 students to test the reliability and validity of the instrument and it was found satisfactory ($\alpha = 0.89$). The data collected from the final administration of the questionnaires was done in 3 phases; the first two phases were carried out at Pachhunga University College in February, 2016 and April, 2016 respectively. The last phase was carried out during October and November, 2016 at Saiha Government College.

Table 1.1
Detail of Questionnaire Distribution and Collection

Sources			Number of Questionnaires							Initial Sample Size
College	Department	Coordinating Person	Distributed	Collected	Rejected	Accepted	A	P	N	
Pachhunga University College	Mathematics & Physics	Dr. Denghmingliani Zadeng Assistant Professor	110	66	29	37	21	3	13	323
	Commerce	Dr. Vanlalthana Assistant Professor	115	112	7	105	53	7	45	
	English	Dr. Rualzakhumi Ralte Associate Professor	110	103	9	94	61	10	23	
	Political Science	Dr. Lalthakima Assistant Professor	22	14	2	12	7	2	3	
	Geography	Mr. Zoramkhuma Assistant Professor	28	20	0	20	15	3	2	
	History	Dr. Mahmingi Assistant Professor	35	20	1	19	10	1	8	
	Education	Dr. Lalthankungi Associate Professor	8	8	0	8	8	0	0	
	Philosophy	Emily F. Lalnunpuii Assistant Professor	14	11	3	8	4	1	3	
	Random	Self	24	20	0	20	14	1	5	
Government Saiha College	Random	Dr. Mark V. Vanlalrema Department of English Government Saiha College	250	201	24	177	123	13	41	177
		Grand Total →	716	575	75	500	316	41	143	500

Note: **A** = Active Tobacco Users; **P** = Past Tobacco Users; **N** = Non-Tobacco Users

(b) Secondary Data: Secondary data has been collected from all available publications including newspapers, magazines, reports and journals across various fields and disciplines. Some of the important sources used for collection of reliable secondary data are as follows:

(i) The Mizoram State Tobacco Control Society (MSTCS)
(ii) Indian Society on Tobacco and Health (ISTH-Mizoram Chapter)
(iii) Department of Economics and Statistics, Government of Mizoram
(iv) Health & Family Welfare Department, Government of Mizoram

   (v)   Central Library, Mizoram University

  (vi)   Planning and Programme Implementation Department, Government of Mizoram

 (vii)   Ministry of Health and Family Welfare, Government of India

(viii)   The Global Adult Tobacco Survey (GATS) India

  (ix)   World Health Organization (WHO)

   (x)   Tobacco Board, India

  (xi)   The Tobacco Institute of India

1.10.5.2 Sampling

(a) Sampling Area: At the time of study, the state of Mizoram was divided into eight districts[1] namely – Aizawl (3,577 sq km), Champhai (3,168 sq km), Kolasib (1,386 sq km), Lawngtlai (2,519 sq km), Lunglei (4,572 sq km), Mamit (2,967 sq km), Saiha (1,414 sq km), and Serchhip (1,424 sq km). The selected sample constitutes representative students from one undergraduate college of Aizawl (to represent the most advanced district in the state) and one undergraduate college of Saiha (to represent the least advanced district in the state). It may be added that both Saiha and Lawngtlai districts are identified as backward areas by Ministry of Panchayati Raj Institutions, Government of India and thus are funded with Backward Region Grant Fund (BRGF) since 2009. According to census 2011, Saiha is having the lowest population (56574) among all the districts of Mizoram. However, the rationale behind selecting Saiha district for the study is primarily because of its remoteness from the state capital compared to Lawngtlai district.

(b) Sampling Frame: A sampling frame constituting all the students pursuing undergraduate studies at Pachhunga University College in Aizawl and Govt. Saiha College in Saiha was drawn for the study. These two colleges are traditionally having the largest student population in their respective districts.

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[1] Three new districts namely Hnahthial, Khawzawl and Saitual were created by Mizoram State Government vide a notification dated June 3, 2019.

(c) Sampling Technique: There were two sampling procedures applied for the study. At first, judgmental sampling technique was used while selecting the colleges and districts and then random sampling technique was used for selecting the respondent students from the selected colleges.

(d) Sample Size: According to the Mizoram University Annual Report 2012-2013, there are total 14,755 undergraduate students in 28 colleges affiliated to Mizoram University in Mizoram.

The Pachhunga University College is the largest college in Aizawl in terms of the diversity of undergraduate courses that are currently being offered and it is also the second largest college in Aizawl in terms of the total number of enrolled students. As per the Mizoram University Annual Report 2012-2013, there are 1,993 students enrolled in various courses at Pachhunga University College. Considering these 1,993 students as the population, a sample size of 322 students has been selected for the study (at 95 per cent confidence level). Similarly, Government Saiha College which is the only college in Saiha district has 323 enrolled students as per the Mizoram University Annual Report 2012-2013. Therefore, considering 323 as the population size, a sample size of 176 students has been drawn randomly for the study (at 95 per cent confidence level). Thus, the total sample size including both the colleges was determined as 498. For the purpose of general convenience, one additional unit each has been added to both the college samples taking the total sample size to 500. The detail of the sample size has been presented in Table 1.2.

Table 1.2
Sample Size Determination

Serial No.	Name of the district	Name of the College	Population Size	Sample Size
1	Aizawl	Pachhunga University College	1993	323
2	Saiha	Govt. Saiha College	323	177
Total			2316	500

1.10.5.3Analysis

(a) Classification of Tobacco Users: The World Health Organization (WHO, 1983), categorizes the tobacco users in two broad categories as 'Smokers' and 'Smokeless Tobacco Users'. The Smokers are further categorized as 'Current Smokers' (who at the time of study had smoked more than 100 cigarettes in their lifetime), 'Non-Smokers' (who at the time of study does not smoke) and 'Ex-Smokers'(who did not smoke at the time of study but had smoked in the past daily for at least 6 months) and 'Other Smokers' (Includes those who have either never smoked or have smoked too little in terms of frequency and duration). Current Smokers are further categorized as 'Daily Smokers' (who at the time of study smokes at least once in a day) and 'Occasional Smokers' (who at the time of study smokes less than once a day). The Smokeless Tobacco Users are also categorized in a similar way as 'Current Users', 'Non-Users' and 'Ex-Users' and Current Users are further categorized as 'Daily Users' and 'Occasional Users'. The definition of these categories of Smokeless Tobacco Users is similar to Smokers except in case of Smokeless Tobacco Users smoking is replaced by any kind of tobacco consumption other than smoking. Some studies have used simpler classification such as classifying smokers as "Daily Smokers" and Nondaily Smokers" (Romero et al., 2014; Wortley et al., 2003) or "Current Daily Smokers", "Occasional Smokers" and Quitters (Patja et al., 2009).

Exhibit 1.7
WHO Categorization of Tobacco Users
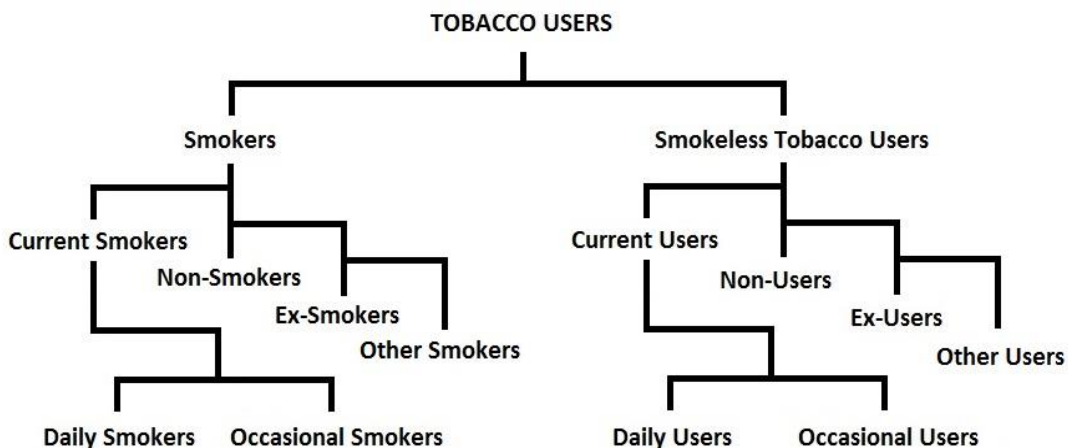
Source: Adapted from WHO (1983)

In the present study on the usage of tobacco by undergraduate students, a simplified categorization of tobacco users has been devised which combines both Smokers and Smokeless Tobacco Users and categorizes them under three basic categories as follows:

(i) **Active Tobacco Consumers:** It includes Daily Smokers, Daily Users, Occasional Smokers and Occasional Users and is similar to the definition of current tobacco use by Fouad et al., (2016).

(ii) **Past Tobacco Consumers:** It includes Ex-Smokers and Ex-Users.

(iii) **Non Tobacco Consumers**: It includes Non-Smokers, Non-Users, Other Smokers and Other Users.

(b) Tabulation and Representation: All the collected data from primary and secondary sources are represented using tables, diagrams, pie charts, bar graphs etc.

(c) Software Used for Analysis: The primary software used for the analysis of data includes IBM SPSS Statistics Version 25 and Microsoft Office Professional Plus 2013.

(d) Statistical Tools used for Analysis: The data collected and tabulated from the questionnaire and other secondary sources has been analyzed using various statistical tools as found appropriate to examine relationships between variables and draw inferences as per the objectives of the study.

1.11 Limitations

The present study is subject to the following limitations:

1. The selected sample for the study is a representative of the undergraduate student's population of only the selected districts and the results obtained may be further extended to other undergraduate students of other colleges and institutes of Mizoram. However this assumption has a limitation as tobacco consumption prevalence and behaviour is also subject to factors like district-wise and college-wise tobacco control measures and tobacco availability.

2. During the survey, the respondents were requested to be frank and honest while filling the questionnaires. However, few of the respondents and especially among female undergraduate students there may have been a tendency to not being fully open about their personal tobacco consumption choice and habits.

3. The primary data collected for the study was based on a generalised questionnaire regarding comprehensive tobacco use among undergraduate students and therefore it did not include specific questions that are only appropriate for certain type of tobacco products being consumed.

1.12 Areas for Further Research

A good work of research always has an inherent tendency to not remain limited and isolated in its purpose and therefore it triggers a continuous process of human enquiry. The present study also opens up avenues for future research to explore tobacco consumption behaviour from various other aspects. Some suggested areas for future research may be listed as follows:

1. Studies exploring tobacco consumption behaviour of undergraduates in other districts of Mizoram.

2. Studies exploring tobacco consumption behaviour of undergraduates in other states and regions of India.

3. Comparative studies based on gender on tobacco consumption behaviour.

4. Comparative studies based on various age-groups on tobacco consumption behaviour.

5. Comparative studies exploring tobacco consumption behaviour in rural and urban areas.

6. Comparative studies exploring tobacco consumption behaviour in different states of India.

7. Effectiveness of existing social marketing strategies for tobacco control among specific population.

8. Studies to examine the effectiveness of the proposed social marketing framework suggested in the present study.

9. Studies exploring newer forms of tobacco consumption like e-cigarettes and ENDS (Electronic Nicotine Delivery Systems) products among undergraduate students in Mizoram and India.

10. Factors causing re-initiation of tobacco use among past tobacco consumers.

11. Effect of the availability of contraband tobacco products for tobacco initiation and prevalence in Mizoram.

12. Studies exploring social marketing strategies for controlling consumption of other addictive substances such as alcohol, marijuana, drugs etc in Mizoram.
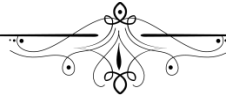
Chapter 2

Review of Literature

2.1 Introduction

There are many important and resourceful studies carried out across the world in the areas of tobacco consumption, its prevalence, causes and consequences and policies and strategies to control the epidemic of tobacco consumption. According to Lee and Dewhirst (2011), "A rich body of literature, from both a theoretical and practitioner perspective, is evident on the discipline of social marketing and tobacco control". The present chapter explores, identifies and discusses the various available literatures which are relevant in the context of this particular research work. A detail review of the literatures provides a deeper understanding about the subject matter of the research and its associated aspects. Most importantly, it offers a current assessment of the amount of research and academic exploration carried out on the particular area of tobacco consumption behaviour and also to narrow down the uncovered areas in the form of research gap. The identified research gap essentially provides the core framework for the scope of this research. Though, the collected literatures have been reviewed, grouped and discussed under eight broad sections, but the findings and scope of many such literatures goes beyond the particular sections and therefore there may be overlapping of context between the grouped sections. The reviewed literatures have been presented and discussed in paragraph wise format with a chronological order for the purpose of documenting the gradual exploration and continuous developments happening in the area.

2.2 Global Tobacco Consumption

Several studies were carried out by individuals, groups and organizations across the world in the area of tobacco consumption and tobacco consumption behaviour. Many studies were done exclusively for particular countries or its selected regions. Some studies were also done for selected group of countries and are comparative in nature. This section largely discusses the prevalence and patterns of tobacco consumption studied and explored across the globe.

Lopez (1988) conducted a survey of full-time students at a small, Midwestern liberal arts college in U.S. to explore the prevalence of smokeless tobacco consumption among college students and the reasons for its use. The use of smokeless tobacco among female students was found to be negligible whereas, 9% of male student reported routine use of smokeless tobacco on campus. The author concluded that use of smokeless tobacco appeared to be predominantly a male pastime but based on current information it cannot be determined that consumption of smokeless tobacco among college students is a fad or continuing trend.

Fakhfakh et al., (2002) conducted a cross-sectional study in 1996 of a representative national sample of 5696 subjects aged 25 and above to assess tobacco use and the awareness of and attitudes towards tobacco and its control in the population of Tunisia. The study found 30.4% of the respondents as tobacco users, of whom 24.6% smoked cigarettes 5.8% consumed other traditional forms of tobacco. It was concluded that informational and educational campaigns relating to tobacco control should be directed at individuals and communities, taking into account the gaps in awareness of the effects of tobacco on health.

In 2009, the ITC Bhutan Survey was conducted by researchers from the Bhutan Ministry of Health partnering with researchers from La Trobe University and The Cancer Council Victoria in Australia, and the University of Waterloo in Canada to estimate the prevalence of tobacco consumption, effect and public support for the tobacco ban, exposure to second-hand smoke etc in Bhutan (ITC Project, 2011). The major findings of the report were as follows:

1. Overall prevalence of reported tobacco use is very low.
2. The Bhutanese people support the ban on the sale of tobacco products.
3. There is strong societal disapproval of tobacco and support for government action on tobacco control.
4. The sales ban has reduced the availability of tobacco.
5. The source of tobacco products is mostly within Bhutan.
6. One-third of smokers have plans to quit, but the majority thinks it will be difficult.

7. Smokeless tobacco is perceived as less harmful.

8. There was a lack of awareness and adherence to the ban on smoking in public places in 2009.

9. Bhutanese are taking steps to protect their families from second-hand smoke.

10. Smokers tend to be heavy drinkers.

Banta et al., (2012) explored the pattern between tobacco addiction and alcohol use in Cambodia. The researchers mentioned the highly severe consequences of combined use of tobacco and alcohol. They found that men who smoked were 2 times more likely to have drunk alcohol in the past week and women using smokeless tobacco with betel quid were more likely to be alcohol drinkers. They also found that past week's drinking declined by late middle age and were associated with lower education and being currently married; the behaviour was lower in some ethnic groups. Therefore, they concluded that there is an important association between alcohol and tobacco use and reducing alcohol consumption may be useful for tobacco control.

Adepoju et al., (2013) conducted a population based cross-sectional study of randomly selected consenting adults to assess the prevalence and characteristics of cigarette smokers among the residents of Osogbo, in southwestern Nigeria. They found that about 22% had ever smoked while 8.7% were current smokers of whom majority were males. Most smokers (71%) were introduced to smoking by friends and ill health was the most often reported reason for quitting. The researchers suggested creating awareness and advocacy to inform current smokers about the hazards and cumulative effects inherent in smoking.

Palipudi et al., (2013) described the background, rationale and a comprehensive description of the survey methods and protocol for GATS. GATS is nationally representative household survey of persons 15 years or older which was first conducted during 2008-2010 in 14 low- and middle-income countries. It was developed in 2008 by the Centres for Disease Control and Prevention (CDC) and the World Health Organization as an instrument to monitor global tobacco use and measure indicators of tobacco control. GATS used a standard core questionnaire,

sample design, and procedures for data collection and management and added country-specific questions as per requirement. The questions were about various characteristics of the respondents, their tobacco use and a wide range of tobacco-related topics. In each country, a multistage cluster sample design was used, with randomly selected households proportionate to the size of the population and one respondent was selected at random from each household to participate in the survey. Interviewers administered the survey in the country's local language(s) using handheld electronic data collection devices. In each country, the ministry of health was the lead coordinating agency for GATS, and the survey was implemented by national statistical organizations or surveillance institutes.

Exhibit 2.1
Process of GATS
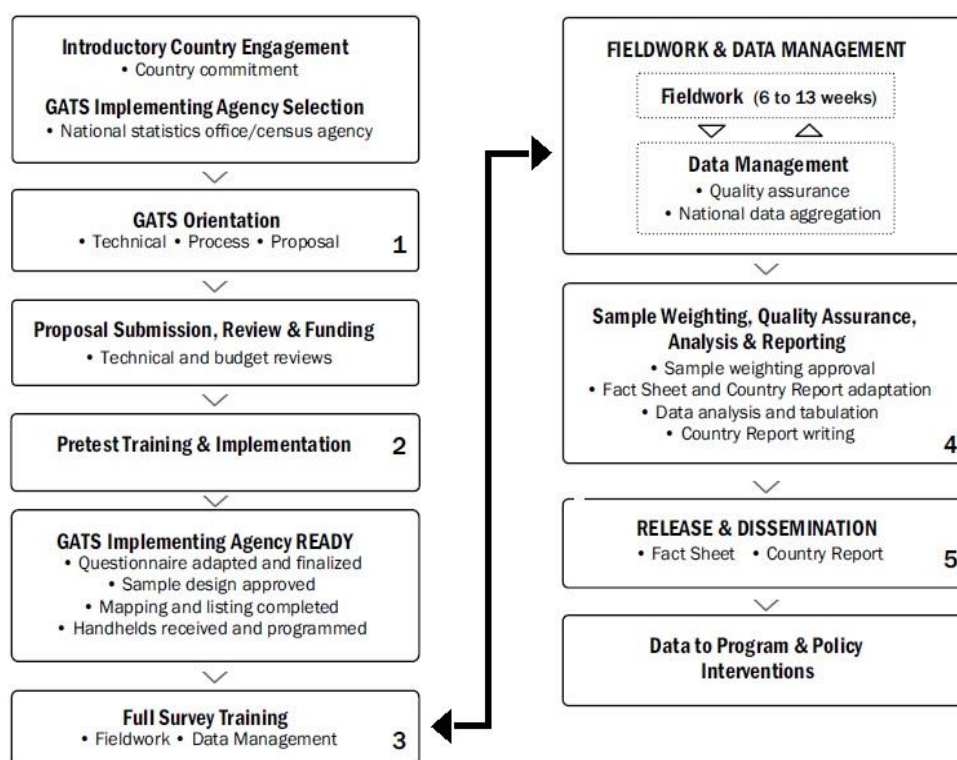
Source: Palipudi et al. (2013), p.23

A comparative study was carried out where key indicators from the MPOWER measures were compared across 14 countries from the data of GATS 2008-2010 (Song et al, 2013). The findings of the study revealed that current tobacco use prevalence rates ranged from 16.1% in Mexico to 43.3% in Bangladesh, the highest

rate of secondhand smoke in workplace was recorded in China (63.3%), the highest 'smoking quit attempt' rates among cigarette smokers were recorded in Viet Nam (55.3%) and the lowest were in Russian Federation (32.1%). It was also found that more than half of the current smokers in 5 out of 14 countries thought of quitting due to health warnings on cigarette packages, the Philippines (74.3%) and the Russian Federation (68%) had highest percentage of respondents who noticed cigarette advertising, promotion and sponsorship and the affordability of manufactured cigarettes ranged from 0.6% in Russia to 8% in India. The study concluded that the "monitoring of tobacco use and tobacco control policy achievements is crucial to managing and implementing measures to reverse the epidemic".

Stoebner-Delbarre and Aghi (2013) did a comparative study of perceptions on tobacco in vulnerable populations between India and France. They obtained qualitative information on representations of tobacco use and cessation within two vulnerable populations and identified the cultural factors that influence tobacco use and cessation to suggest strategies for tobacco cessation. The authors concluded that tobacco control interventions "need to focus on coping strategies to deal with feelings of distress, withdrawal symptoms, and the circumstances of everyday life experienced by disadvantaged tobacco users".

Mousawi (2014) studied the prevalence of smoking among Karbala University students in Iraq determined its associations with demographic and other substance use behaviors. The prevalence of current smoking was 10.5%, shisha smoking was 4.4% and previous smoking was 1.0%. 45.7% smokers started smoking before the age of 18 and smoking was also found to be positively related to male gender, increasing age, being unmarried, college, drinking alcohol, having a positive attitude toward smoking and higher fathers' educational level.

Katulanda et al., (2015) studied the patterns of tobacco smoking among schoolchildren in Colombo, Sri Lanka, using a self-administered questionnaire on a multistage stratified random sample of 6000 students. The prevalence rates for males and females, respectively, were found to be 27.0% and 13.3% (for having smoked at least 1 complete cigarette), 2.3% and 0.3% (for smoked more than 100 cigarettes)

and 1.8% and 0.2% (for daily smoking). The mean age of initiation for smoking was 14.16 years and the most consumed tobacco products were found to be cigarettes (91.5%) and bidis (3.8%). In univariate analysis, male gender, parental smoking, studying non-science subjects, peer smoking, and participating in sports were found to be significantly associated with smoking of at least 1 complete cigarette and in multivariate analysis, the most significant correlates were having close friends or parents who smoked. The authors also concluded that female smoking has increased from earlier reports and suggested that such high risk groups should be targeted for preventive programs.

WHO (2015) published a report on the global trends regarding tobacco smoking. The data used for the analysis was obtained from WHO FCTC Implementation Database, WHO Comprehensive Information Systems for Tobacco Control, WHO Infobase and from other sources. The report contained country-specific estimates for four indicators: current and daily tobacco smoking and current and daily cigarette smoking, for males and females for the years 2000, 2005, 2010, 2015, 2020 and 2025. The report also includes short accounts of recent surveys undertaken by specific countries and provides an assessment of the next survey due for the country based on the WHO recommendations.

Fouad et al., (2016) studied the prevalence of tobacco use among adults in Egypt using data from GATS 2009. They assessed the differences in overall use of tobacco and tobacco products, by sex and frequency of use across various demographic groups. Overall, they found that 19.7% of all adults in Egypt use some form of tobacco, where men are more likely to use tobacco then women. They found that men are most likely to use manufactured cigarettes and 96% of them who use tobacco are daily tobacco users. On the other hand, women who use shisha are daily users. The findings revealed that lower educational status and being employed predicted a higher use of tobacco and there is significant variation in the prevalence of tobacco use and types of tobacco used by adult men and women in Egypt.

Yaya et al., (2017) conducted a study using cross-sectional data on 1693 men aged between 15 and 49 years from 2013-2014 Multiple Indicator Cluster Survey in

Malawi to explore the prevalence of smoking status, early smoking initiation, and association with socioeconomic status (SES) of the early smoking initiation among Malawian men. Their findings were as follows:

1. Prevalence of smoking, early initiation, and ever using any form of smokeless tobacco were, respectively, 46.6%, 33.7%, and 6%.
2. Compared with men who had higher education, those who had no formal education, primary-level, and secondary-level qualification had, respectively, 21%, 40% higher odds of being a smoker.
3. Those who had no formal education were 2.7 times as likely to try smoking before reaching 18 years of age.
4. Compared with the richest, those in the lowest wealth quintile had 32% lower odds of early onset of smoking, 63% lower odds of trying other tobacco products.

The researchers concluded that it is important to address the socioeconomic disparities for delaying early onset and limiting overall tobacco consumption and suggested that ongoing health policy should consider improving educational and material well-being among men.

2.3 Tobacco Consumption in India

There are various studies available on tobacco consumption in India which includes national surveys and studies conducted by individual or team of researchers. It has been found that the nationally representative household surveys on tobacco consumption in India are only available since 1995-1996. The more tobacco focused surveys in India were conducted after the introduction of Global Tobacco Surveillance System (GTSS). GTSS was jointly developed by the WHO, the U.S. Centers for Disease Control and Prevention (CDC), and the Canadian Public Health Association (CPHA) to assist the member states of WHO in establishing continuous tobacco-control surveillance and monitoring. The GTSS includes collection of data through the Global Youth Tobacco Survey (GYTS), Global School Personnel Survey (GSPS), Global Health Professional Survey (GHPS), and Global Adult Tobacco

Survey (GATS). Therefore, this section includes reviews of such national surveys on tobacco consumption, in addition to various other relevant literatures related to prevalence and pattern of tobacco consumption in different parts of India.

The Global Tobacco Surveillance System (GTSS) aims "to enhance country capacity to design, implement, and evaluate tobacco control interventions, and monitor key articles of the World Health Organization's Framework Convention on Tobacco Control (FCTC) and components of the WHO MPOWER technical package" (Centre for Disease Control and Prevention, 2018). The descriptions of the various surveys under GTSS are as follows (Centre for Disease Control and Prevention, 2018):

1. **Global Youth Tobacco Survey (GYTS):** It focuses on school student aged 13-15 and collects information from schools.
2. **Global School Personnel Survey (GSPS):** It focuses on teachers and administrators from the same schools that participate in the GYTS.
3. **Global Health Professions Student Survey (GHPSS):** It focuses on 3rd year students pursuing degrees in dentistry, medicine, nursing and pharmacy.
4. **Global Adult Tobacco Survey (GATS):** It is a nationally representative household survey that monitors tobacco use among adults aged 15 and above.

India GYTS (Global Youth Tobacco Survey) 2006 was conducted region-wise, namely in North, South, East, West, central and North-east covering 99.7% of India's total population. There were 12,086 students and 2,926 school personnel from 180 schools who participated in the six regional surveys (Sinha, 2006). Sinha (2006) compared the data from India GYTS 2003 and GYTS 2006 to analyse the changes in different variables of tobacco control measures for monitoring and evaluation as per the provisions of Tobacco Control Act, 2003 and relevant Articles in the World Health Organization, Framework Convention on Tobacco Control (WHO FCTC). The salient observations in his report were as follows:

- At the national level, exposure to second-hand smoke has significantly reduced from 49% to 40% in public places.

- Nationally, the initiation of smoking before the age of 10 has significantly reduced from 49% to 37%.

- In five out of six regions of India, the tobacco use among boys and girls is statistically similar.

- Over three years, the overall consumption of tobacco has not shown any significant decrease.

- Educating the schools about the hazards of consuming tobacco has not shown any improvement.

- The exposure to cigarette advertisement on billboards has not declined.

- Over three years, the sale of tobacco and tobacco products to the minors does not show any decline.

- Nationally, over three years, the distribution of free sampling of cigarettes has not changed.

- The prevalence of current tobacco use has increased in the central region.

- Tobacco consumption remained high in the North-East and Eastern Regions.

The India GSPS (Global School Personnel Survey) 2006 was also carried out in the same schools that were selected for the GYTS. There were a total of 2926 school personnel out of 3629 from 180 schools participated in the 6 regional surveys covering North, South, East, West, central and the North East (Sinha, 2006). The major findings are as follows:

- Nearly all the school personnel strongly agreed that schools must have a rule that specifically prohibits the use of tobacco among students (94.9%) and school personnel (95.2%).

- The majority of school personnel strongly agreed that they should be given specific training to help students avoid or quit using tobacco.

- Over one-third of school personnel used tobacco.

- The school tobacco control education in India is underscored by over two-thirds tobacco-free school policy and teaching materials and over three-fifths training among school personnel.

A report prepared by Ministry of Health and Family Welfare, Government of India examined the tobacco use among students in grades 8 to 10, which correspond to ages 13 to 15 years, and school personnel in India, using data from three rounds of the Global Youth Tobacco Surveys (GYTS - 2003, 2006 and 2009) and two rounds of the Global School Personnel Surveys (GSPS - 2006 and 2009) (Ministry of Health and Family Welfare, 2009). Some of the findings from this report are as follows:

- According to GYTS 2009, 14.6% of students currently used tobacco in any form, 8.1% smoked, and 9.0% used smokeless tobacco which shows that there has been no change in the prevalence of tobacco use among students between 2003 and 2009.

- Gender wise, 11% of all male students surveyed in GYTS 2009 were found to be users of smoking or smokeless tobacco, while 6% of all female students were found to be users of smokeless tobacco and 3.7% are smokers.

- According to GYTS 2009, the percentage of students exposed to smoking at home and public places were 21.9% and 36.6% respectively. This shows a decreasing trend when compared to GYTS 2003.

- According to GYTS 2009, Out of all the students who participated in the surveys, 8.1% says that they were offered free sample cigarettes during promotional campaigns by representatives from cigarette companies. Moreover, 56.2% students stated that they did not experience any age related objection while buying cigarettes from stores.

- According to GYTS 2009, nearly two-third of the students have gained knowledge about the health hazards related to tobacco use in their schools and around two-third of them have shown positive intentions for quitting smoking. However, more than two-third of the students who tried have failed to quit smoking.

- According to GSPS 2009, over 90% of school personnel believed that schools should have policies prohibiting tobacco use in school by students and personnel, yet only two-thirds of schools had such policies in place. Also, two-third of the teachers has pointed out about the unavailability of teaching materials regarding the problems associated with tobacco use in their schools.

The report also suggested that there is a need to improve the current "tobacco-free schools" policy and strictly enforce the laws regarding prohibition of sale of tobacco products around educational institutions and to minors. Further the report also asks the Ministry of Health and Family Welfare and Ministry of Human Resource Development to collaborate to make teaching materials available for teachers and establish teacher training programmes regarding the harms of tobacco use (Ministry of Health and Family Welfare, 2009).

The Global Adult Tobacco Survey (GATS) India 2009-2010 was conducted by the International Institute for Population Sciences, Mumbai on behalf of the Ministry of Health and Family Welfare, Government of India with technical support from the US Centers for Disease Control and Prevention (CDC), the World Health Organization, the Johns Hopkins Bloomberg School of Public Health and the RTI International (International Institute of Population Sciences, 2010). GATS is a nationally representative household survey, among population age 15 and above, designed to produce internationally comparable data about tobacco consumption and control measures using standardized methodology (International Institute of Population Sciences, 2010). GATS India was conducted all over the country covering about 99.9% of the entire population. The major highlights of this survey were as follows (International Institute of Population Sciences, 2010):

- Within the categories of current adult users of tobacco, 34.6% are users of tobacco in any form, 25.9% are smokeless tobacco users, 14% are smokers, 5.7% are cigarette smokers and 9.2% are bidi smokers.

- Gender wise among the current adult users of tobacco in any form, 47.9% are males and 20.3% are females, among the current adult smokers, 24.3% are males and 2.9% are females and among smokeless tobacco users 32.9% are males and 18.4% are females.

- Among daily tobacco users, 60.2% consumed tobacco within half an hour of waking up.

- 17.8 is the average age of initiation of tobacco use and 25.8% of females start tobacco use before the age of 15.

- Among minors (age 15-17), 9.6% consumed tobacco in some form and most of them were able to purchase tobacco products.

- Five in ten current smokers (46.6%) and users of smokeless tobacco (45.2%) planned to quit or at least thought of quitting tobacco.

- 46.3% of smokers and 26.7% of users of smokeless tobacco who visited a healthcare provider were advised to quit by health care provider.

- About five in ten adults (52.3%) were exposed to second-hand smoke at home and 29.0% at public places (mainly in public transport and restaurants).

- About two out of three adults (64.5%) have noticed tobacco products related advertisements or promotions.

- Three out of five (61.1%) current tobacco users have noticed the health warnings displayed on packets containing tobacco products and one-third (31.5%) of the current tobacco users have been motivated to quit tobacco due to such health warnings.

Lal et al., (2015) reviewed first round of Global Adult Tobacco Survey (GATS) in India and pointed out the limitations in methods regarding sampling, questionnaire, ensuring data quality and management which may impact the estimates of prevalence. The authors recommended the following measures to overcome these limitations in the next round of surveys:

1. **Objectives:** Objective 2 (Systematically monitor adult tobacco use and track key tobacco control indicators) should be the primary objective and objective 1 (Measure the impact of tobacco control efforts through implementation of different provisions of COTPA 2003 and its regulations) should be expanded to adequately capture and reflect current tobacco epidemiology and control efforts in the country, including the activities of the NTCP.

2. **Sampling:** Region based sampling needs to be replaced by state-based sampling which is locally relevant and PPS (probability proportional to size) sampling needs to be supported with purposive sampling. The lower prevalence of use among women suggests a need for larger samples for women gender and proportionate sampling for the 15–25 years age group is

needed for better understanding of tobacco use behaviours in different age groups.

3. **Questionnaire and Data Collection:** Greater methodological rigour is needed in pre-testing of the questionnaire, data collection, ambiguity within and across questions, data quality, data entry and data validation.

4. **Data Quality and Management:** Conflicts of interest were noticed in agencies hired to conduct the first round of GATS survey. Future surveys should be designed to be more inclusive and consultative by including members of civil society, academia, programme managers and statisticians from other disciplines and make the questionnaire and methodology open for review by independent reviewers prior to the survey.

The second round of GATS was conducted between August 2016 and February 2017 by Tata Institute of Social Sciences, Mumbai for the Ministry of Health & Family Welfare, Government of India. A multi-stage sample design was used for both rounds of GATS. From each of the sampled household, one household member of 15 years of age or older was randomly selected for individual interview. In the first round, 69,296 individual interviews were completed with an overall response rate of 91.8%. In the second round, a total of 74,037 individual interviews were completed with an overall response rate of 92.9%. Highlights from the findings of the survey may be categorized under the following (Ministry of Health and Family Welfare, Government of India, 2017):

1. **Tobacco Use:** 19.0% of men, 2.0% of women and 10.7% (99.5 million) of all adults currently smoke tobacco. 29.6% of men, 12.8% of women and 21.4% (199.4 million) of all adults currently use smokeless tobacco. 42.4% of men, 14.2% of women and 28.6% (266.8 million) of all adults currently use tobacco (smoked and/or smokeless tobacco).

2. **Cessation:** 55.4% of current smokers are planning or thinking of quitting smoking and 49.6% of current smokeless tobacco users are planning or thinking of quitting smokeless tobacco use. 48.8% of current smokers were advised by health care provider to quit smoking and 31.7% of current

smokeless tobacco users were advised by health care provider to quit use of smokeless tobacco.

3. **Second-hand Smoke:** 38.7% of adults were exposed to second hand smoke at home. 30.2% of adults who work indoors are exposed to second-hand smoke at their workplace. 7.4% of adults were exposed to second hand smoke at restaurants.

4. **Media:** 19.2% of adults noticed smoking tobacco advertisement and 18.3% of adults noticed smokeless tobacco advertisement. 68.0% of adults noticed anti-smoking tobacco information on television or radio and 59.3% of adults noticed anti-smokeless tobacco information on television or radio.

5. **Knowledge, Attitudes & Perceptions:** 92.4% of adults believed that smoking causes serious illness and 95.6% of adults believed that use of smokeless tobacco causes serious illness.

Chadda and Sengupta (2002) focused on various tobacco products available in India, the extent of their use in adolescents, factors leading to initiation of their use, and the preventive strategies, which could be used to deal with the problem. They concluded that there is a need to collect nationwide data on tobacco use by children and adolescents, launching community awareness programs for school children and public, and implement the policies and conventions of international agencies like WHO, UNDP etc on tobacco use and control.

Nichter, Nichter and Sickle (2004) examined the perception and described the pattern and use of tobacco products among college students in Karnataka, India using data from interviews, observation and a college-based survey. The findings revealed that 45% of college students had used tobacco products, 36% had tried cigarettes, 10% had tried bidis, and 18% had tried gutkha. The average cigarettes smoked by daily smokers was 6 per day and the students of attending professional courses like engineering, medicine, and law were significantly more likely to have ever smoked and to be daily smokers than students enrolled in other courses. The male students revealed that smoking a cigarette enhanced one's manliness, relieved boredom, and eased tension. Majority of students believed that three-quarters of all youth in the

West smoked and that filter-tipped cigarettes were addictive because of better quality, mildness and smoothness.

Reddy and Gupta (2004) published a report on tobacco control in India which was jointly supported by Ministry of Health & Family Welfare, Government of India, Centers for Disease Control and Prevention, USA and World Health Organization. The report provided a comprehensive overview of the tobacco problem in India, from public health challenges to policy responses with an objective for evolving future tobacco control policies. The report covered various aspects like the historical overview, prevalence and pattern, health consequences and costs of tobacco use in India. It offered specific recommendations for the central government, state governments, civil society, international organizations, health professionals and research scientists. The authors had also compiled an elaborated list of various forms of tobacco products used in India (Table 2.1).

Table 2.1
Types of Tobacco Products Used in India

Forms	Types
Smoking forms	*Beedis* (tobacco flakes wrapped in tendu leaf and it is the most popular form of smoking in India), **Cigarettes** (second most popular smoking form in India), **Cigars** (made from air-cured fermented tobacco), *Cheroots* (a roll made from tobacco leaves), *Chuttas* (coarsely prepared cheroots use in coastal areas of Andhra Pradesh, Tamil Nadu and Orissa), **Reverse** *Chutta* **smoking** (practiced extensively by women in rural areas of Visakhapatnam and Srikaulam districts of Andhra Pradesh), *Dhumti* (a conical cigar made by rolling tobacco leaf in the leaf of another plant), **Pipe** (one of the oldest form of tobacco use), *Hooklis* (clay pipes commonly used in western India), *Chillum* (exclusively a male practice limited to the rural areas of northern India) & *Hookah* (Indian water pipe in which tobacco smoke passes through water before inhalation).
Smokeless forms	*Paan* (betel leaf with tobacco, areca nut, slaked lime & catechu), *Pan masala* (contains a mixture of areca nut, slaked lime, catechu & condiments with or without powdered tobacco), **Tobacco areca nut and slaked lime preparations** (chewed in several parts of north India and known by different names), **Mainpuri tobacco** (contains tobacco with slaked lime, finely cut areca nut, camphor & cloves), *Mawa* (contains thin shavings of areca nuts with tobacco & slaked lime), *Khaini* (sun dried tobacco with slaked lime specially popular in north India and Maharashtra), **Chewing tobacco** (chewing of tobacco alone is not very popular in India) & *Snus* (Swedish snuff is available in pouches which can be kept in buccal or labial groove and sucked).

Tobacco products for application	*Mishri* (roasted black powder made by baking tobacco on hot metal used mainly in Maharashtra & Goa), *Gul* (pyrolysed tobacco product used as a dentifrice in eastern India), *Bajjar* (dry snuff applied commonly on gums & teeth by women in Gujrat), *Laldantmanjan* (red-coloured tobacco-containing tooth powder), *Gudhaku* (paste made from tobacco & molasses applied to teeth & gums predominantly by women in Bihar, Orissa, Uttar Pradesh & Uttaranchal) , **Creamy snuff** (commercial preparations of tobacco paste marketed in toothpaste-like tubes which is popular with children in Goa) , **Tobacco water** (known as *tuibur* in Mizoram & *hidakphu* in Manipur manufactured by passing tobacco smoke through water) & **Nicotine chewing gum** (chewing gum containing 2% nicotine available in gutkaflavor for chewers and mint flavor for smokers).
Areca nut preparations	**Areca nut** (chewing of areca nut alone in different forms like fermented areca nut called *tamol* or *buratamol* in Assam), *Supari* (some commercial supari are made by roasting dry areca nut & adding flavouring and sweetening agents) & *Meethamawa* (consists of thin shavings of areca nut, grated coconut, dried fruits & other sweetening agents).

Adapted from Reddy & Gupta (2004)

Subramanian et al., (2004) described the socio-demographic and economic pattern of smoking, drinking and tobacco chewing behaviour based on 1998-99 Indian National Family Health Survey (NFHS) in the states of Andhra Pradesh, Madhya Pradesh, Orissa and West Bengal. The study found strong independent effects of socio-economic position (SEP) and social caste on health behaviours related to smoking, drinking and chewing and also suggested that there exists significant local area, district and state variations emphasizing the context of shaping such health behaviours. The authors further argued that policy should be directed towards changing the macro environment rather than individual behavioural change.

Jindal et al., (2005) studied the prevalence of tobacco use among school going youth in north Indian states based on the GYTS findings from a sample of 9319 students out of the total eligible population of 30488 from 100 schools. The study revealed that the prevalence of tobacco was highest in Chandigarh and lowest in Punjab and the prevalence of ever-use of tobacco varied between 2.9 to 8.5% in boys and 1.5 to 9.8% in girls. Between 16 to 46% of students were found to be exposed to tobacco from parents or friends and 10 to 34% students were passively exposed to environmental tobacco smoke. The authors concluded that tobacco prevalence is present in up to 10 percent of school going youth in the region and majority of the respondents had expressed their desire to quit. Therefore, the authors stressed on the need for tobacco control and cessation programmes at schools.

John (2006) analysed the consumption patterns, socio-economic distribution and household choices regarding various tobacco products across rural and urban India. The researcher found that most forms of tobacco consumption are higher among socially disadvantaged and low-income groups in the country and education, sex ratio, alcohol and pan consumption were found to be significant factors determining tobacco consumption habits of Indian households. The researcher also pointed that there is considerable variation in the prevalence of tobacco consumption and types of tobacco products consumed across states.

Thankappan and Thresia (2007) explored the various aspects of tobacco use in Kerala, India and listed the following findings:

1. Smoking is the most common form of tobacco usage among men and chewing tobacco is more common among women and children.
2. Chewing tobacco is also increasing among men due to smoking ban and tobacco industries strategic focus on smokeless tobacco.
3. Tobacco use is significantly more among the low socio-economic groups.
4. Mortality and morbidity attributed to tobacco use is higher among the poorest people.
5. Cancer rate of oral cavity, lung cancer and heart diseases among the young people has been increasing in recent times.

Gajalakshmi and Kanimozhi (2010) studied students aged between 13 to 15 years in Grades 8 to 10 who were surveyed in the Global Youth Tobacco Survey in year 2006 and in 2009 to monitor the prevalence of smoking and smokeless tobacco use and to assess their attitudes, knowledge and behaviours towards tobacco use and its health impact. The study concluded that there is no significant difference in the prevalence of tobacco use among students between the 2006 and 2009 surveys. The percentage of boys who initiated bidi smoking before age 10 is statistically higher in 2009 compared to 2006. The study suggested that there is a need to strengthen enforcement of policies already in place as well as focus on expansion into additional program efforts.

Sharma, Grover and Chaturvedi (2010) studied the prevalence of tobacco use among adolescent students in South Delhi and its epidemiological correlates. The prevalence of tobacco use overall was found to be 20.9%, and was significantly higher (P=0.016) among the males than the females. Tobacco use was found to be significantly associated with having seen a brother/sister smoke (OR 5.15), best friend smoke (OR 2.92), and belonging to a nuclear family (OR 1.96). They concluded that tobacco use is still important risk behaviour among adolescent students and there is a strong association of tobacco use by adolescents with their having seen various role models ever smoking.

Dhekale, Gadekar and Kolhe (2011) studied the prevalence and pattern of tobacco consumption among adolescents of tribal areas in Maharashtra. They found a high overall prevalence of tobacco consumption of 45.42% (65.31% among males and 26.46% among females). It was concluded that social customs, peer pressure and the consumption of tobacco by the family members were the major contributing factors which emphasized the need of strengthening the information, education and communication (IEC) activities.

Multani et al., (2012) conducted a study to assess the prevalence, knowledge, attitude, behaviour and interpersonal factors related to the use of tobacco among 1031, 15- to 25-year-old youths studying in different colleges of Udaipur city in Rajasthan. It was found that there is a high prevalence use of tobacco among the youth where 47.8% were current tobacco users out of which 39.8% were men. It was also found that the majority of current tobacco users (72.5% men and 82% women) wanted to stop smoking/gutkha chewing.

Soni and Raut (2012) gave a global overview of prevalence and patterns of tobacco consumption with special focus on India. They highlighted the risks of exposure of tobacco for both adults and adolescents and also focused on the impact of tobacco use on human right, ecology and economy of the country.

Soni (2012) studied the tobacco consumption patterns of school students in NCT of Delhi. The study focused on the prevalence of tobacco use among senior secondary

school children, pattern of tobacco consumption among school children, major reasons for tobacco consumption, consequences of tobacco use, awareness level of children, school authorities and parents regarding tobacco use and the role of school and family in dealing with the problem of tobacco use. The study revealed that overall prevalence of tobacco consumption was 73.5% out of which 68% were boys and 31% were girls. The study also revealed that age of initiation was an important predictor for regular use of tobacco among students The study concluded that family is not the only influencing factor for tobacco consumption among school students, in fact advertisements from various media outlets was the most influencing factor for tobacco consumption. The study also found that "stress" is the most common cause for tobacco use among students and majority of the students were not aware of anti-tobacco programmes or laws prohibiting tobacco consumption. The study recommended a comprehensive tobacco control policy for schools and suggested seven recommendations in this regard.

Mathur et al., (2014) did a study in Delhi and Chennai where they investigated the socioeconomic differences in patterns and trends of tobacco consumption over time among the youth and examined the distribution of tobacco use risk factors across social class. They found that the relationship between SES (Socio-economic Status) and tobacco use over time was not consistent. In 2004, lower SES was associated with higher prevalence of tobacco use but this relation reversed 2 years later in 2006. The researchers suggested that both lower and higher SES youth are at the risk for tobacco use and both should be targeted for interventions but programs may require specific tailoring based on their psychosocial risk profile.

Singh and Ladusingh (2014) examined the regional variations, and socioeconomic, demographic and other correlates of smoking, smokeless tobacco and dual use of tobacco in India using data from GATS 2009-10. Their findings revealed that smokeless tobacco use was the major form of tobacco use in India followed by smoking and dual tobacco use and tobacco use was higher among males in general, middle-aged adult males among males, among respondents with less knowledge about the health hazards of tobacco, the less educated, the poor, and the rural

population in India. Therefore, age, education and region were found to be significant determinants of all forms of tobacco use and lack of awareness about the selected hazards of tobacco significantly affects its use. It was suggested that tobacco control policies in India should adopt a targeted, population-based approach to control and reduce tobacco consumption in the country.

Mishra et al., (2016) documented the trends in bidi and cigarette smoking prevalence among Indians aged between 15 to 69 years since 1998 till 2015. The researchers compared data from Special Fertility and Mortality Survey (1998), the Sample Registration System Baseline Survey (2004), and the Global Adult Tobacco Survey (2010) to draw age-standardized smoking prevalence and projected absolute numbers of smokers in 2015 and stratified trends by type of tobacco smoked, age, gender and education level. The major findings were as follows:

1. Age-standardized prevalence of any smoking in men aged 15-69 years, came down from 27% in 1998 to 24% in 2010, but rose at ages 15-29 years. There is an average increase of about 1.7 million male smokers every year.

2. Cigarette smoking became twofold more prevalent among men aged between 15-69 years and fourfold more prevalent among men aged between 15-29 years. By contrast, bidi smoking among men at ages 15-69 years fell modestly.

3. Age-standardized prevalence of any smoking among women aged between 15-69 years was 2.7% in 2010. About 11 million women aged 15-69 smoked in 2015.

4. Prevalence of smoking rose among illiterate men, but fell modestly among men with grade 10 or more education.

5. The ex-smoking prevalence in men at ages 45-59 years rose modestly but remained low.

The researchers concluded that the smoking prevalence among male smokers aged has increased substantially over the last 15 years and cigarettes are displacing bidi smoking, most notably among young adult and illiterate men. Therefore, they

suggested that tobacco control policies need to adapt to these changes, specially rising of taxes on tobacco products.

Mohan and Lando (2016) compiled a list of various forms of smokeless tobacco (SLT) used in India, with regions where they are commonly used and their respective compositions. The list included Gutka, Chewing tobacco, Khaini, Pan with tobacco, Pan masala, Mawa, Mishri, Gudakhu, Creamy snuff, Bajjar, Laldantmanjan, Tuibur, Hidakphu and Gul.

Mohan et al., (2018) reviewed the determinants of tobacco consumption like socio-economic status, marriage, population growth, marketing strategies, and price and also explored the burden of tobacco consumption such as its economic and social costs and adverse health impacts. They also addressed the history of tobacco control legislation in India and challenges in implementation. The researchers felt that there is a need for more "visible and aggressive anti-tobacco campaigns including increased public awareness of tobacco harms and active engagement of worksites and health professionals in promoting tobacco cessation".

2. 4 Tobacco Consumption in Northeast India

The north-eastern part of India comprises of eight small states namely: Assam, Arunachal Pradesh, Manipur, Meghalaya, Tripura, Mizoram, Nagaland and Sikkim. This region covers almost 8 per cent of India's total land mass and is distinguishable from the rest of India in terms various geographic, economic, social and cultural factors. The Northeastern states together as a region is having highest prevalence of tobacco use in India (Dutt, 2018). The following section reviews the available literatures related to the various aspects of tobacco consumption in Northeast India.

Gupta et al., (2003) conducted a study to find out the prevalence of tobacco use among school students in the North-eastern states of India. Their study was funded by the Tobacco Free Initiative, WHO, Geneva and the technical assistance was provided by the Office on Smoking and Health, CDC, Atlanta. The major findings of the study were as follows:

1. The ever tobacco users ranged from 75.3% in Mizoram to 40.1% in Assam.

2. Over 65% of the users reported initiation at 10 years of age or earlier in all northeastern states except Mizoram.

3. The range of current tobacco users of any products was 63% in Nagaland to 36.1% in Assam.

4. The current smokeless tobacco users ranged from 49.9% in Nagaland to 25.3% in Assam.

5. Mizoram reported the highest current smoking of mainly cigarettes (34.5%) and Assam reported the lowest current smoking of mainly cigarettes (19.7%).

6. The current smoking among girls was also quite high and ranged within 8.3% to 28.2%.

7. Over half of current cigarette smokers (53.2% to 96.3%) and a high proportion of current smokeless tobacco users (38.5% to 80.8%) reported feeling like having tobacco first thing in the morning.

8. Only about 20% of students reported having been taught in school about the dangers of tobacco use, except in Mizoram where it is around 50%.

9. Tobacco use by parents and close friends was positively associated with students' current tobacco use.

The researchers concluded that the prevalence of tobacco use is very high among school students including girls in the northeast and visible signs of tobacco dependency have been observed among these students especially among smokers. In their conclusion, the researchers also highlighted the fact that in general most of the schools in northeast do not educate their students of the hazards of tobacco use and smoking.

The Northeast has been covered extensively in the Global Adult Tobacco Survey during 2009-2010 and 2016-2017. The surveys highlighted that in some northeastern states, especially Manipur, Assam, and Tripura, the prevalence of tobacco use among the overall population has increased since the last GATS was carried out first time. One of the most worrying factors about the tobacco prevalence in Northeast is that there is a high percentage of young tobacco users in the region. According to Sulabha

Parasuraman, the Consultant for GATS 2 and a Faculty Member at the Tata Institute of Social Science, "The exact reason so as to why minors in this region are using tobacco more than their counterparts in other parts of the country is yet to be ascertained. Maybe it is due to the cultural and traditional acceptance of tobacco. Minors here are seeing their adults resorting to the use of tobacco and are influenced by it" (Times of India, November 25, 2017). Some of the highlights on Northeast India from the Global Adult Tobacco Surveys of 2009-2010 and 2016-2017 have been presented below:

1. Tripura tops in tobacco use in the country with 64.5% of its population using different types of tobacco products, which has increased from its earlier record of 55.9%. This is an increase of 8.6 percentage points over the state's prevalence in 2009-10.

2. Among all age groups, Manipur, Tripura and Assam recorded 55.1%, 64.5% and 48.2% respectively in the prevalence of current tobacco use. The prevalence went up in Manipur by one percentage point and went up in Assam by 8.9 percentage points, from 39.3% to 48.2%.

3. Tripura also has the highest prevalence of smokeless tobacco users, with 48.5% and Mizoram has the highest number of smokers at 34.4%,

4. Sikkim achieved rapid progress by registering a decline from 41.6% to 17.9% which is less than the national average record.

5. While Sikkim, Mizoram and Meghalaya achieved remarkable progress in mitigation of tobacco use, Arunachal Pradesh and Manipur achieved no major progress.

6. There are more tobacco consumers in all forms in the 15 to 17 years age group in the northeast than anywhere in the country. The national tobacco prevalence in this age group is 4.4%. Mizoram tops the table where 27% of the population in this age bracket is a tobacco-user while Sikkim recorded zero users. Mizoram had recorded a higher rate (35.4%) in the GATS 1 survey of 2009-10. Sikkim had 11.6% in the last survey.

7. Only Arunachal Pradesh showed an increase in tobacco users among people aged 15 to 17 years from 14.3% recorded during the GATS 1 survey to

25.1% recorded in the latest survey. Lagging behind Mizoram and Arunachal Pradesh are Meghalaya 12.6%, Tripura 11.6%, Nagaland 11.3%, Assam 9.1% and Manipur 9%.

Ladusingh, Dhillon and Narzary (2017) assessed the influence of parent's tobacco use on prospective tobacco use trajectories among young offspring. The study is based on unit level data from District Level Household and Facility Survey-4 (2012-2013) comprising 27,706 youths in 15–24 years' age group from northeastern states of India. They found that the likelihood of using tobacco is 3.4 and 1.14 times more, respectively, for youths staying with mothers and fathers who use tobacco, in comparison to youths staying with parents who do not use tobacco. The researchers felt that there is an urgent need to extend National Tobacco Control Programme (NTCP) to the community level with involvement of civil societies for increasing awareness, providing support and facilitating quitting of tobacco use.

2. 5 Tobacco Consumption in Mizoram

There is limited number of literatures available which focuses on tobacco consumption in Mizoram. Some studies have covered the prevalence and pattern of tobacco consumption in Mizoram as part of their overall study on northeastern states or part of the pan India surveys. However, few important doctoral studies have been carried out in recent times particularly related to various psycho-social aspects of tobacco consumption in Mizoram.

Gupta et al., (2003) in their study of "Tobacco use among students in the eight North-eastern states of India" included a sample of 26,112 students aged between 13 to 15 years from 25 sampled schools in Mizoram. They found that 75.3% of the total respondents including 78.6% boys and 72% girls were users of tobacco and 23.9% of the total respondents including 27.6% boys and 19.7% girls reporting that they initiated tobacco at 10 years of age or earlier than that. The study also pointed that 53.5% respondents (58.4% boys and 48.7% girls) were current tobacco users of any form, 42.9% (45.7% boys and 40.1% girls) were current smokeless tobacco users and 23.1% were (32.8% boys and 13.4% girls) were cigarette smokers. The study also

revealed that "around half of tobacco users (53.2% cigarette smokers, 44.5% smokeless tobacco users) reported needing tobacco first thing in the morning. The study also pointed that compared to never tobacco users, tobacco users were being perceived more positively by others like boys who use tobacco looks more attractive, tobacco users are more successful, have more friends etc. Also, both tobacco users (53% to 59%) and never tobacco users (62.2%) agreed that tobacco helped in losing weight. However, around 50% of respondent students in Mizoram reported having been taught in school about the dangers of tobacco use.

Lalfakzuali (2014), in her doctoral research studied the relationship between gender and levels of tobacco dependence with various psychological variables namely, personality, stress, coping, anxiety and depression among smokers, smokeless tobacco users and non-users. She determined the predictability of psychological variables from the level of tobacco dependence and assessed the independent and interaction effects of gender and level of tobacco dependency on the psychological variables. Her findings revealed that females exhibited greater scores than males on psychological variables namely Personality (extraversion and neuroticism), Perceived Stress Measures, Anxiety and Depression as compared to males. The scores were highest among female high dependent smokers followed by high dependent smokeless tobacco users, low dependent smokers and low dependent smokeless tobacco users and lowest among non-users. She also concluded that there are significant interactions between gender and level of tobacco dependency on psychological variables.

Hatzaw (2014) in her doctoral thesis titled "Psychological Aspects of Tobacco Use among Mizo Women" studied the pattern, psycho-social factors, reasons and health impact of tobacco among Mizo women and suggested measures for social work policy intervention to deal with the problems of tobacco use in Mizoram. She concluded that there is no relationship between tobacco use and education, tobacco use and occupation, tobacco use frequency and personal income of the respondents, awareness of health effects of tobacco use and rate of quit or attempt to quit tobacco. She also concluded that smokeless tobacco is more prevalent among the urban

women respondents and smoke forms of tobacco are more prevalent among the rural women respondents. In her study she found the importance of public participation and civil society efforts to reduce tobacco use among Mizo women and highlighted the interventions made by Tobacco Society of Mizoram, Mizoram State Cancer Institute, Indian Society for Tobacco and Health Mizoram Chapter and Mizoram State Tobacco Control Society. She suggested a multi-level social work intervention.

Hatzaw (2015) also conducted a study in 2012 in Aizawl district of Mizoram among 350 Mizo women who were healthy and in the age group of 13 to 45 years. Her objective was to understand the perceptions of tribal women on health consequences of tobacco use, the correlation between tobacco use and occurrences of major health problems, minor health complaints and the severity of minor health complaints. The results of her study indicated that many effects of tobacco use is being perceived by the women and majority of the respondents understand that health problems like pregnancy related complications, respiratory ailments, oral and oesophagus cancer and dental problems are caused by tobacco use.

Vanlalngilneii and Thamilarasan (2016) explored how gender determines prevalence of cancer and tobacco consumption in Mizo society. According to them gender roles are well defined in Mizo society and determines type of tobacco being consumed respectively by males and females. The Male behaviour of tobacco smoking and female behaviour of consuming smokeless tobacco matches with the differences in cancer prevalence among genders where lung cancer is most prevalent among males compared to females.

As part of the Global Adult Tobacco Survey, Mizoram has been covered extensively in their two surveys. The first round of GATS was conducted between June 2009 and January 2010. The second round of GATS was conducted between August 2016 to February 2017 by Tata Institute of Social Sciences, Mumbai; for the Ministry of Health & Family Welfare, Government of India. The major finding from the Global Adult Tobacco Survey (GATS 2) India 2016-2017 Report in connection with its 2009-2010 report has been summarized below:

1. Mizoram has the second highest prevalence of tobacco use among all the states in India at 58.7%, which is more than double of the national average of 28.6%.

2. The overall tobacco consumption in Mizoram has come down from 67.2% to 58.7% registering 8.5% decrease.

3. With 34.4%, Mizoram has the highest number of smokers.

4. Mizoram is still having the highest tobacco users among all states in India in the age group of 15 to 17 years. 27% of its population in the age group of 15-17 years is a tobacco-user, which is way above the national average of 4.4%. In GATS 1 survey of 2009-2010, 35.4% of Mizoram's populations in the age group of 15-17 years were tobacco users.

5. 25.1% of tobacco users in Mizoram used smoke tobacco, while 24.3% used smokeless tobacco and 9.2% used both.

6. 54% of daily cigarette and hand rolled bidi smokers were adult males and 14.3% were adult females.

7. 52.4% of people using smokeless tobacco were male, 21.3% females used smokeless tobacco.

8. Consumption of smoke tobacco decreased by 5.3%, while smokeless tobacco decreased by 7.2%.

9. The percentage of tobacco consumption among youths in the age group of 15-17 years registered declining trend as it was decreased from 35.4% (GATS 1) to 27.0% (GATS 2).

10. Age of initiation of tobacco use was 17.4 years (GATS 1) which has increased to 17.8 years (GATS 2).

11. The percentage of people exposed to 'second hand smoke in private house' has decreased from 95% to 84.1%.

12. The percentage of people exposed to 'second hand smoke' in public place has decreased from 64.6% to 44.5%.

13. The percentage of smoking in public place also declined from 27.3% to 18.2%.

14. The monthly expenditure on cigarettes by current smokers in Mizoram is ₹712, while monthly expenditure on bid by a current bidi smoker is ₹256.1.

2.6 Factors Contributing Tobacco Consumption

One of the most important aspects of tobacco consumption that has been studied over the years through research is the exploration of various factors that lead to the initiation, use and addiction of tobacco. Numerous research studies from across the world have attempted to determine these factors which includes environmental factors such as socio-economic conditions, cultural dimensions, demographic factors, pro-tobacco advertisement as well as individual factors related to personality, behaviour, gender, income, family etc. According to Mohan et al., (2005), the most common reasons for the initiation of tobacco use among children are peer pressure, parental tobacco habits and pocket money given to children. Others (Aggarwal et al., 1998; Chadda & Sengupta, 2002; Jayant et al., 1991; Kumar et al., 2006; Muttappallymyalil et al., 2010; Narayan et al., 1996) have pointed that decision of tobacco use is associated with factors like peer smoking, peer attitudes and norms, underlying emotional and psychological problems like stress, depression and self-esteem, health concerns, risky behaviours, experimentation, parental smoking, family income, parental attitudes, sibling addiction, attachment to family and friends and easy access to tobacco products. On the other hand, Chadda and Sengupta (2002) feels that the most important factor contributing to initiation of tobacco use is the aggressive marketing strategy of the tobacco industry.

Gray (1993) studied the relationship between cigarette smoking behaviour and use of other substances among college students of Oregon. Their findings revealed no significant difference between cigarette smokers and non-smokers with regard to use of smokeless tobacco, alcohol consumption, or marijuana use, except a significant difference regarding the use of other illicit substances. It was found that smokers were more likely to use illicit substances on an occasional or regular basis compared to non-smokers. Smokeless tobacco users who consumed alcohol, marijuana and other illicit substances were more likely to consume more alcohol on a weekly basis and use marijuana and other illicit substances on an occasional and regular basis

compared to non-users. The researcher stressed on the need to educate young people regarding cigarettes and smokeless products which are being used as starter drugs.

Gangeness, Evanson and Webb (2006) did a pilot study to compare business practices of tobacco merchants who sold tobacco to youth and those who did not and compared tobacco merchant new employee training and business policies and practices to business compliance data. The finding of the study indicates that tobacco merchants who provide employees with training on fake IDs are more likely to be compliant with youth tobacco sale laws than those who do not provide such training. Thus the researchers suggested that public health nurses may focus more resources for tobacco merchant education and training to decrease youth access to tobacco.

Nichter et al., (2006) explored the gendered dimensions of smoking among low level smokers such as acceptability of smoking in different contexts, reasons for smoking, shared smoking as a means of communicating concern and empathy etc. Their findings contrasted male smokers as looking manly, relaxed, and in control against female smokers as looking slutty and out of control. Women were found to monitor their own and their friends' smoking carefully and tended to smoke in groups to mitigate negative perceptions of smoking. The researchers advocated for gender-specific tobacco cessation programs on college campuses.

Peretti-Watel et al., (2009) examined smoking motivation and motivation to quit, and determinants of these motivations among HIV-infected cigarette smokers. They found four clusters of smoking motivation out of which the automatic/stress relief cluster was negatively correlated to the motivation to quit whereas the weight control cluster was strongly associated to this motivation.

Ravishankar and Nagarajappa (2009) identified the prominent factors leading to initiation of tobacco use among adolescents of Moradabad. It was found that 17.3% of the adolescents have experimented with tobacco, curiosity and peer pressure were the main reasons behind trying tobacco and parental tobacco status, especially place of use had a significant influence on adolescents experimenting tobacco. The researchers concluded that tobacco use by parents is likely to influence adolescents,

as they perceive tobacco use as a positive and acceptable behaviour, and develop favourable personal beliefs and subjective norms towards tobacco use.

Banta et al., (2012), has linked alcohol drinking to cigarette smoking among men and smokeless tobacco use among women in Cambodia. The authors further pointed out the "possibility that a pattern of smoking and drinking in young adulthood serves as a gateway for habitual tobacco use among males throughout the life span".

Widome et al., (2012) used data from a 2007 cross-sectional study of the retail tobacco marketing environments in the St. Paul, MN metropolitan area and matched with a database of age-of-sale compliance checks to determine how point-of-sale tobacco advertising is related to sales to minors. The authors found that tobacco stores were the most likely and supermarkets were least likely type of store to fail compliance checks. Beside a marginally significant association with Hispanic population proportion, the authors did not find any other association between either store advertising characteristics or neighbourhood demographics and stores' compliance check failure. The authors however concluded that "the relationship between advertising and real youth sales may be more nuanced as compliance checks do not perfectly simulate the way youth attempt to purchase cigarettes".

Stewart and Moreno (2013) conducted a study in U.S. to understand how students' attitudes, intentions, and behaviours toward tobacco and marijuana change during freshman year and to examine how attitude and intention predict use of these substances. The researchers found that only intention predicted tobacco initiation, while both attitude and intention predicted marijuana initiation. Overall, attitudes, intentions, and behaviours changed significantly toward favoured use and predictors of use varied by substance, suggesting that different prevention approaches may be beneficial.

Agaku and Ayo-Yusuf (2014) assessed the influence of pro-tobacco advertisements exposure from internet, newspaper/magazines and retail store on experimentation with emerging tobacco products among U.S. adolescents aged 9 years or greater in Grades 6 to 12 using the data from the 2011 National Youth Tobacco Survey. They

found that the odds of experimenting with snus were 1.36, 2.03, and 3.24, among students exposed to one, two, or all three types of pro-tobacco advertisements, respectively in comparison with those exposed to none. Similar results were also found for e-cigarettes. The authors concluded that exposure to pro-tobacco advertisements significantly increased the likelihood of experimenting both with snus and e-cigarettes. The authors argued for stronger restrictions on tobacco advertisements, increased taxes on tobacco and warning about the dangers of tobacco can help to reduce use of tobacco among youth.

Romero et al., (2014) examined the behavioural and psychosocial correlates of smoking among subgroups of nondaily college student smokers in a large public university of U.S. They found that almost half of nondaily smokers have attempted to quit smoking completely and they have significantly higher quit attempts, perceived risk related to smoking and self-efficacy to abstain from smoking. The researchers concluded heterogeneity among subgroups of nondaily college student smokers exists in a number of behavioural and psychosocial factors and therefore suggested that prevention and cessation strategies may be improved by considering frequency of nondaily smoking and targeting subgroups differently.

A cross sectional study was done by Barik et al., (2016) to examine the socio-economic factors associated with types of tobacco use among the rural population of Birbhum district of West Bengal, India. The study applied bivariate analyses and binary logistic regression to estimate the adjusted odds ratio for socio-economic factors of religion, social group, education, occupation, and wealth quintile associated with current tobacco use, current smokeless tobacco use, and current bidi use among men and women. The study found that though women compared to men and unemployed people in general are less likely to use tobacco. However, irrespective of gender, tobacco use declines with increase of education and with increasing income, the odds of smokeless tobacco use and smoking bidi are higher among women and men, respectively. The authors concluded that irrespective of gender and income, raising the level of awareness through household-based health education could be an effective intervention for tobacco control.

Ford et al., (2016) examined adolescents' awareness of e-cigarette marketing and investigated the impact of e-cigarette flavour descriptors on perceptions of product harm and user image using data from 2014 Youth Tobacco Policy Survey, UK. The researchers found that the regular use of e-cigarettes was low and limited to adolescents who had also smoked tobacco. Brand awareness was found to be low but most of them were aware of at least one promotional channel and that e-cigarettes came in different flavours, where fruit and sweet flavours were perceived as more likely to be tried by young never smokers than adult smokers trying to quit. The authors concluded that "there is a need to monitor the impact of future market and regulatory change on youth uptake and perceptions of e-cigarettes".

Huong et al., (2017) described the exposure to tobacco advertising and promotion among the population aged 15+ years in Vietnam based on the data from the Global Adult Tobacco Survey 2015. The authors concluded that gender, educational level, age, occupation, marital status, socioeconomic status, location (urban, rural), and current smoking status were associated with the exposure to tobacco advertising, tobacco promotion, tobacco advertising and promotion, and tobacco advertising or promotion. The authors found that in spite of the comprehensive ban on tobacco advertising and promotion in Vietnam, the 15+ years still reported of being exposed to tobacco advertising and promotion. Based on the findings the authors suggested stricter enforcement of ban on tobacco advertising and promotion, especially point-of sale promotion.

Popova et al., (2017) evaluated the association of discrete positive and negative emotions with interest in alternative tobacco products among 1,226 U.S. adult nonsmokers and current smokers. They concluded that positive emotions, particularly hope, were consistently positively associated with interest in alternative tobacco products and is widely used by tobacco and e-cigarette companies to advertise their products. They suggested that Anti-tobacco messages should aim to lower hope associated with tobacco products but increase hope for cessation or life without tobacco.

2.7 Implications of Tobacco Consumption

There are various implications of tobacco consumption which particularly becomes the basis of arguments for and against the tobacco industry and the need for tobacco control. Over the years, research studies have explored issues such as the health related consequences of tobacco consumption, cost of tobacco consumption, and socio-economic implications of tobacco industry. The present section presents the review of such literatures which brings out both the negative and positive implications of tobacco consumption.

Reddy and Gupta (2004) has pointed out that due to morbidity, mortality and negative externalities linked with consumption of tobacco products, the total social costs of tobacco products exceed the direct outlay on them. Moreover, the cost of tobacco consumption is extended much beyond the direct users and covers secondary smokers and non-users and continues for much longer period than actual period of consumption. The researchers also listed the various health consequences related to tobacco exposure like heart and blood vessel diseases, cancer, respiratory diseases, reproductive effects etc (Exhibit 2.2).

Table 2.2
Health Consequences for Tobacco Exposure

Heart and blood vessel diseases	• Atherosclerosis, coronary heart disease • Cerebrovascular diseases • Abdominal aortic aneurysm • Peripheral vascular disease (may cause gangrene in the legs) • Erectile dysfunction or impotence (atherosclerosis and endothelial dysfunction of the internal pudendal and penile arteries)
Cancer	• Cancers of the bladders, cervix, oesophagus, kidney, larynx, lung, oral cavity and pharynx, pancreas, stomach and leukaemia • Precancerous lesions: Leucoplakia, erythroplakia of the oral cavity
Respiratory diseases	• Chronic obstructive pulmonary disease: Chronic bronchitis • Acute respiratory illness: Pneumonia, bronchitis and other respiratory infections • Respiratory effects mediated *in utero*: Reduced respiratory function in infants • Respiratory effects in childhood and adolescence: Decreased physical fitness, potential retardation in the rate of lung growth and the level of maximum lung function among children and adolescents • Respiratory effects in adulthood: Acceleration of age-related decline in lung function among adults • Other respiratory effects: Increased cough, phlegm production, wheezing, respiratory infections and dyspnoea

Reproductive effects	• Foetal death and stillbirth: Sudden infant death syndrome (SIDS) • Fertility: Delayed conception (primary and secondary infertility) • Low birth weight: Foetal growth restriction and preterm delivery • Pregnancy complications: Premature rupture of membranes, abruption placentae and placenta praevia
Other effects	• Cataract • Adverse surgical outcomes related to wound healing and respiratory complications • Low bone density among postmenopausal women and risk of hip fractures • Peptic ulcer disease, periodontitis

Adapted from Reddy and Gupta (2004)

Collins and Lapsley (2006) estimated the social costs of tobacco use in Victoria, Australia for the financial year 1998-1999 and the social benefits, if there were to be a reduction in smoking prevalence in Victoria from the 2003 prevalence figure of 17% to 12% by the end of 2008. It was concluded that the total costs of smoking in Victoria in 1998-1999 were about $5.05 billion and the discounted present value in the year 2003-2004 of the social benefits of the reduction in smoking prevalence would be $2,034 million.

Hussain (2008) pointed out that premature death due to tobacco consumption is particularly damaging to the desired economic development of countries with emerging economies. He suggested exploring alternative crop option as a rational supply-side management for tobacco control approach.

Karmakar (2008) explored the economic and macro variables related to tobacco and tobacco consumption from a global perspective including employment generation, alternative livelihood opportunities, government revenue, subsidies granted, consumption and production trends, foreign exchange and social cost. She suggested that though there are multiple economic dimensions to tobacco and its consumption but the social cost related to tobacco must not be ignored and there should be government intervention to put an end to the camouflage created by the tobacco industry over the deadly consequences of tobacco use.

Pain (2008) explored the historical path of medicinal implications of tobacco through gathering instances from various sources. The medicinal usage of tobacco has been traced back since it was discovered by Columbus in 1492 and its use in the pre-

modern and modern period in Europe and America till the present era. Pain (2008) suggested that the therapeutic applications of tobacco are not grasped in its totality and the entire domain of tobacco's medicinal usage remains far from being explored.

Lee (2008) undertook Health Assessment (HIA) of UK trade policy on tobacco taxation. The paper provided evidence that trade liberalization promotes production and consumption of tobacco with adverse consequences on public health and draws attention for change in taxation policy.

Ankathil (2010) using familial clustering of lung cancer and segregation analysis have inferred a possible role for genetic susceptibility in the development of lung cancer which can be used to individualize treatments, personalize harms of smoking and to motivate cessation.

John et al., (2010), pointed out that in India, the direct cost of treating four major tobacco related diseases (respiratory, tuberculosis, cardiovascular, and neoplasms) amounted to ₹54 billion in 2004 which was equivalent 4.7% of India's national healthcare expenditure that year.

Spangler et al., (2013) conducted a web-based survey at 11 colleges and universities in North Carolina and Virginia to explore Correlates of smokeless tobacco use among first year college students. Their findings revealed that 7.2% of male college students use SLT and it is associated with other health behaviours, including current cigarette smoking, alcoholic energy drink use, and physical activity. In conclusion the researchers said that knowledge of significant correlations between student tobacco use, including SLT and other risky health behaviours, may guide clinicians' inquiry and provide opportunities for health education of students.

Chikkala (2014) outlined the macro-structures of tobacco production and marketing in Andhra Pradesh from a historical perspective. They discussed the depot and auction system and other strategies for more effective marketing conditions for tobacco which they considered as attractive but highly perishable agricultural produce. The authors also mentioned that tobacco production is a source of

substantial income and employment for many stakeholders including Dalits and women in India.

Arowolo (2015) employed the uses and gratification theory and Abraham Maslow's hierarchy of needs frameworks to explain how people use available tobacco product in relation to it adverts. The author also pointed the medicinal use of tobacco plant; and the impactful economic benefits of tobacco advertising. The study found that people consume tobacco to gratify their demanding needs, and for health benefits depending on their knowledge of alternative uses of the tobacco plant. Some of the benefits of tobacco consumption and smoking listed by the author included psychological benefits like reducing tension and anxiety, promoting the feel good feeling and sensation of positive emotions, physical benefit like deepening of voice for music artists, various medicinal uses of tobacco, and economic benefits of tobacco industry. The author concluded that tobacco advertising based on the consumers' gratification uses is desirable for its discoverable health benefits and thus recommended regulated cultivation of tobacco and efforts for popularizing health benefits of the tobacco plant.

Lal, Goel and Sharma (2015) estimated the consumer expenditure on tobacco products by underage users in India using nationally representative data. According to their estimation, approximately 7.2% of the population in the 15-17 age group were current daily users of tobacco who annually spend nearly US$16.9 million and US$270.8 million respectively on smoking and chewing tobacco products. The authors also pointed out that the cost of tobacco including health costs and cost due to loss of productivity due to illness and death far outweigh the money earned by government in the form of taxes on tobacco. The authors stressed that the government of India's efforts to reduce sale to underage users has had limited effect and needs to be strengthened.

Mamtani et al., (2017), through their systematic literature review, attempted to quantify the relationship between waterpipe smoking and cancer. The authors found that waterpipe smoking was associated with increased risk of head and neck cancer, esophageal cancer and lung cancer. Therefore, the authors concluded that contrary to

the perception of the relative safety of waterpipe smoking, there is strong evidence regarding the association of waterpipe smoking with cancers of the head and neck, esophagus and lung.

Perera, Guruge and Jayawardana (2017) conducted a cross-sectional study to describe the household expenditure on tobacco and its association with food and education related expenditures at household level by people of Monaragala, a rural agricultural district in southern Sri Lanka. In the study, the poorest reported the highest mean proportionate expenditure from the household income and the household expenditure on tobacco found to be negatively associated with expenditure on children's education at the household level.

Östergren, Martikainen and Lundberg (2018) assessed the level and changes in contribution of smoking and alcohol-related mortality to educational differences in life expectancy in Sweden. The researchers found that alcohol-related mortality was higher and substantially contributed to inequalities among men compared to women and smoking-related mortality decreased among men but increased among women, primarily among the low educated. Smoking-related mortality was also found to be at similar levels among men and women at the end of the follow-up. The researchers concluded that smoking and alcohol consumption contribute to educational differences in life expectancy and the widening gap in life expectancy among women could largely be attributed to smoking.

2.8 Control of Tobacco Consumption Globally

This section reviews the various available literatures that evaluates the existing or past tobacco control measure and strategies adopted in different countries from across the globe and also includes literatures that makes specific future recommendation for prevention and control of tobacco consumption for specific countries or from a global perspective.

Halpern and Warner (1993) examined six reasons for smoking cessation, and their association with successfully quitting among current and former smokers. They

found that successful cessation was associated with having personal concerns regarding the health effects of smoking and with wanting to set a good example for children. In contrast, concerns about the cost of smoking, the effect of smoking on others, and pressure from friends and family to quit were associated with decreased likelihood of cessation. The researchers also concluded that the relative importance of a reason also influenced the association of that reason with smoking cessation.

Rumore (1997) discussed the three choices for pharmacists in U.S. in the context of new FDA regulations on pharmacy with regard to the sale of tobacco in pharmacies which includes display and sell tobacco products (Choice 1), refuse to sell tobacco products (Choice 2), or make tobacco products available but counsel on smoking cessation (Choice 3). The author made the following important observations:

1. Choice 1 will involve only sales to adult smokers, thus lessening somewhat the ethical dilemma of pharmacists who choose to sell tobacco.
2. Regarding Choice 2, remerchandising the space formerly used for cigarettes with other non-tobacco products is financially successful and the mass display of tobacco is in contradiction with the role of the pharmacy as a public health facility.
3. Choice 3 is ideal as the accessibility of pharmacists and their highly respected status places them in an ideal position to become involved in smoking cessation.

Borland (2003) from the harm reduction perspective have proposed a model called the "regulated market model" which can be used to eliminate incentives and opportunities for commercial promotion of tobacco and to create incentives for encouraging the development of less harmful tobacco products. The author opined that "such a model preserves the competition inherent in a free market, but directs it towards the challenge of reducing the harm from tobacco use".

Esson and Leeder (2004) discussed the role of tobacco control in achieving the Millennium Development Goals (MDGs). They discussed the increasing prevalence of tobacco use in developing countries and explained how tobacco control is

essential for each of the eight MDGs and especially for the goals related to health outcomes, poverty and hunger. The author remarked that MDGs are the current "gold standard" against which progress is evaluated and therefore it is "important that tobacco control is explicitly included within their purview".

Jason et al., (2004) examined storefront tobacco advertisements in 11 towns in Illinois from 1999 to 2001 to assess possible changes in these types of advertisements since the introduction of master tobacco settlement that banned tobacco advertisements on billboards. The master settlement banned outdoor advertising, use of cartoon characters in advertising, offering free samples to youth and restricted brand-name sponsorships of events with significant youth audience (Wilson, 1999). The researchers explored the relationship between the amount of tobacco advertisements and underage tobacco sales to minors. They found that there is no significant relationship between tobacco advertisements and underage tobacco sales. However, there was decrease in industry price advertisements because of tobacco price increases and increase in industry brand advertisements over time due to master settlement. They researcher pointed that the industry brand advertisements increase were perhaps an effort by the tobacco industry to retain sales of their products through brand recognition.

Johnson et al., (2004) examined the process that youth undergo to regain control over their smoking using a grounded theory approach. They found that the youth undergo a process to control tobacco use which includes (a) determining if smoking is a problem, (b) "crossing the line" of acceptable tobacco use, and (c) implementing strategies to regain control of smoking. They suggested that the findings of their study "lay the basis for the development of harm reduction approaches that facilitate youth's propensity to control their tobacco use".

Oberly and Macedo (2004) criticized past tobacco-use researches on Native Americans or American-Indian minorities on the basis of subjective generalization, paternalism, deficit-based studies etc. The authors highlight culturally competent research strategies to aid Native communities in tobacco abuse prevention and education.

Snell and Bailey (2005) recorded the point-of-purchase tobacco advertising, promotions, and compliance with tobacco laws among a sample of 409 stores in three Texas counties of USA and found that the patterns of storefront advertising mirrored youth and minority purchase and brand preferences. It was observed that active enforcement and retailer education resulted in less tobacco advertising and greater compliance of required warning signs. The researchers also concluded that tobacco advertising and noncompliance with state laws is most problematic among non-chain stores and in rural locations.

Gilbertson (2007) evaluated through randomized experiment, the attitudes and behavioural intentions of 458 undergraduate college students in U.S. about their intention to intervene and prevent illegal purchase of tobacco products by a minor after exposure to a factorial combination of three pieces of information. The study found "evidence of an association between beliefs and behavioural intentions about capable retail point-of-sale guardianship. However, the rational empirical change effort did not, on average, improve capable guardianship." The author hoped that the findings would "contribute some insight into the amorphous nature of youth tobacco prevention at the retail point-of-sale".

Quentin et al., (2007) reviewed international literature that used time-series analysis to evaluate the effects of advertising bans on tobacco consumption. The authors identified 24 studies, out of which, 18 studies found a negative effect of advertising ban on aggregate consumption with only 10 of them revealed a significant effect. 2 studies using data from 22 OECD countries suggested that partial bans on advertising have little or no effect on aggregate tobacco consumption, whereas complete ban significantly reduces tobacco consumption. The authors therefore concluded that advertising bans, unless complete, may only have narrow impact on consumption.

Stead et al., (2007) reviewed primary studies related to alcohol, tobacco, illicit drugs and physical activity using pre-specified search and inclusion criteria and selected 54 interventions to further review the effectiveness of social marketing interventions in influencing individual behaviour and bringing about environmental and policy-level changes. Out of the 54 interventions, 21 studies examined the effectiveness of

interventions in preventing smoking among young people and 9 studies examined the effectiveness of interventions on smoking cessations. From the findings Stead et al., (2007) suggested that social marketing can be regarded as a promising intervention approach which is effective across 'a range of behaviours, with a range of target groups, in different settings, and can work upstream as well as with individuals".

Macy et al., (2008) studied 407 adults from four Texas cities to examine the association between level of local smokefree air law and four perceived norms about smoking. The findings revealed that comprehensive smokefree air law made a significant contribution to the prediction of the perceived prevalence of smoking, the perception of others' views about the acceptability of smoking, and the perception of others' views about whether smokers should take measures to not smoke, but not one's own view about the acceptability of smoking. The researchers concluded that "smokefree air laws are more likely to influence perceptions of others' smoking related attitudes and behaviours than one's own. Thus, smokefree air laws may be changing smoking behaviours by first influencing perceived norms about smoking".

Novotny and Mamudu (2008) examined the tobacco control experience in United States from five decades to suggest important lessons for future tobacco control programs in other countries. The authors suggested five major policy drivers for a comprehensive tobacco control program, which includes: science to inform policy, information strategies to educate consumers, advocacy to stimulate interventions, legal actions to develop regulations, and international collaboration through the FCTC. The paper concluded that the tobacco control activities funded and implemented by government can be most effective when supported by the civil society.

Wang (2008) observed that there exist fundamental challenges to tobacco control in China. According to Wang (2008), as long as the tobacco industry continues to play significant role in the economic development of China and the Chinese government continues facilitate tobacco production, there will be debate between tobacco control and tobacco production.

Patja et al., (2009) analysed the differences between tobacco policy and tobacco use between Sweeden and Finland using representative data. In Sweden, 16% of men were daily smokers, 27% of men were daily users of snuff, out of which 17% were non-smokers and 23% of male daily snuff users smoke occasionally. In Finland, 28% of men were daily smokers and 3% of them were daily snuff users. The researchers concluded that tobacco control measures had good results among women in Sweden compared to Finland and tobacco use in Sweden increased mainly due to an increase in snuff use which appeals to both switchers and young males without a history of smoking.

Collishaw (2010) discussed the role of the Framework Convention on Tobacco Control (FCTC) in achieving the Millennium Development Goals proposed by the UN Secretary-General in 2001. According to the author, FCTC contributes towards the achievement of many of the Millennium Development Goals and the treaty itself is a demonstration of strengthened international and national rule of law which provides better balance of international law among economic, environmental, social and health sectors. The author points out that there has been considerable success in implementation of both tobacco control and the Millennium Development Goals and also explains how the millennium declaration, millennium development goals, millennium development targets, and the FCTC all work together to mutual benefit.

Kohrman (2010) argued that "China's ongoing popular quiescence regarding tobacco stems in part from strategic miscalculations that public health advocates are making". He described how these strategic miscalculations have unfolded and makes suggestions for alternative ways by which the advocates of public health can help Chinese citizens achieve the collective purpose to repudiate tobacco. The author felt that there are sufficient reasons to worry how tobacco control is developing as an arm of global health intervention and whether it can produce sufficient momentum for ongoing intervention. The author argued that tobacco control in China falls short "because it emphasizes conceptual logics-expertise, population management, health economics, disease etiology, rational choice-while largely disregarding the political economic sources and histories behind the cigarette's ubiquity in China, the social

suffering it generates, and the ethics, every day practices, and desires binding citizens and tobacco together into webs of sociality". To move forward, the author made four recommendations which included generating a new grammar of tobacco-induced suffering and victimhood, denormalizing China's tobacco industry and its tactics, desocializing smoking and promoting self-sustaining formal and informal networks and institutions.

López (2010) discussed about the Spanish smoking law which is intended to protect non-smokers from second-hand smoke (SHS) through complete prohibition of smoking in all enclosed public and private workplaces with the exception of the hospitality sector where partial restrictions were imposed based on the size of the venues. The author argued that though the Spanish smoking law is being promoted as a model for other countries but the scientific evidence clearly suggests that total bans are the only way of protecting hospitality workers instead of partial bans. The author strongly argued for total bans and suggested that the Spanish smoking law should not be considered as a model to follow in spite its positive impact on areas such as the reduction of SHS exposure in workplaces.

Nichter and Muramoto (2010) described the pilot interventions being launched under Project Quit Tobacco International (QTI) in 10 medical colleges of India and Indonesia to (a) integrate tobacco into their 4-year training programs, (b) establish illness-specific cessation clinics, and (c) involve colleges in community outreach efforts to promote smoke-free households. Their paper discussed the lessons learned, challenges faced, and successes made. The authors stressed on the importance of creating well-grounded curriculum to be developed in a participatory manner and the benefit of providing educational materials to instructors in modular form for mainstreaming tobacco within medical education. The authors also discussed the clinic-based and community-based activities carried out under QTI and highlighted the role of joint research and creation of a network of medical experts with tobacco expertise. The Project Quit Tobacco International (QTI) was initiated in 2002 to explore culturally appropriate tobacco cessation approaches within the health sectors of India and Indonesia.

Lee and Dewhirst (2011) had suggested market segmentation for tobacco control accounting for demographics, geography, psychographics, and behavioral aspects of a given jurisdiction and stressed that "it is necessary to consider the target audience as well as the particular social and cultural context of social marketing efforts" for tobacco control. They also discussed the marketing mix considerations, prevention versus cessation approaches, de-normalization campaigns and the use of fear appeals in social marketing for tobacco control.

Cussen and McCool (2011) assessed the current status of tobacco advertising bans in 8 low and lower-middle income countries within the Pacific region. They found that 3 countries had comprehensive tobacco advertising bans that prohibit tobacco advertisements in 5 to 7 forms of media, and the remaining 5 countries have weak tobacco advertising bans that provide no protection for youth against tobacco advertising. The authors concluded that there is need for resources to support effective policies regarding tobacco advertising in the low and lower-middle income countries within the Pacific region.

Moodie et al., (2012) did a review of 37 studies related to 'plain' tobacco packaging and its public health benefits. The researchers concluded from the review that plain packaging reduces pack, product and brand appeal, increases the effectiveness of health warnings displayed on them, and reduces the confusion about product harm that results from branded packs. The review also concluded that plain packaging has a deterrent effect on the onset of smoking by young smokers and likely to encourage quitting for existing smokers.

Reddy et al., (2012) emphasized the integration of tobacco control into other health and development agendas, especially for the welfare and development of low-income and middle-income countries like India. The authors stressed on an integrated approach to tobacco control and highlighted the need for integrating tobacco control with primary and secondary healthcare programmes, and explore tobacco control from the perspectives of environmental, human rights and other development concerns. The authors suggested that creation of a global coalition with intersectoral

coordination to support tobacco control movement has the potential to contribute to the United Nations Millennium Development Goals.

Tonstad et al., (2012) conducted a nationwide survey of former tobacco users in Cambodia, with 5145 current and 447 former tobacco users. The study determined factors associated with quitting tobacco. They found that smokeless tobacco users were 10-fold less likely to quit than smokers. The study concluded that, tobacco cessation among Cambodians was lower than in nations with decades of comprehensive tobacco control policies. The researchers suggested that tobacco cessation programs and policies should include all forms of tobacco and target young to middle-aged users before onset of disease and premature death.

Lunze and Migliorini (2013) have stressed on the need for targeting women and youths to counter industry efforts. They identified the following strategies to reduce tobacco prevalence in Russian Federation (Russia):

- Adjusting national tobacco policy by raising tobacco tax from the current lowest level in Europe to at least 70%
- Consequent enforcement of a complete smoking ban in public places
- Marketing restrictions
- Smoking cessation interventions integrated into primary care

Erguder et al., (2013) assessed the level of exposure to anti and pro-cigarette advertising and to cigarette promotions and sponsorships among various demographic groups in Turkey using the data from the Global Adult Tobacco Survey (GATS). They found that almost 9 out of 10 survey respondents noticing some anti-cigarette information during the 30 days before the survey and the most anti-cigarette information was seen on television. In all examined media channels, it was found that people with less than a primary education were less likely to notice anticigarette information than those with a higher level of education. Their findings also revealed low prevalence of noticing cigarette marketing indicating high compliance with the Turkish law of banning such marketing.

Hu et al., (2013) conducted a study to analyze the barriers in the implementation of the WHO Framework Convention on Tobacco Control (FCTC) in China and offer recommendations to address the challenges in tobacco control in China. There finding revealed that there are intractable, political, structural, economic and social barriers which makes the FCTC implementation a slow and painstaking process in China.

The U.S. National Cancer Institute and World Health Organization (2016) jointly produced a monograph to examine the economic issues in tobacco and tobacco control, including the supply and demand of tobacco products. The nine broad conclusions that emerge from the volume were as follows:

1. The global health and economic burden of tobacco use is enormous and is increasingly borne by low- and middle-income countries.
2. Failures in the markets for tobacco products provide an economic rationale for governments to intervene in these markets.
3. Effective policy and programmatic interventions are available to reduce the demand for tobacco products and the death, disease, and economic costs that result from their use, but these interventions are underutilized.
4. Policies and programs that work to reduce the demand for tobacco products are highly cost-effective.
5. Control of illicit trade in tobacco products, now the subject of its own international treaty, is the key supply-side policy to reduce tobacco use and its health and economic consequences.
6. The market power of tobacco companies has increased in recent years, creating new challenges for tobacco control efforts.
7. Tobacco control does not harm economies.
8. Tobacco control reduces the disproportionate burden that tobacco use imposes on the poor.
9. Progress is now being made in controlling the global tobacco epidemic, but concerted efforts will be required to ensure that progress is maintained or accelerated.

Dahal et al., (2015) conducted a descriptive cross-sectional among 394 students of higher secondary level in three randomly selected colleges of Kathmandu district, Nepal to assess their knowledge and attitude towards new regulation on smoking ban in public places. Their findings revealed that majority (79.9%) of the students are well aware about the smoking ban on public places which they came to know mostly from television (72.3%), friends (36.5%) and family members (33.9%) as their source for information. The findings also revealed that most students (74.1%) have positive attitude towards the new regulation on smoking ban in public places in Nepal. The authors further stressed that "there is need of implementing the policy strictly by raising awareness among people and penalizing those who violate it".

Ekpu and Brown (2015) examined global and UK evidence on the economic impact of smoking prevalence and evaluated the effectiveness and cost effectiveness of smoking cessation measures and concluded that direct costs and externalities to society of smoking far outweigh any benefits that might be accruable when considered from the perspective of socially desirable outcomes. The authors pointed that most of the cessation measures reviewed by them were effective and cost effective in delivering the much-desired cost savings and net gains to individuals and primary health care providers. The main findings from their review were as follows:

1. The costs of smoking can be classified into direct, indirect, and intangible costs. In the UK, the direct costs of smoking to the NHS have been estimated at between £2.7 billion and £5.2 billion in UK. Smoking accounts for approximately 0.7% of China's GDP and approximately 1% of US GDP. As part of the indirect (non-health-related) costs of smoking, the total productivity losses caused by smoking each year in the US have been estimated at US$151 billion.

2. Tobacco produces huge tax revenues for most governments, especially in high-income countries, as well as employment in the tobacco industry. Income from the tobacco industry accounts for up to 7.4% of centrally collected government revenue in China. Smoking also yields cost savings in pension payments from premature death of smokers.

3. Smoking cessation measures could range from pharmacological treatment interventions to policy-based measures, community-based interventions, telecoms, media, and technology (TMT)-based interventions, school-based interventions, and workplace interventions.

4. The cost per life year saved from the use of pharmacological treatment interventions ranged between US$128 and US$1,450 and up to US$4,400 per quality-adjusted life years (QALYs) saved. Use of pharmacotherapies such as varenicline, NRT, and Bupropion, when combined with other behavioural treatment interventions is both clinically effective and cost effective to primary health care providers.

5. Price-based policy measures like increase in tobacco taxes are the most effective means of reducing tobacco consumption. A 10% tax-induced cigarette price increase anywhere in the world reduces smoking prevalence by between 4% and 8%. Net public benefits from tobacco tax, however, remain positive only when tax rates are between 42.9% and 91.1%.

6. Smoking cessation classes are most effective among community-based measures, leading to a quit rate of up to 35%, but they usually incur higher costs than other measures such as self-help quit-smoking kits. On average, community pharmacist-based smoking cessation programs yield cost savings to the health system of between US$500 and US$614 per LYG (life year gained).

7. Advertising media, telecommunications, and other technology-based interventions usually have positive synergistic effects in reducing smoking prevalence especially when combined to deliver smoking cessation messages and counselling support. Due to universal reach and low implementation costs, online campaigns are substantially more cost effective than other media, though it may not be as effective in reducing smoking prevalence.

8. School-based smoking prevalence programs tend to reduce short-term smoking prevalence by between 30% and 70%. The cost effectiveness of school-based programs could save approximately between US$2,000 and US$20,000 per QALY.

9. Workplace-based interventions could represent a sound economic investment to both employers and the society at large, achieving a benefit-cost ratio of up to

8.75 and generating 12-month employer cost savings of between $150 and $540 per non-smoking employee.

In 2007-2008, the Department of Health in England as part of Tobacco Control National Strategy consulted clinical practitioners, social marketing communication experts and reviewed behavioural change theories to developed a new marketing strategy to reduce smoking prevalence among routine and manual (R&M) workers (The NSMC, 2016). The overall aim of the strategy was to reduce prevalence to 26% or less by 2010. The three overreaching objectives of the marketing strategy was to trigger action, make quitting easier and reinforce motivation among the targets. The following were the achievements of the strategy:

1. Over 3 million smokers (52 per cent of them R&M) made quit attempts and nearly 220,000 successfully sustained their quit 1 year later.
2. Over two years, the customer relationship marketing programme increased quitting success rates among participants by 57 per cent.
3. Between its launch in January and March 2010, over 480,000 'Quit Kits' were ordered, and of these, 95 per cent were from people who had not previously responded to national marketing.

Horn (2017) analyzed tobacco control in South Africa using the 'stages model'- a theoretical framework that guides an analysis of a public policy process. The stages described were agenda setting, policy formulation, decision-making, policy implementation and policy evaluation. The author concluded that the policy fits neatly into the stages model and "overall, the main problem with the stages model is that the policy area is in continual flux, whereas the model can only provide a snapshot of the policy at one point in time". The author also recommended investigation into how excise tax should be used in South Africa and psychological intervention for reducing tobacco use.

Ickes et al., (2017) conducted an online study among five thousand randomly selected students of a large southeastern university in U.S. to determine the demographic and personal characteristics associated with students' beliefs about and

perceived effectiveness of a tobacco-free campus policy and assessed whether tobacco use status and exposure to second-hand smoke (SHS) predicted beliefs and perceived effectiveness. It was found that students held positive beliefs about tobacco-free (TF) policies where 64% of them thought that it reduces second-hand smoke (SHS) exposure and 40% thought it encourages quitting. Males were found to be less likely than females to believe that the policy was effective in reducing SHS exposure and encouraging quitting. Lower undergraduates and students most exposed to SHS were less likely to perceive the policy was effective in reducing SHS, whereas international students and nonusers were more likely to perceive the policy as more effective at encouraging quitting. The researcher also pointed that tailored messaging regarding policy benefits are necessary and suggested that perceived effectiveness of TF policies may be related to compliance with the policy and should be further investigated. The researchers at the end highlighted the role of nursing faculty, student advocates, and campus decision makers for promotion and better implementation of effective TF policies.

Mansour and Bakhsh (2017) has conducted a cross sectional study to explore the perceived effectiveness of pictorial health warning (PHW) labels required by Gulf Cooperation Council and compared them with Food and Drug Administration approved PHW labels to determine factors affecting their perceived effectiveness. They concluded that the smoking status and image type are the most important factors for the perceived effectiveness of the PHW labels on cigarette packs. They also found that the PHW labels with graphic images of pathology and a telephone quit-line are perceived to be most effective.

Zatoński and Stokłosa (2017) published a report on the roundtable seminar on the past, present and future of tobacco control took place in October 2016 at the Harvard University Science Center. The seminar generated broad, strategic thinking on the history and perspectives of tobacco control, as well as future research and collaboration ideas. The participants at the seminar included international public health leaders and scholars, including health economists, political scientists, and historians of science, health advocates, and policymakers. During the seminar,

discussions were held on a range of areas such as harm reduction approaches to tobacco control, electronic nicotine delivery systems, treatment of tobacco dependence, tobacco taxation, past successes in tobacco control and on the question of "radically different moment" in tobacco control. Allan Brandt cautioned during the closing that 50 years of progress in tobacco control could be undone in the next 50 years and tobacco will lead to a billion deaths by 2100 even smoking rates remain unchanged. He pointed that "The challenge for the tobacco control field is to promote things we know actually work, while at the same time developing a sharper research agenda to understand the new technologies and changing cultures of smoking".

Charoenca et al., (2018) developed a multiperspective assessment to identify and address any gaps in compliance with FCTC provisions in Thailand. A part of this assessment was a 3-tiered rating of all major provisions in FCTC and based on its result the areas of local and regional implementation and compliance with FCTC provisions were addressed. Highest ratings were obtained for articles 6, 8, 11, 12, 14, 15, and 16 but only 6, 11, 12, 15, and 16 reached level 2 (effectiveness) of the 3-level rating. The authors discussed articles 6, 8, 11, 13, and 14 as they are the WHO priority articles of the MPOWER tobacco control policy. The problems cited by stakeholders were lack of completeness of present Thai law and processes for enforcement and lack of public understanding regarding tobacco control strategies and provisions. The authors concluded that the stakeholder approach devised is a timely addition to the ongoing process of assessing effective and efficient tobacco control activities, especially as the new Tobacco Products Control Act of 2017 goes into effect.

Lantz (2018) discussed the implications of "Tobacco 21" which is policy that focuses on increasing the legal age to 21 for purchase, use, and/or possession of tobacco in US. Tobacco 21 has become a top priority in tobacco control which has been endorsed by the American Medical Association, American Paediatric Association, and the American Public Health Association. The author pointed that there is lack of empirical research evidence outside policy simulation modelling to support the

extent of gain from implementation of Tobacco 21. The author also suggested that there is need for further evaluation research on the population- and sub-population effects of Tobacco 21 on behavioural and health outcomes as well as sociological inquiry on other aspects of the policy.

Seitz et al., (2018) did an extensive study in U.S. regarding student, faculty, and staff approval of university smoke/tobacco-free policies, as published through campus newspaper articles. Their findings which is based on non-traditional data source and is consistent with other findings from the peer-reviewed literature revealed that most of the students, faculty, and staff on university campuses approve of smoke/tobacco-free campus policies.

Watson et al., (2018) described the trends in cigarette advertisements, price-reducing promotions, and compliance with tobacco control policies by licensed tobacco retailers (LTR) in New York State from 2004 to 2015 and discussed its implications. The researcher found that the number of LTRs decreased 22.9% from 2004 to 2015 and the prevalence of cigarette advertisements cigarette price-reducing promotions decreased significantly over time. Compliance with posting required age-of-sale signs also increased significantly and there was nearly 100% compliance with the ban on self-service tobacco displays. The researchers concluded that the decreases in pro-tobacco marketing and number of LTRs, and improvements in compliance are likely to bring positive impacts on youth and adult smoking outcomes.

2.9 Control of Tobacco Consumption in India

This section presents the review of various available literatures that have discussed, explored and evaluated tobacco control policies, legislations and measure in India and also includes reviews of literatures that have made important recommendations for future tobacco control in India.

Shimkhada and Peabody (2003) discussed the ineffectiveness of tobacco control legislations in India such as the anti-tobacco legislation of 1975, the lack uniformity of state legislations and the proposed advanced legislation of 2001. The authors

pointed out that despite its key demand reduction measures, the proposed legislation will not be enough to reduce tobacco demand unless it includes "policies to raise taxes, control smuggling, close advertising loopholes, and create adequate provisions for the enforcement of tobacco control laws".

Reddy and Gupta (2004) argued that the overall positive impact of tobacco control on economic, social and human development is likely to outweigh any short-term dislocation which may follow. The authors also suggested that there should not be any significant differences between tax policies across different types of tobacco products in India and tobacco control policies must encompass a human rights' approach to protect the vulnerable. The following measures have been suggested as a vision for 2020 and beyond by them for controlling tobacco in India:

1. Raise taxes on all tobacco products to increase prices and generate revenue for tobacco control.
2. Spend the additional revenue on social sector initiatives benefitting the poor and on strengthening tobacco control programmes.
3. Impose a ban on oral tobacco products such as *gutka*.
4. Strengthen enforcement of existing laws and regulations.
5. Establish coordinating mechanisms at the central and state levels.
6. Mobilize the people through mass education and community empowerment.
7. Promote tobacco cessation through multiple avenues.
8. Restrict the tobacco products into India.
9. Progressively reduce the area of land under tobacco cultivation in India.

Mishra et al., (2005) discussed the findings of Focus Group Discussions (FGDs) conducted in sixth and eighth grades in six schools in Delhi as a formative assessment for Project MYTRI (Mobilizing Youth for Tobacco Related Initiatives in India). The authors used the findings to develop a comprehensive intervention program for prevention and control of tobacco use among Indian youth. The key findings of the study were as follows:

1. Students in government schools reported as "consumers" of tobacco, whereas students in private schools reported as "commentators"

2. Parents and peers have a strong influence on youth tobacco use

3. Chewing *gutkha* is considered less harmful and more accessible than smoking cigarettes

4. Schools are not promoting tobacco control activities; and

5. Students were enthusiastic about the role government should play in tobacco control.

Jandoo and Mehrotra (2008) explored the magnitude of tobacco consumption and its associated health hazards, and reviewed the existing practices to curb the burden of tobacco in India. The authors suggested the need for innovative methods of mobilizing financial and human resources for tobacco control, establishing efficient national coordinating mechanisms, integrating tobacco control with health and development programs and periodic evaluation of these activities. The authors also suggested raising taxes, controlling smuggling, closing advertising loopholes, and enforcing the tobacco control laws by the government.

Reddy, Arora and Yadav (2008) in their report compared the WHO FCTC and the Indian laws regulating tobacco especially COTPA 2003. The authors concluded that India has complied with most of the FCTC provisions but stressed that the "anti-tobacco initiatives and tobacco control law in India, at best, are enforced the least. The authors suggested the need for an anti-tobacco coalition comprising all stakeholders with public and private partnership and concurrent awareness, political and public acceptance of the law for the self-enforcement of tobacco control in India. The authors also pointed that it is "imperative to undertake comprehensive reviews of existing legislation, policies, rules and regulations to go beyond FCTC requirements.

Raute et al., (2009) conducted a study among 712 respondents to determine the opinion of general public towards implementation of pictorial warnings on tobacco packages in India. The study found that 89.9% respondents were aware about the health warning messages on cigarette packs and 88.5% of them strongly agreed for

strengthening such messages. The study also revealed that strong pictorial health warnings would make 23.2% male users to think about quitting and 33.1% non-users of tobacco will think twice before starting smoking.

John et al., (2010) reviewed the current research on the economics of tobacco taxation in India where they examined the economic and policy dimensions of tobacco taxation as a mechanism for controlling tobacco consumption in India. The report observed that taxation on cigarettes is low, while taxes on bidis is almost negligible and highlighted that a 10% increase in bidi and cigarette price could reduce bidi consumption by 9.2% and cigarette consumption by 3.4% respectively. The report made the following recommendations regarding taxation policy for tobacco:

    a) Increase taxes on bidis substantially.
    b) Tighten policies regulating bidi production.
    c) Increase cigarette taxes substantially.
    d) Simplify, extend, and strengthen tobacco taxation.
    e) Explore earmarking as a means to support additional tobacco control efforts.

Rath (2010) did research about tobacco consumption in Orissa and explored the role of social marketing, advertising and strategic action plans for building a tobacco free society. Some important recommendations in the research included legal redefinition of tobacco, structural and administrative changes, social marketing strategy, comprehensive media strategy, mass education etc.

Jhanjee (2011) evaluated the status of tobacco control in India and presented the major findings from tobacco use related surveys in India, especially the Global Adult Tobacco Survey (GATS) of 2009-10. The author also discussed the current status of implementation of COTPA and NTCP in India and made recommendations for the following:

    1. Strengthen enforcement of existing laws and regulations.

2. Raise taxes on all tobacco products to increase prices and generate revenue for tobacco control.

3. Spend the additional revenue on social sector initiatives benefiting the poor and on strengthening tobacco control programmes.

4. Mobilize the people through mass education and community empowerment.

5. Comprehensive TAPS ban, strengthen smoke free policies and impose a ban on oral tobacco products such as *gutka*.

6. Establish coordinating mechanisms at central and state levels.

7. Promote tobacco cessation through many avenues.

8. Progressively reduce the area of land under tobacco cultivation in India and crop substitution and provision for alternative livelihoods.

9. Multi-sectoral coordination and Mainstream with other national health programmes.

Kaur and Jain (2011) assessed the implementation of tobacco control policies in India and discussed the implementation of various tobacco control laws since 1975 till COTPA, India's role and participation in WHO Framework Convention on Tobacco Control (WHO FCTC), the implementation of National Tobacco Control Programme (NTCP), and the progress of WHO Tobacco Free Initiative in India. The authors pointed encouraging steps taken by the government regarding implementation of tobacco control policies at national and sub national level which has yielded various levels of success. They concluded that "implementation of the Government policies, synergized with tobacco control initiatives by the civil society and community are pivotal in reducing prevalence of tobacco use in the country".

The Australia India Institute (2012) established the Australia India Institute Taskforce on Tobacco Control to determine whether plain packaging legislation for all types of tobacco products is a viable tobacco control measure in India. The taskforce presented market research evidence regarding plain packaging in India, a review of policy initiatives to introduce plain packaging from various national settings and evidence from a consultation with a range of Indian public health and other experts. The report discussed the plain packaging attempts in Canada, New

Zealand and Australia and its successful implementation in Australia and presented a SWOT Analysis for Plain Packaging in India. To support the argument for plain packaging in India, the report also included cross-sectional study, analysis and findings from focus group discussions, stakeholder analysis and opinion poll. The report recommended the following short term, intermediate and long-term measures for tobacco control in India:

A. Short Term Measures:
1. Frame plain packaging as a public health issue
2. Strengthen pictorial warnings
3. Establish a Code of Conduct pursuant to Article 5.3 of the FCTC.
4. Compile a body of evidence supporting plain packaging in the Indian context.
5. Consider compatible best practices from the Australian experience.

B. Intermediate Measures:
1. Amend COTPA.
2. Refer to Articles 11 and 13 of the FCTC when advocating for plain packaging.
3. Carefully analyse all international investment agreements.
4. Educate the public about the burden of tobacco consumption.
5. Conduct further research

C. Long-Term Measures:
1. Ensure that a law for the implementation of plain packaging is watertight.
2. Accompany plain packaging legislation with a comprehensive suite of measures.
3. Foresee key structural and employment issues.

Exhibit 2.2
SWOT Analysis for Plain Packaging in India

Strengths	Weaknesses
• Commitment to tobacco control through policy, legislation and programmes. • The overall domestic and international policy environment is shifting against tobacco use	• Multiplicity of implementing government agencies, with opposing mandates • Technical challenges and cost issues in the display of standardized packaging
Opportunities	**Threats**
• Use this initiative to push through amendments to Sections 5 and 7 of COTPA • Create technical infrastructure for tracking and tracing; and, comply with international best standards • Lead the way for developing countries to reverse the deadly tobacco consumption trend	• Tobacco industry claims of increased illicit trade/smuggling and losses in exchequer revenues • Definitions in bilateral and multilateral investment and trade agreements may pose a challenge • Lack of integrated command and control of the production-to-sale life cycle of tobacco products.

Source: Australia India Institute (2012, p.56)

Murukutla et al., (2012) evaluated a national television and radio mass media campaign targeted at smokeless tobacco users in India to educate them about the harmful effects of smokeless tobacco, denormalise tobacco usage and encourage quitting. The campaign was evaluated with a nationally representative household survey of smokeless tobacco users and the effect of campaign awareness was assessed with logistic regression analysis. The findings revealed that "campaign awareness was associated with better knowledge, more negative attitudes towards smokeless tobacco and greater cessation-oriented intentions and behaviours among smokeless tobacco users". The authors also concluded that social marketing campaigns involving mass media are feasible and effective interventions for tobacco control in India.

Soni (2012) suggested the following seven recommendations to summarize the effective strategies for schools in preventing tobacco use among students in India:

1. Provide instruction about the short and long-term negative physiological and social consequences of tobacco use; social influences leading to tobacco use; peer norms regarding tobacco use and refusal skills.

2. Provide tobacco-use prevention education; this instruction should be especially intensive in junior, middle or high school and should be reinforced in high school.

3. Provide programme-specific training for teachers.

4. Involve parents or families in support of school-based programmes to prevent tobacco use.

5. Support cessation efforts among students and all school staff who use tobacco.

6. Assess the tobacco-use prevention programme at regular intervals.

7. Develop and enforce a school policy on tobacco use.

Turk et al., (2012) evaluated a national social marketing campaign against the use of smokeless tobacco in India and identified significant differences across a range of campaign behavioural predictors by audience segments aware of the campaign versus those who were unaware. The authors also identified vulnerable groups by gender and rural/urban disparities. The authors discussed the findings in relation to the powerful impact of using graphic, emotive, and testimonial imagery for tobacco control with socially disadvantaged groups.

Dhumal et al., (2014) conducted a cross sectional study in four cities of India namely, Mumbai, Patna, Indore and Kolkata and concluded that around one-fifth of tobacco users in India intended to quit tobacco and that factors like higher education, doctor's advice and anti-tobacco messages were positively associated with users' intention to quit.

McKay, Patel and Majeed (2015) did a systematic review of the extent of tobacco control measures and the outcomes of associated trialed interventions in India, using the Framework Convention on Tobacco Control (FCTC) as a framework for synthesis. They found that most of the studies were related to education and tobacco-use cessation. The studies indicated widespread understanding of tobacco-related harm, but less knowledge about specific tobacco related consequences, less confidence for cessation assistance and limited training among health professionals and school teachers. Overall, educational and cessation assistance interventions demonstrated positive impact on tobacco use and studies relating to smoke-free policies, tobacco advertisements and availability indicated increasing widespread smoke-free policies but high levels of SHS exposure and existence of tobacco

promotion and availability including to minors. There was limited information available on taxation/pricing and no studies were identified on product regulation, alternative employment strategies, or illicit trade. The researchers concluded that tobacco control measures may be improved by using school/community-based and adult education interventions, and cessation assistance, facilitated by training for health professionals and schoolteachers and also highlighted that there is a need to assess additional tobacco control measures.

Mohan and Lando (2016) did a comprehensive review of large-scale pan-India surveys and regional studies on various aspects of smokeless tobacco. The study aimed at closing the existing gaps in knowledge, provide a track to formulate tobacco control strategies and guide tobacco control policies in the Indian context. The researcher's recommendations focused on cessation programs as a paramedical subject to draw the attention of policymakers to integrate medical and dental educational institutions, health care professionals, and tobacco users to synergistically develop successful tobacco control measures.

Raut and Pawar (2016) explored the effectiveness of de-marketing strategies for tobacco control in India and the perception held by tobacco users towards the de-marketing of tobacco goods. The authors concluded that there is a positive perception of tobacco user towards the de-marketing of tobacco products.

Baporikar and Fotolela (2017) described demarketing as a strategy for reducing tobacco demand and consumption which according to them is well suited for harmful products though they may have utility in the economics of liquor, drugs, cigars and tobacco products. They studied the demarketing of tobacco products adopted in Mysore in Southern India and their findings indicated that demarketing of tobacco products has made an impact along with societal change.

Mohan et al., (2018) reviewed multiple determinants of tobacco consumption such as socioeconomic status, marriage, population growth, marketing strategies, and price and considered the economic and social costs and adverse health impacts of tobacco. The researchers addressed the challenges in implementation of tobacco control

legislation in India and felt that tobacco consumption continues to increase despite tobacco control policy. They suggested for more visible and aggressive anti-tobacco campaigns with increased public awareness regarding tobacco harms and active engagement of worksites and health professionals in promoting tobacco cessation.

John, Dauchy and Goodchild (2019), using own-price elasticity of demand for tobacco products estimated the potential impact of the goods and services tax (GST) on price, consumption and tax revenue from tobacco products in India and across states. The researchers predicted that the statutory GST rate of 28% plus compensation cess will increase the price of cigarettes, bidi and smokeless tobacco by 0.18%, 8.8% and 6%, respectively which will result in the reduction of weighted average consumption by 0.3%, 10% and 6% and increase of tax revenue by 0.17%, 35% and 4.7%, respectively. Overall, they predicted that there will be more than 50% fall of tax revenue from tobacco products for states in comparison to the value added tax (VAT) collected before GST. Thus, the researchers felt that GST has increased the complexity of the tax system for tobacco products in India and suggested regular revision of specific cess particularly for cigarettes and reintroduction of excise taxation on all tobacco products on top of GST.

2.10 Identifying the Research Gap

Reddy et al., (2010) has identified several gaps in tobacco control research in low- and middle-income countries which included areas related to comprehensive surveillance, economic research, cessation interventions, supply-side research, effective communications and social determinants. Novotny and Mamudu (2008) argued that there is still need for additional evidence to support developing countries' tobacco control programs. According to Reddy et al., (2010), considerable research related to tobacco has been "focused on the etiological investigation of tobacco use as causal agent for several disorders and, to a lesser extent, on the determinants of tobacco use". They further added that research on tobacco, related to "policy interventions to reduce tobacco consumption, interventions to promote tobacco cessation and prevent tobacco initiation have been areas of relative neglect". McKay (2015) pointed out that compared to cigarettes and smoking, there is less information

available for consumption of other types of tobacco products in India. In the context of India, Reddy et al., (2010) argued that effective cessation methods needed to be identified for smokeless tobacco products for which there exists limited research compared to cigarettes. They also pointed that in comparison to high-income countries, there exists limited research on communication strategies for tobacco control in low- and middle-income countries.

From the review of literature, it may be concluded that in India, most of the studies are carried out from the perspective of psychology, social work, health care and medical science discipline and may not be sufficient to address certain core issues related to tobacco consumption from the social marketing perspective. The GATS studies (2009-10 and 2016-2017) and other surveys like GYTS (2006, 2009) and GSPS (2006, 2009) surveyed the magnitude of tobacco consumption across the country, including the north-eastern states from the macro perspective. However, such studies were not carried out specifically from social marketing and behavioural perspectives. The Global Tobacco Surveillance System (GTSS) which includes the collection of data through the four surveys, namely, Global Youth Tobacco Survey (GYTS), Global School Personnel Survey (GSPS), Global Health Professions Student Survey (GHPSS) and Global Adult Tobacco Survey (GATS) are targeted to different age groups and/or professionals. GYTS is targeted to school students in the age group of 13 to 15 years, GSPS is targeted to school teachers and administrators, GHPSS focuses on 3rd year students pursuing degrees in dentistry, medicine, nursing and pharmacy and GATS is targeted to adults aged 15 and above. Though all these surveys did cover the state of Mizoram in past in their respective target groups and particularly, GATS covered a broad range of population in the age group of 15 and above, but none of the surveys were concerned specifically with the age group of college students (approximately 18-21 years). This age group of college students may be considered as a vulnerable age group for tobacco consumption due to following reasons.

   a) Tobacco use during college years may cause physical, mental and emotional harm (Stewart & Moreno, 2013). Besides exposing them to common tobacco

related health risks, the regular users among college students may suffer from poorer working memory performance and neurotoxicity, whereas the cessation of tobacco use is associated with depression, anxiety, nicotine cravings, and loss of memory (Jacobsen et al., 2005).

b) The most susceptible time for tobacco initiation in India is during adolescence and early adulthood (National Sample Survey Organization, 1998; Reddy & Gupta, 2004; Jindal et al., 2005). College students are at an increased risk to smoking initiation as well as moving from intermittent or social smoking to regular heavy smoking (Nichter et al., 2006) and early smokers also have less ability to quit smoking at older age (Reidpath et al., 2013). The average age of initiation in Mizoram of any tobacco use is 17.8 years, for smoking initiation it is 17.5 years and for smokeless tobacco use it is 18.3 years (GATS, 2016-2017). This average age of initiation in Mizoram is more inclined towards approaching college students rather than existing school students.

c) There is considerable doubt regarding long-term effectiveness of school based smoking prevention programs (Ekpu & Brown, 2015; Wiehe et al., 2005). The college students on the other hand are in their early adulthood and are expected to make more matured behavioural choices compared to school students, which is going to shape their future.

d) Initiation to tobacco at an early age may have negative effects at a later stage (Yaya et al., 2017) and habits formed during the early adulthood may be carried forward by the college students later in their life. Small changes in adolescent tobacco consumption can have significant population-level effects over time (Lantz, 2018). Therefore, it is desirable to introduce interventions early, so that the chances of quitting are more (Reddy et al., 2002; U.S. Department of Health and Human Services, 1994) and early before any serious harm caused to their health (Jindal et al., 2005).

e) The college students enjoy lesser restrictive environment compared to school students. They have increased opportunity to experiment with behaviours such as drinking and smoking (Maggs, 1997; O'Malley & Johnston, 2002).

f) The college students may act directly or indirectly as strong potential influencers to younger generation like school students regarding tobacco consumption.

g) There is ample evidence that tobacco companies often target the underage adolescents (Cummings et al., 2002; Hollie, 1985; Pierce et al., 2002). However, college students are young adults and can legally purchase tobacco and so they became legitimately the prime targets of tobacco marketers (Ling & Glantz, 2002).

According to Gupta (2006), "The Indian tobacco control policies so far seem to be based on international research and recommendations. India however, has a much wider spectrum of tobacco and health problems and strategies need to be developed with the help of local research on tobacco control". Mohan and Lando (2016) has pointed that despite there are a myriad form in which tobacco is consumed, yet tobacco control measures mostly focus on cigarette smoking and less on smokeless tobacco. Laldinliana (2010) has mentioned consumer behaviour in specific product/market categories in Mizoram and social marketing practices and their evaluation in Mizoram in a list of suggested areas for further research. Due to the pro-marketing approach of the tobacco industry in promoting tobacco among youth, there is an urgent need for targeted interventions among youth in general and students in particular (Ministry of Health and Family Welfare, Government of India, 2009). Therefore, overall, there exists a research gap where tobacco consumption behaviour in Mizoram, particularly among the specific age group of undergraduate students remained mostly uncovered and the social marketing aspects for controlling such consumption behaviour remained an even more unexplored territory.

Chapter 3

Socio-Economic Profiling of Undergraduate Students according to their Tobacco Consumption Status

3.1 Introduction

The term "socioeconomic" can be defined as a "field of study that examines social and economic factors to better understand how the combination of both influences something" (Business Dictionary, 2019). The measure of socioeconomic status generally includes education, income, and occupation (Baker, 2014). This chapter explores the socio-economic factors of the undergraduate students of the select colleges in Mizoram according to their tobacco consumption status. According to Barik et al., (2016), "it is important to use the best possible indicators of socio-economic position to have a comprehensive picture of social inequities in tobacco use". Reddy and Gupta (2004) have recommended for research scientists to identify the economic and sociocultural determinants of tobacco use in different demographic groups in India. Reddy et al., (2010) has given research on economic impact of tobacco use and tobacco control and social determinants of tobacco use as among the highest priorities for tobacco control research in low- and middle-income countries. According to Mathur et al., (2014), "socioeconomic differences in tobacco use in adolescents can be viewed as a prelude to socioeconomic differences in tobacco use and related health hazards in adulthood". Studies have pointed and identified that socioeconomic factors like income, education, caste, gender, age and region of residence are linked to tobacco use (Fouad et al., 2016; Lal et al., 2015; Mini et al., 2014; Rawat et al., 2015; Singh & Ladusingh, 2014; Thakur et al., 2015; Thankappan & Thresia, 2007; Turk et al., 2012; Ahmed & Peeran, 2016) and key predictors of smoking lifestyle (Yaya et al., 2017). Subramanian et al., (2004) found strong independent effects of socio-economic status and social class on health behaviour related to smoking, drinking and chewing tobacco. It has been found that besides causing poverty (John, 2005); tobacco leads to a vicious cycle of social problems that hinders the development of individuals, households and nations (Eriksen et al., 2015; Eriksen, Mackay & Ross, 2012). This is the reason that tobacco control is now being considered to be increasingly important for economic development and poverty reduction in low and middle-income countries (Novotny & Mamudu, 2008). The objective of this chapter is to construct a socio-economic profile of undergraduate students based on their tobacco consumption status.

Mizoram is among the four fastest growing states in India which includes Gujarat, Jharkhand, Mizoram and Tripura. (Planning & Programme Implementation Department, Government of Mizoram, 2018). According to census 2011, the total population of Mizoram is 10,97,206 with a sex ratio of 976 (Directorate of Economics & Statistics, Government of Mizoram, 2018) and a population density only 52 persons per sq km (Planning & Programme Implementation Department, Government of Mizoram, 2018). Mizoram is also a state with high urban population. According to 2011 Census, 51.5% of the population in Mizoram is urban compared to 18.3% and 31.2% respectively for all the Northeastern states combined and for entire India (Directorate of Economics & Statistics, Government of Mizoram, 2018). Aizawl, which is the largest city and capital of Mizoram is having a total population of 4,00,309 (Directorate of Economics & Statistics, Government of Mizoram, 2018). Mizoram also has an impressive literacy rate of 91.33% (Directorate of Economics & Statistics, Government of Mizoram, 2018). According to the 2011 Census, the literacy rate of Mizoram is higher than the average of all northeastern states which is 79.3% and higher than national average of 74% (Planning & Programme Implementation Department, Government of Mizoram, 2018). According to the Economic Survey 2017-2018, Ministry of Finance, Government of India, the per capita income of Mizoram for the year 2015-2016 was ₹114524 which was considerably higher than the per capita income of all northeastern states at ₹101631.6 and India at ₹94130 (Planning & Programme Implementation Department, Government of Mizoram, 2018). The Gross State Domestic Product (GSDP) of Mizoram had expanded at Compound Annual Growth Rate (CAGR) of 15.93% to ₹176.20 billion and the per capita GSDP grew at CAGR of 14.23% to ₹145,143 between 2011-12 and 2017-18 (IBEF, 2019). It is estimated that around 70% of the total population in Mizoram is dependent in some form of agriculture. 88.93% of Mizoram's total geographical area is covered by forest out of which, Bamboo forests covers around 3,267 square kilometre of Mizoram's entire geographical area. It is estimated that there is growing stock of 25.26 million metric tonnes of 35 different varieties of bamboo in the state (IBEF, 2019). Sericulture is another important industry of Mizoram. During 2018-19, the raw silk production in Mizoram stood at 75.0 metric tonnes (IBEF, 2019). Besides all these, food and agro processing, hydro

power, tourism, handloom etc. has also been identified to have great potential for the economic development of Mizoram. Mizoram has a location advantage as it shares domestic state borders with Manipur, Tripura and Assam and international borders with neighboring countries of Bangladesh and Myanmar. For all these reasons, in near future, Mizoram has the potential to become a gateway for international trade and commerce with Southeast Asian countries.

3.2 Demographic Compositions of the Sample

The demographic variables of any region are important indicators which play a vital role in factually and categorically defining a population in terms of its socio-economic contexts. The sample of 500 undergraduate students from the study shows considerable diversity in terms of different demographic variables.

3.2.1 College Composition of the Sample Respondents

The two colleges selected for the study were Pachhunga University College, Aizawl and Government Saiha College, Saiha. Pachhunga University College was the first college in Mizoram which came into existence on 15th August, 1958, then named as 'Aijal College'. It became a constituent college of the Mizoram University in 2001 (Memorabilia Golden Jubilee Souvenir, 2008). Government Saiha College was established on 20th July 1978 and till date it is the only recognized college offering degree courses in Saiha district. Pachhunga University College is the largest college in Aizawl in terms of the diversity of undergraduate courses that are currently being offered and it is also the second largest college in Aizawl in terms of the total number of enrolled students. As per the Mizoram University Annual Report 2012-2013, there are 1,993 students enrolled in various courses at Pachhunga University College. Considering these 1,993 students as the population, a sample size of 322 students has been selected for the study (at 95 per cent confidence level). Similarly, Government Saiha College has 323 enrolled students as per the Mizoram University Annual Report 2012-2013. Therefore, considering 323 as the population size, a sample size of 176 students has been drawn randomly for the study (at 95 per cent confidence level). Thus, the total sample size including both the colleges was

determined as 498. For the purpose of convenience, one additional unit for each has been added to both the college samples, taking the total sample size to 500.

Exhibit 3.1
College Compositions of the Sample Respondents
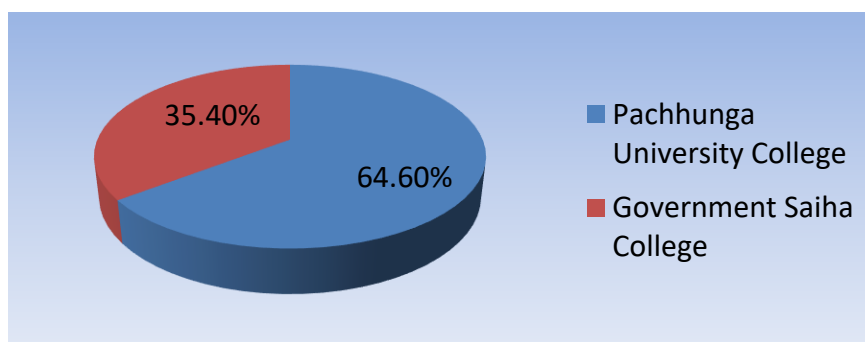
Out of the total sample of 500 respondents, 323 (64.6%) respondents were from Pachhunga University College and rest 177 respondents (35.4%) were from Government Saiha College. Therefore, this college-wise distribution of respondents represents the initial sampling of students enrolled for their respective colleges.

3.2.2 Course Compositions of the Sample Respondents

The different courses pursued by the sample respondents were namely, Bachelor of Arts (BA), Bachelor of Commerce (BCom) and Bachelor of Science (BSc). However, at the time of study, only Pachhunga University College offered all these three courses, whereas Government Saiha College offered only BA courses.

Exhibit 3.2
Course Compositions of the Sample Respondents
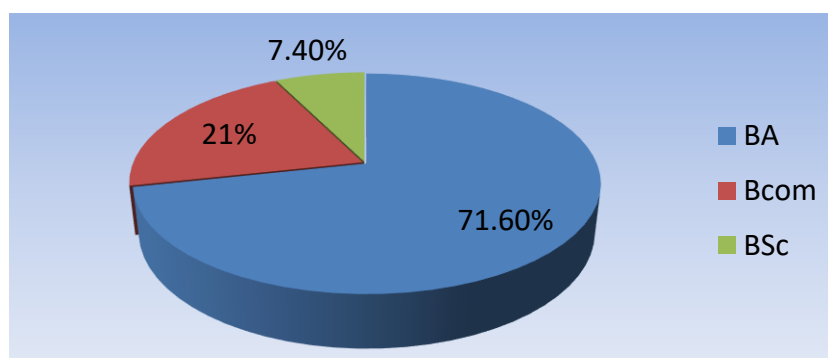
Out of all the respondents, majority (71.6%) of them were pursuing BA, followed by BCom (21%), and followed by BSc (7.4%). Therefore, BA is the most popular course among the respondents which may also reflect the fact that there are limited opportunities for students willing to opt for other courses within the state of Mizoram. As pointed earlier, Government Saiha College did not offer any BSc or BCom courses at the time of study.

3.2.3 Gender Composition of the Sample Respondents

According to Census 2011, Mizoram has higher sex ratio of 976 compared to India's national average of 943 (Planning & Programme Implementation Department, Government of Mizoram, 2018). According to the Mizoram University Annual Report 2012-2013, there were 1,993 students enrolled in various courses at Pachhunga University College, out of which 920 are females which is 46.16% of the total students. According to the same report, there are 140 female students out of 323, which is 43.34% of the total students enrolled for various courses in Government Saiha College. The total number of students pursuing various courses in both the colleges as per the Mizoram University Annual Report 2012-2013 is 2316, out of which the total number of female students is 1060, that is 45.77% and the remaining 44.23% were male students. The present sample of 500 students included 251 males which constitute 50.2% of the total sample and 249 females which constitute 49.8% of the total sample.

Exhibit 3.3
Gender Composition of the Sample Respondents
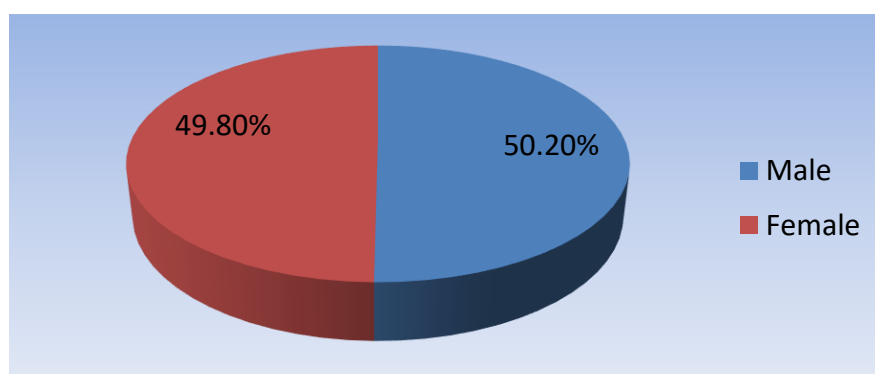
The Statistical Abstract of Mizoram: 2017, which published data on education as per the sources from the Directorate of Higher and Technical Education, Mizoram, mentions that in 2016-2017, there are total 13,152 students in various Arts, Science & Commerce Colleges in Mizoram out of which 6,967 (52.97%) were males and 6,185 (47.03%) were females. District wise, in 2016-2017, there were 8483 students in Aizawl, out of which 4483 (52.85%) were males and 4000 (47.15%) were females and in Saiha there were 422 students out of which 228 (54.03%) were males and 194 (45.97%) were females. Therefore, the selected sample also reflects an approximate representation of the overall student population studying in various colleges in Mizoram.

3.2.4 Age Composition of the Sample Respondents

In terms of age groups among the sample respondents, most of them (91.6%) were aged between 18 to 23 years. It may be pointed here that majority of the students (21.8%) were 20 years of age, followed by students (20.8%) with 19 years of age, followed by students (17.2%) with 21 years of age. It may also be noted that only very few students (6.8%) were above 24 years of age.

Exhibit 3.4
Age Composition of the Sample Respondents
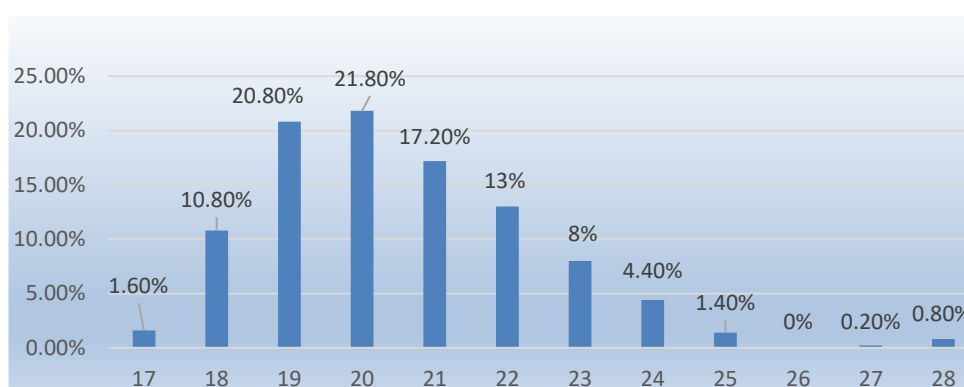
In general, the undergraduate students studying three years degree courses normally falls in the age group of 18-21 years. In the present sample, it has been found that 70.6% of the respondents were aged between 18 and 21. Also, the average age of the respondents were 20.52 years.

3.2.5 Family Size Composition of the Sample Respondents

Traditionally in Mizoam, parents normally stay together with at least one of their grown-up children. Also, most parents in the families prefer to have two or more children. Therefore, nuclear families or families consisting of less than 4 members are not commonly observed in Mizoram.

Exhibit 3.5
Family Size Composition of the Sample Respondents
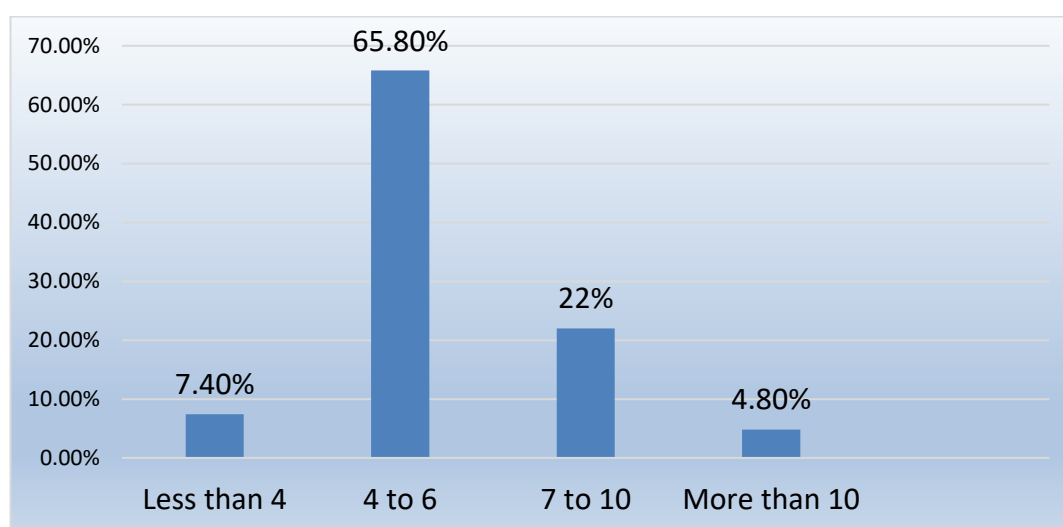
In terms of the family size, most of the sample respondents (65.8%) were having 4 to 6 members in their respective families followed by respondents having 7 to 10 members (22%). In either case, respondents having less than 4 or more than 10 members in their respective families were found to be very less.

3.2.6 Relationship Status Composition of the Sample Respondents

From social context, relationship status is an important personal factor that influences a person's attitudes and behaviour. Therefore, the respondents were asked to provide information on their present relationship status.

Exhibit 3.6
Relationship Status Composition of the Sample Respondents
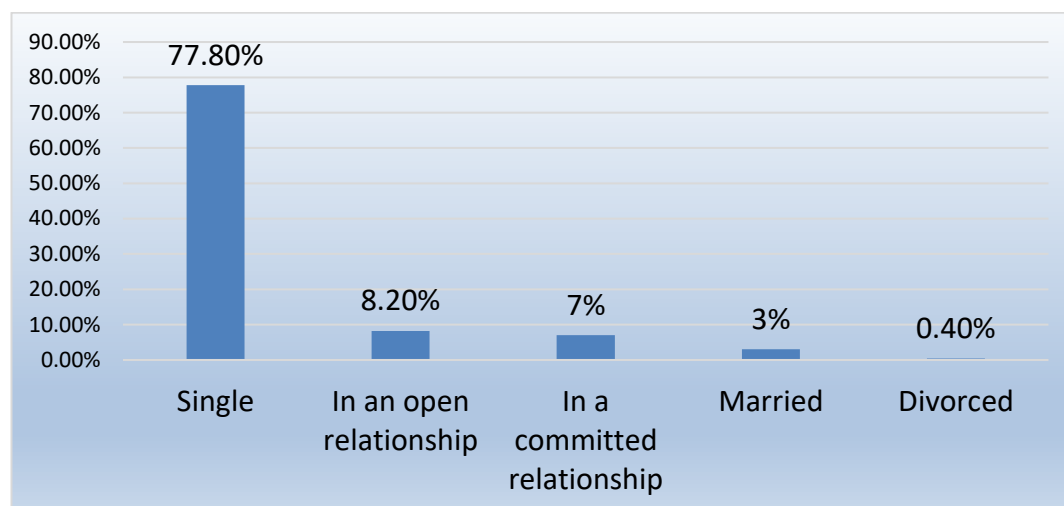
Out of all the respondents, majority, that is, 77.8% of them were found to be "singles" followed by 8.2% who were "in an open relationship", followed by 7% who were "in a committed relationship". Out of all the respondents, 3.6% also categorized themselves to be "in a complicated relationship" and 3% declared themselves as being married. The "in an open relationship", in this context has been defined as a kind of relationship, where a person is presently having a relationship with another person without any future commitments.

3.2.7 Income Composition of the Sample Respondents

There is significant diversity in the average monthly household incomes of the sample respondents. Most of the respondent's (69.8%) average monthly household income ranges from ₹5,0001 to ₹30,000. In this broad income bracket, the maximum (18.4%) respondent's monthly household income is within ₹5,000 to ₹10,000, followed by 15.8% and 14.4% respondents whose monthly household income falls under ₹10,001 to ₹15,000 and ₹15,001 to ₹20,000 respectively.

Exhibit 3.7
Income Composition of the Sample Respondents
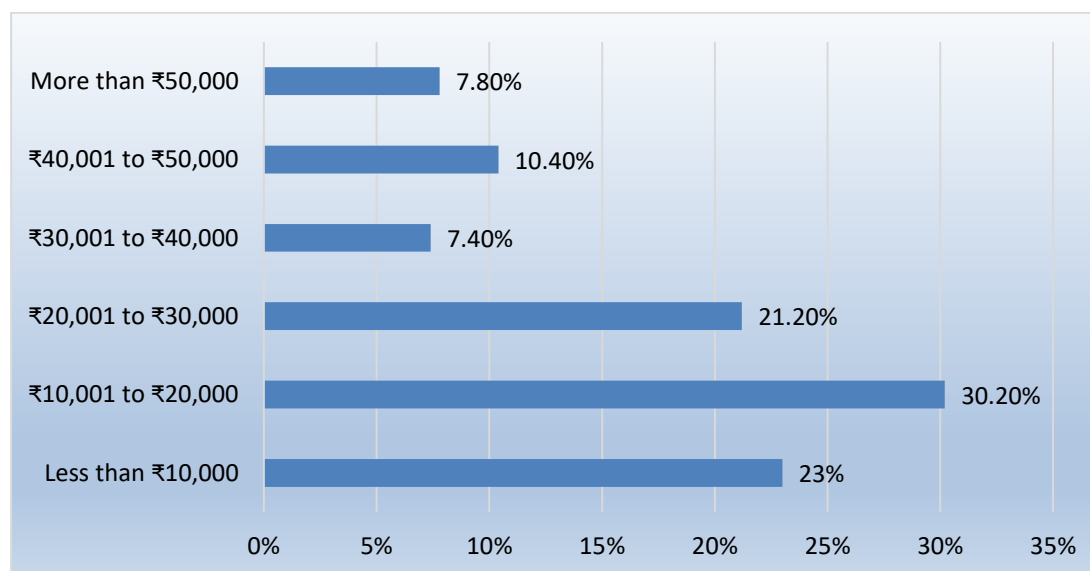
There are 7.4% and 10.4% respondents whose average monthly household incomes were between ₹30,001 to ₹40,000 and ₹40,001 to ₹50,000 respectively. Out of the total 500 respondents only 7.8% have more than ₹50,000 as their average monthly household income.

3.2.8 Family Occupation Composition of the Sample Respondents

Occupation is an important factor that may directly or indirectly affect people's income and lifestyle. Therefore, the respondents were asked about their family's primary occupation. In general, the three most common occupational choices for the people in Mizoram are service, business and farming. According to the Economic Survey 2017-18 report of the Government of Mizoram, more than half of the population in Mizoram is directly or indirectly dependent on agriculture and its allied activities. The contribution to the GSVA in 2016-2017 by the agriculture and allied activities, the service sector and the manufacturing and other industry is 31.72%, 43.5% and 24.78% respectively (Planning & Programme Implementation Department, Government of Mizoram, 2018).

Exhibit 3.8
Family Occupation Composition of the Sample Respondents
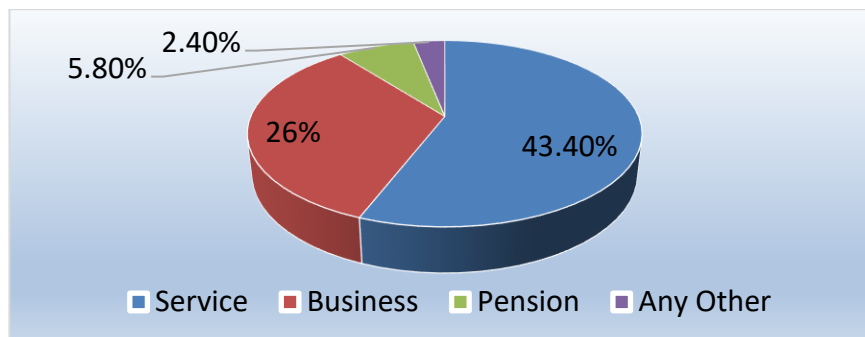
Majority (43.4%) of the sample respondent's primary family occupation is service followed by business (26%) and farming (22.4%). Only, 5.8% and 2.4% of the respondents marked their family's primary occupation as pension and others.

3.2.9 Category Composition of Sample Respondents

The World Health Organization categorizes the tobacco users in two broad categories as 'Smokers' and 'Smokeless Tobacco Users' (WHO, 1983). The Smokers are further categorized as 'Current Smokers', 'Non-Smokers' and 'Ex-Smokers' and 'Other Smokers'. The Current Smokers are further categorized as 'Daily Smokers' and 'Occasional Smokers'. Similarly, the Smokeless Tobacco Users are also categorized in as 'Current Users', 'Non-Users' and 'Ex-Users' and Current Users are further categorized as 'Daily Users' and 'Occasional Users'.

Exhibit 3.9
Category Composition of Tobacco Consumers
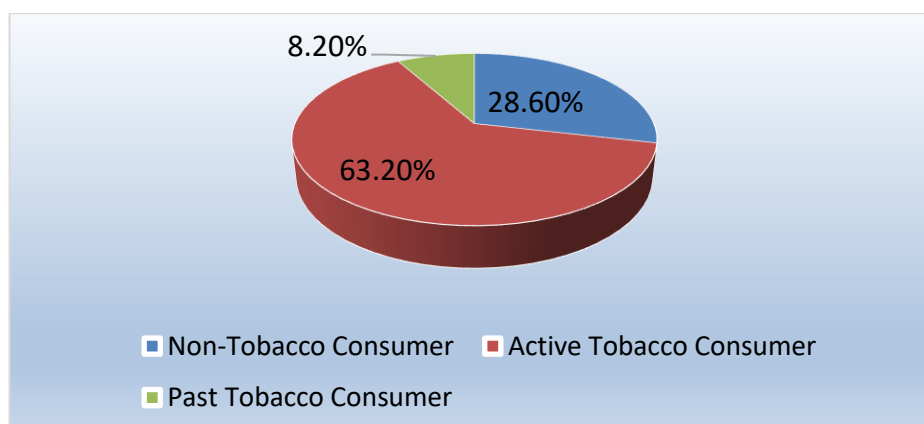
In the present study, a simplified categorization of tobacco users has been made which combines both Smokers and Smokeless Tobacco Users and categorizes them under three basic categories as under:

(i)   **Active Tobacco Users:** It includes Daily Smokers, Daily Users, Occasional Smokers and Occasional Users

(ii) **Past Tobacco Users:** It includes Ex-Smokers and Ex-Users

(iii) **Non Tobacco Users**: It includes Non-Smokers, Non-Users, Other Smokers and Other Users

Out of the total 500 respondents, 316 (63.2%) were found to be current active consumers of tobacco and 143 (28.6%) are non-tobacco consumers. There were only 41 (8.2%) respondents who used to consume tobacco in the past but have now quitted.

3.3 Socio-Economic Profile of Active Tobacco Consumers

This section presents the socio-economic profile of all the respondents who have been categorized as Active Tobacco Users which includes Daily Smokers, Daily Users, Occasional Smokers and Occasional Users. In accordance with the World Health Organization's classification of tobacco users (WHO, 1983), the Active Tobacco Consumers in the present study includes those undergraduate students who at the time of the study had smoked more than 100 units of smoke tobacco products like cigarettes, bidis etc in their lifetime or consumed more than 100 units of non-smoking tobacco products like gutkha, zarda, khaini etc. There were 316 Active Tobacco Consumers out of the total 500 respondents.

3.3.1 Frequency of Tobacco Consumption by Active Tobacco Consumers

Tobacco may be consumed by tobacco consumers in varying quantity and frequency. Generally, higher frequency of tobacco consumption by a person reflects higher level of his or her addiction towards tobacco. Also, due to the addictive nature of tobacco, the frequency of its usage by tobacco consumers tends to increase with time. Thus, current occasional tobacco users may be potential heavy tobacco users of future.

Knowing the frequency of tobacco usage by tobacco users is important for introducing proper intervention for de-addiction.

Exhibit 3.10
Frequency of Tobacco Consumption by the Respondents
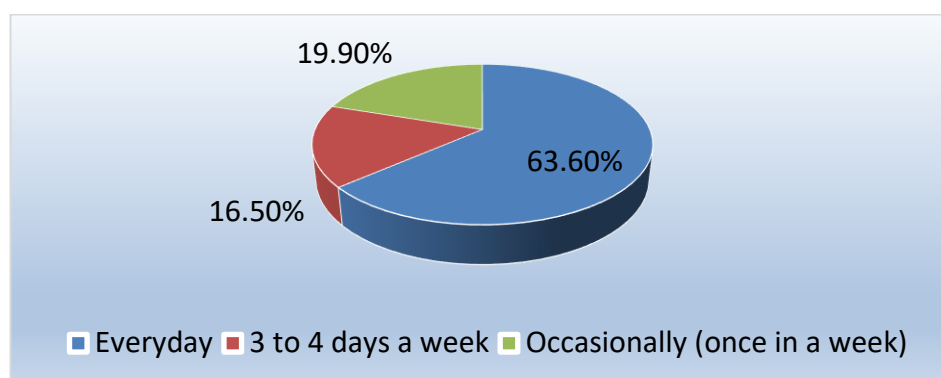
Exhibit 3.10 shows the frequency of tobacco consumption by active tobacco consumers. Majority of the active tobacco consumers (63.6%) consumes tobacco daily followed by 19.9% of the active tobacco consumers who consumes it occasionally (once in a week), followed by 16.5% of the active tobacco consumers who consumes it 3 to 4 days a week.

3.3.2 College Composition of Active Tobacco Consumers

There were 316 Active Tobacco Consumers out the total 500 respondents, which means that 63.2% of all the respondents were Active Tobacco Consumers. Again, out of the total 316 Active Tobacco Consumers, 193 were from Pachhunga University College that is 61.08% of the total 316 Active Tobacco Consumers. Among the total 323 respondents of the Pachhunga University College, 193 were found to be Active Tobacco Consumers which is 59.75% of all the respondents.

Table 3.1
College Composition of Active Tobacco Consumers

Name of the College	Total Number of		Percentage of Active Tobacco Consumers	
	Respondents	Active Tobacco Consumers	Out of the Total Active Tobacco Consumers	In Respective Colleges

Pachhunga University College	323	193	61.08%	59.75%
Govt. Saiha College	177	123	38.92%	69.49%
Total	500	316	63.2%	

Out of the total 316 Active Tobacco Consumers, 123 belong to the Government Saiha College which is 38.92% of the total Active Tobacco Consumers. Also, 69.49% out of the total 177 respondents from Government Saiha College are actually Active Tobacco Consumers. Therefore, the percentage of Active Tobacco Consumers in Government Saiha College is much higher in comparison to Pachhunga University College.

3.3.3 Course Composition of Active Tobacco Consumers

The sample includes students from three courses namely, BA, BCom and BSc. As mentioned earlier the Pachhunga University College had all three courses but Government Saiha College had only BA course at the time of study.

Exhibit 3.11
Course Composition of Active Tobacco Consumers
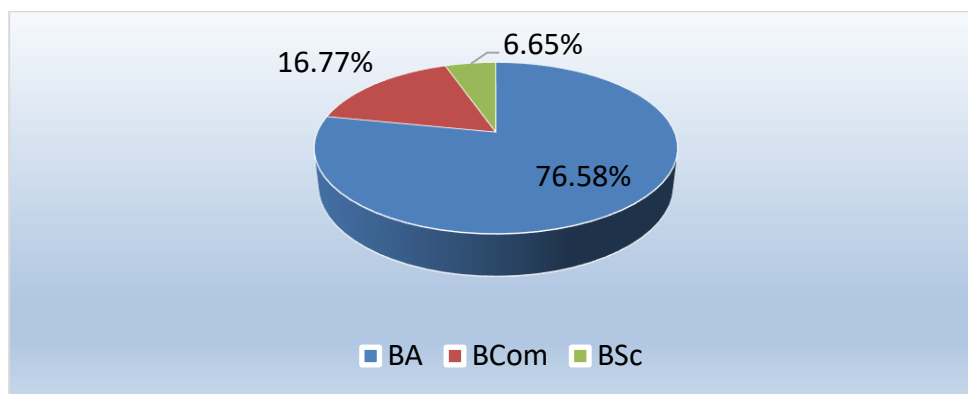
Out of all the Active Tobacco Consumers, 76.58% were studying Bachelor of Arts (BA), 16.77% were studying Bachelor of Commerce (BCom) and the rest 6.65% were studying Bachelor of Science (BSc). One prior study had found that studying non-science subjects is significantly associated with smoking among school children in Sri Lanka (Katulanda et al., 2015). Though, it may be assumed that the students studying science may have better health awareness, but in the present sample, the

high percentage of Active Tobacco Consumers from non-science courses is likely due to their high composition in the overall sample.

3.3.4 Age Composition of Active Tobacco Consumers

Age has been found to be an important determinant of tobacco use in India. (Rani et al., 2003; Reddy & Gupta, 2004; Singh & Ladusingh, 2014). As undergraduate students, the age of the Active Tobacco Consumers ranges from 17 to 28 years. Out of the 316 Active Tobacco Consumers, 88.6% of their age falls between 18 to 23 years. The highest percentage of the Active Tobacco Consumers were aged 20 and 19 years, where 20.6% of them were aged 20 years and 19.9% of them were aged 19 years.

Exhibit 3.12
Age Composition of Active Tobacco Consumers
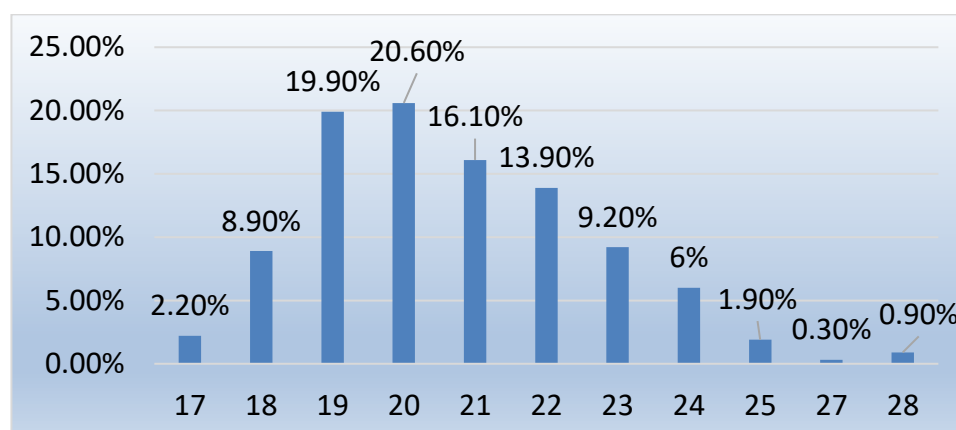
The average age of the Active Tobacco Consumers has been found to be 20.71 years.

3.3.5 Gender Composition of Active Tobacco Consumers

Chadda and Sengupta (2002) observed that unlike west, tobacco consumption and especially smoking is a male dominated phenomenon among children and adolescents in India. Out of the total 316 Active Tobacco Consumers among the respondents, 171 were males and 145 were females. In terms of percentage, 54.1% of the Active Tobacco Consumers were males and 45.9% of the Active Tobacco Consumers were females.

Exhibit 3.13
Gender Composition of Active Tobacco Consumers
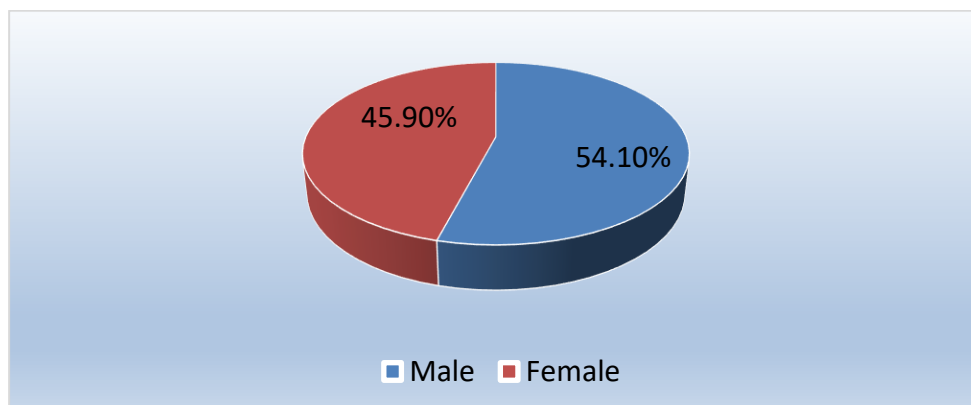
It may be pointed that according to GATS 2 (2017), 64.9% of men, 52.4% women and 58.7% of all adults in Mizoram consumes tobacco, either in smoke or smokeless forms. Therefore, considering all these it may be concluded that the prevalence of tobacco consumption, though high across genders, but is much more among males compared to females in Mizoram.

3.3.6 Family Size Composition of Active Tobacco Consumers

Majority of the Active Tobacco Consumers that is 65.19% belongs to families of 4 to 6 members. This is followed by 23.42% of Active Tobacco Consumers who have 7 to 10 members in their families. Only 6.33% of the Active Tobacco Consumers have 4 or less members in their families.

Exhibit 3.14
Family Size Composition of Active Tobacco Consumers
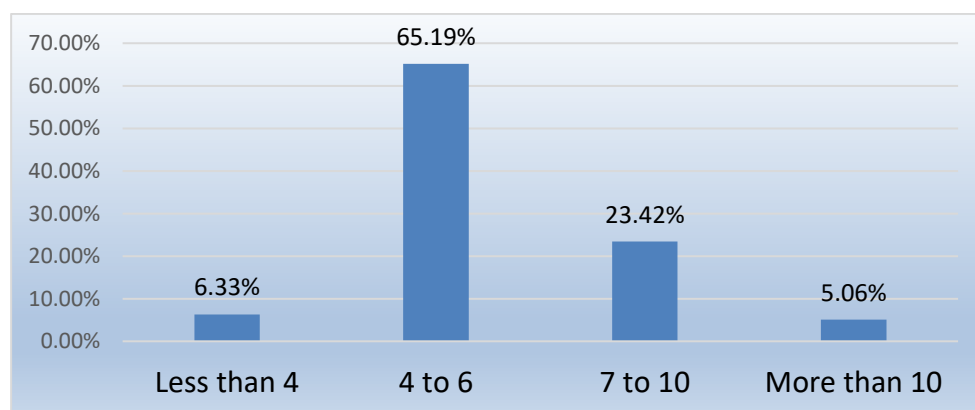
If the family size of Active Tobacco Consumers is compared with the family size of the overall respondents, then there is not much difference between the two except for the fact that the 7.4% of the overall respondents belonging to families of less than 4 members were slightly more than the 6.33% of the Active Tobacco Consumers having families of less than 4 members. Similarly, 23.42% of Active Tobacco Consumers with families of 7 to 10 members is also slightly higher than the 22% overall respondents having families of 7 to 10 members.

3.3.7 Relationship Status Composition of Active Tobacco Consumers

75.3% of the Active Tobacco Consumers were single at the time of the survey. 9.2% of the Active Tobacco Consumers have confessed that they were in an open relationship whereas 7.6% of them said that they were in a committed relationship. Also 3.8% of the Active Tobacco Consumers have revealed that they were in a complicated relationship and 3.8% said that they were married.

Exhibit 3.15
Relationship Status Composition of Active Tobacco Consumers
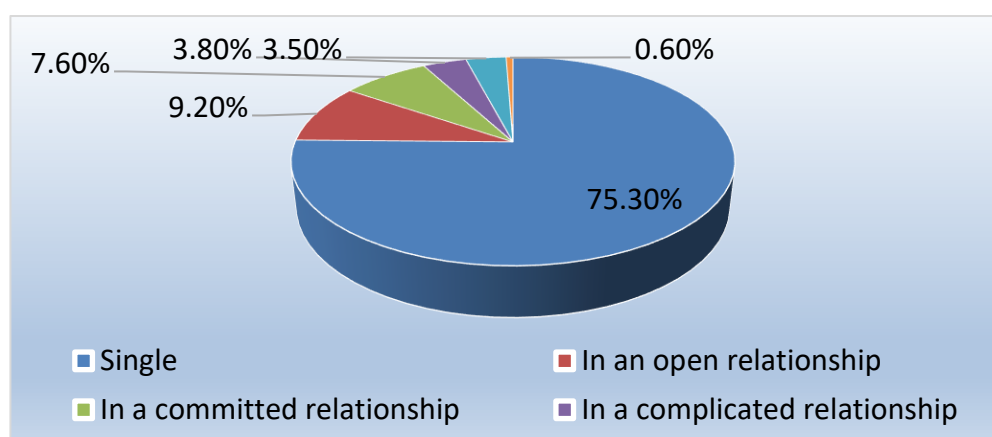
Therefore, majority (75.3%) of the Active Tobacco Consumers were single but this percentage is slightly lower than the 77.8% of the overall respondents who were single. The Active Tobacco Consumers who were in an open relationship is also marginally higher at 9.2% compared to the 8.2% of overall respondents who said that they are in open relationship.

3.3.8 Family Income Composition of Active Tobacco Consumers

30.7% of undergraduate Active Tobacco Consumer's average monthly household income is between ₹10,001 to ₹20,000, this is followed by 20.57% of the Active Tobacco Consumers whose average monthly household income falls between ₹20,001 to ₹30,000. There are 19.62% Active Tobacco Consumers whose average monthly household income is less than ₹10,000 and 9.5% Active Tobacco Consumers having average monthly household income of above ₹50,000.

<div align="center">

Exhibit 3.16
Family Income Composition of Active Tobacco Consumers

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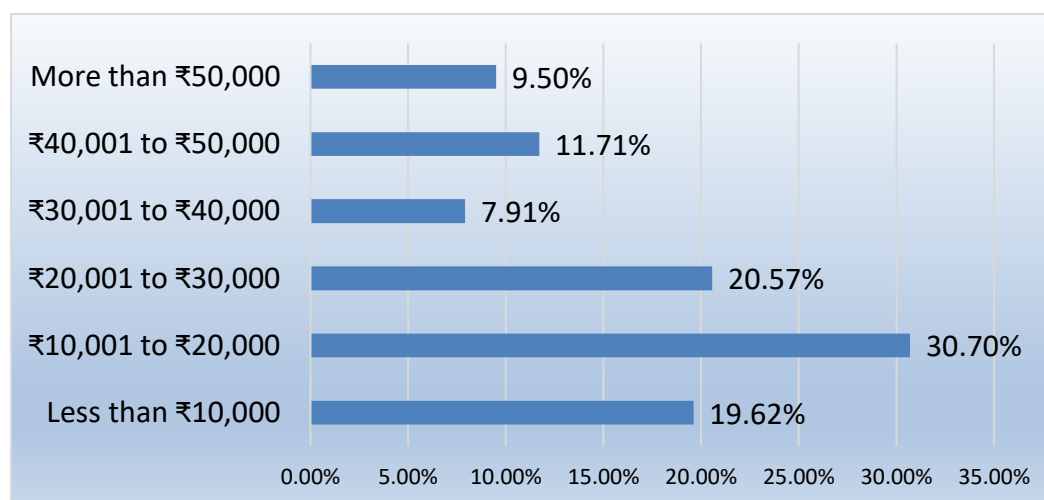
Therefore, more than half (51.27%) of the undergraduate Active Tobacco Consumer's average monthly household income is somewhere between ₹10,000 to ₹30,000. Moreover, there is substantial number of undergraduate Active Tobacco Consumers whose monthly family income is below ₹10,000. It may be pointed out that around 80% of the world's 1.1 billion smokers are from low-income and middle-income countries (WHO, 2019) and also globally, the adult tobacco consumption has been strongly and positively associated with poverty (Mathur et al., 2014). There is also evidence that in low-economic households, the money for tobacco is usually diverted from nutrition, education and medical care (John, 2008; Xin, et al., 2009). In India, the use of smokeless tobacco has been generally found to be higher among lower income groups (Bhasker et al., 2015; Thakur et al., 2015) with few exceptions, which includes the northeastern states of Meghalaya, Mizoram, Nagaland and

Sikkim (Thakur et al., 2015) and certain rural district of West Bengal (Barik et al., 2016). In the present study, most of the tobacco consumers have been found to have family income of below ₹30,000 a month.

3.3.9 Family Occupation Composition of Active Tobacco Consumers

44.6% of the Active Tobacco Consumer's primary family occupation is service followed by business (28.2%), followed by farming (20.3%). Only 5.4% of the Active Tobacco Consumer's main family income comes from pension followed by 1.6% of the Active Tobacco Consumers whose families have other occupations.

Exhibit 3.17
Family Occupation Composition of Active Tobacco Consumers
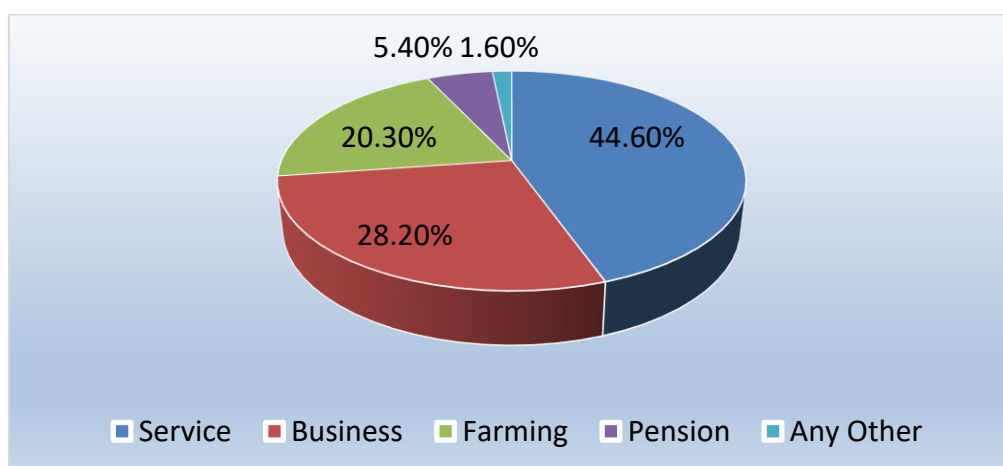
The service (44.6%) and business (28.2%) as primary family occupation of Active Tobacco Consumers are slightly higher compared to the service (43.4%) and business (26%) as primary family occupation of the overall respondents.

3.3.10 Daily Expenditure on Tobacco Products by Active Tobacco Consumers

29.1% of the Active Tobacco Consumers spends ₹10 to ₹20, followed by 26.6% Active Tobacco Consumers who spends less than ₹10, followed by 24.4% Active Tobacco Consumers who spends ₹21 to ₹30 daily for tobacco consumption.

Exhibit 3.18
Daily Expenditure on Tobacco Products by Active Tobacco Consumers
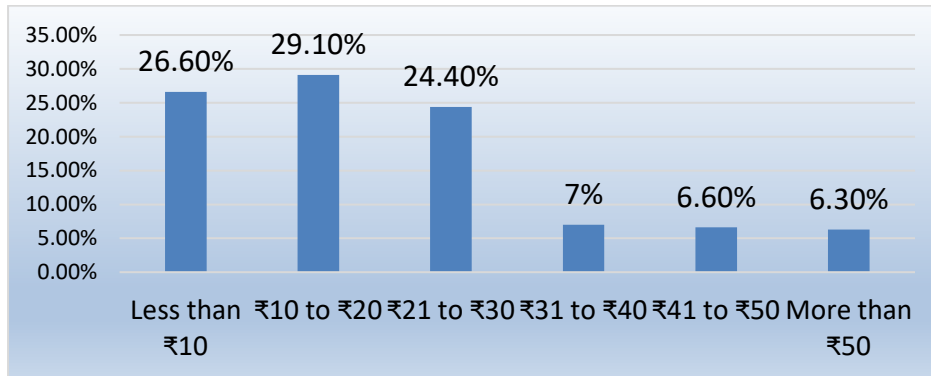
According to GATS India 2016-2017 report, the monthly expenditure on cigarettes by current smokers in Mizoram was ₹712, while monthly expenditure on bidis by current bidi smokers was ₹256.1. If this monthly expenditure is converted into daily expenditure, then current cigarette smokers spend around ₹23.73 and current bidi smokers spends ₹8.54 on a daily basis. Therefore, overall, it may be concluded that most of the Active Tobacco Consumers (80.1%) in Mizoram spends ₹30 or less for consuming tobacco on a daily basis.

3.3.11 Financial Dependency of Active Tobacco Consumers

59.5% of the Active Tobacco Consumers are found to be financially dependent, which is followed by 22.2% of the Active Tobacco Consumers who are partially dependent on their families. Only 18.4% of the Active Tobacco Consumers are not financially dependent on their families.

Exhibit 3.19
Financial Dependency of Active Tobacco Consumers
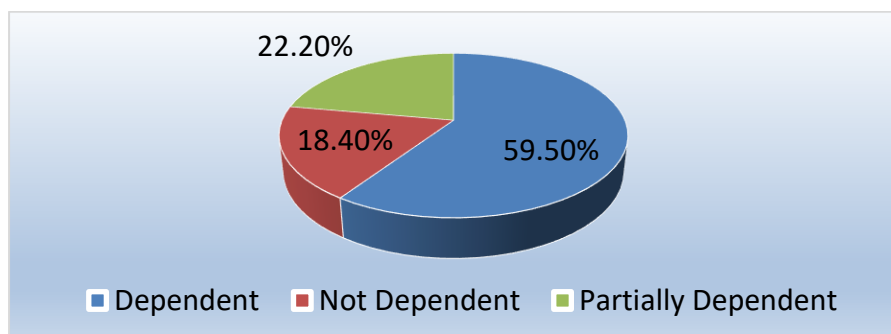
All the respondents surveyed were fulltime undergraduate students; therefore, it is natural for most of them to be financially dependent on their families. Some of the Active Tobacco Consumers (22.2%) may be engaged in some kind of part time job or business which may be a source of personal earning for them. It is also likely that such Active Tobacco Consumers may have more financial freedom for meeting their daily tobacco expenses.

3.3.12 Tobacco Related Health Problems among Active Tobacco Consumers

9.2% of the Active Tobacco Consumers strongly agrees and 31.3% of the Active Tobacco Consumers agrees that they have health problems related to tobacco consumption. A large number of the Active Tobacco Consumers (39.9%) were not sure if they have any health problem that is caused due to tobacco consumption. Only 14.6% of the Active Tobacco Consumers disagrees and 5.1% of the Active Tobacco Consumers strongly disagrees that they have health problems caused due to tobacco consumption.

Table 3.2
Tobacco Related Health Problems among Active Tobacco Consumers

Feedback	Frequency	Percent
Strongly Agrees that they have tobacco related health problems	29	9.2%
Agrees that they have tobacco related health problems	99	31.3%
Not Sure that they have tobacco related health problems	126	39.9%
Disagrees that they have tobacco related health problems	46	14.6%
Strongly Disagrees that they have tobacco related health problems	16	5.1%
Total	316	100%

Therefore, it appears that a substantial number of the Active Tobacco Consumers are aware of their health problems caused due to tobacco and also many among them are not sure about such health problems. Only a small percentage of the Active Tobacco Consumers feels that they do not have health problems, in spite of their habit of consuming tobacco.

3.3.13 Tobacco Consumption in the Family of Active Tobacco Consumers

Majority of the Active Tobacco Consumes (83.5%) have members in the family who consumes tobacco. Only 13.3% of the Active Tobacco Consumers do not have any members in their family who consumes tobacco.

Table 3.3
Tobacco Consumption in the Family of Active Tobacco Consumers

Feedback	Frequency	Percent
Have members in the family who consumes tobacco	264	83.5
Don't have members in the family who consumes tobacco	42	13.3
Can't say if they have members in the family who consumes tobacco	10	3.2
Total	316	100.0

Therefore, it appears likely that most of the Active Tobacco Consumers may never experience any strict environment against tobacco at their home, as many of their family members also consume tobacco. Moreover, the family member's habit of consuming tobacco may act as an indirect approval for tobacco consumption by the Active Tobacco Consumers. One study has found that tobacco use by parents increases the likelihood of tobacco use among the youth (Ladusingh et al., 2017).

3.3.14 Daily Activities Performed by Active Tobacco Consumers

The Active Tobacco Consumers were asked to list their personal amount of time spent on various daily activities such as entertainment, family, studies etc. Most of the Active Tobacco Consumers spends less than 3 hours daily in watching television and 12 per cent of them does not watch television at all. Similarly, most of the Active Tobacco Consumers spends less than 4 hours on listening music and out of that 27.8% of them spend less than 30 minutes daily on listening music.

Table 3.4
Daily Activities Performed by Active Tobacco Consumers in Percentage

Activities	None	Less than 30 m	30 m to 1 h	1 to 2 hours	2 to 3 hours	3 to 4 hours	4 to 5 hours	More than 5 hours
Watching TV	12	22.5	23.7	21.2	10.8	4.4	3.5	1.9
Listening Music	4.1	27.8	25.6	15.5	12.7	7.3	2.2	4.7

Time with Family	9.2	5.7	10.8	10.8	13.6	12.7	8.2	29.1
Time with Friends	4.1	4.7	11.7	15.2	15.5	16.5	14.2	18
Studying	5.7	13	17.4	30.1	21.5	6	4.4	1.9
Outdoor Sports/Workouts	33.5	23.7	15.8	15.2	7	2.8	1.3	6
Reading News Papers/Magazines/Books	10.8	41.8	27.8	11.4	5.1	1.6	6	9
Playing indoor games	56	21.8	8.9	6	4.1	1.6	1.3	3
Surfing internet	4.7	7.3	16.1	19.9	20.9	14.2	7	9.8
Cooking & household works	20.3	16.5	19.6	18	14.6	5.4	3.5	2.2
Going out/Travelling	44	15.8	12	14.2	7	4.1	6	2.2
Religious activities	13	14.9	25.3	25.3	12	5.7	2.5	1.3
Other Hobbies	60.4	6.6	7.6	9.8	5.4	4.4	2.2	3.5

The Active Tobacco Consumers spends varied amount of time with their families. On one hand, 29.1% of the Active Tobacco Consumers spends more than 5 hours daily with their families and on the other hand 9.2% of them do not spend any time with their families at all. It is most likely that majority of these 9.2% students may be studying away from home and probably residing in hostels. The Active Tobacco Consumers also spends considerable amount of time with there friends. 18% of them says that they spends more than 5 hours with their friends. When it comes to stuydying, 69% of the Active Tobacco Consumers spends 30 minitues to 3 hours daily in studying. However, the Active Tobacco Consumers are not so active in outdoor sports and physical exercise, as 57.2% of them spends less than 30 minutes daily on such activities. Moreover, 33.5% of them does not play any otdoor sports or do physical exercises at all. The Active Tobacco Consumers also seems to less engage themselves in reading news papers, magazines and books as 80.4% of them spends only 1 hour or less daily in reading. Also, 56% of the Active Tobacco Consumers does not paly any indoor games. Surfing internet is quite popular among Active Tobacco Consumers, as 71.1% of spends 30 minitues to 4 hours and 9.8% spends more than 5 hours daily on surfing internet. 20.3% of the Active Consumers does not do any cooking or household works which again may include many hosteliers and 52.2% spends anywhere between 30 minutues to 3 hours in cooking and household works. Surprisingly, 44% of the Active Tobacco Consumers have revealed that they hardly go out or do travelling. More than half of the Active

Tobacco Consumers (50.6%) also spends 30 minitues to 2 hours in relegious activities.

3.3.15 Age of Initiation of Active Tobacco Consumers

According to Yaya et al., (2017), "impact of socioeconomic disparities must be considered in early smoking initiation as key factor influencing smoking behaviours or lifestyle". The average age of initiation of tobacco by Active Tobacco Consumers among the respondents is 15.89 years. This age of initiation for undergraduate tobacco users in Mizoram is much lower compared to 17.8 years found in GATS 20016-2017 surveys and 17.4 years found in GATS 2009-2010 surveys.

Table 3.5
Age of Initiation of Active Tobacco Consumers

Age of Initiation	Frequency	Percent	(Age) × (Frequency)
2.00	1	0.3	2
5.00	3	0.9	15
6.00	3	0.9	18
7.00	1	0.3	7
8.00	1	0.3	8
9.00	5	1.6	45
10.00	4	1.3	40
11.00	4	1.3	44
12.00	17	5.4	204
13.00	14	4.4	182
14.00	25	7.9	350
15.00	35	11.1	525
16.00	54	17.1	864
17.00	47	14.9	799
18.00	55	17.4	990
19.00	23	7.3	437
20.00	18	5.7	360
21.00	2	0.6	42
22.00	3	0.9	66
23.00	1	0.3	23
Total	316	100.0	5021
Average Age of Initiation (5021/316) = 15.89 Years			

The lower age of initiation to tobacco revealed in the present study shows that students are exposed to tobacco and are influenced for consumption at a much earlier stage. Therefore, anti-tobacco policies are required to be framed, focused and implemented more on secondary level schools and classes.

3.4 Socio-Economic Profile of Non-Tobacco Consumers

This section presents the socio-economic profile of all the respondents who have been categorized as Non-Tobacco Users which includes Non-Smokers, Non-Users, Other Smokers and Other Users. In accordance with the World Health Organization's classification of tobacco users (WHO, 1983), the Non-Tobacco Consumers in the study includes the undergraduate students who at the time of study neither smoke tobacco nor consume tobacco in any kind other than smoking. There were 143 Non-Tobacco Consumers out of the total 500 respondents.

3.4.1 College Composition of Non-Tobacco Consumers

28.6% of the total respondents were found to be Non-Tobacco Consumers. There were 102 Non-Tobacco Consumers from Pachhunga University College, which is 71.33% of the total Non-Tobacco Consumers. On the other hand, 41 Non-Tobacco Consumers were from Government Saiha College, which is 28.67% of the total sample of Non-Tobacco Consumers.

Table 3.6
College Composition of Non-Tobacco Consumers

Name of the College	Total Number of		Percentage of Non-Tobacco Consumers	
	Respondents	Non-Tobacco Consumers	Out of the Total Non-Tobacco Consumers	In Respective Colleges
Pachhunga University College	323	102	71.33%	31.58%
Govt. Saiha College	177	41	28.67%	23.16%
Total	500	143	28.6%	

31.58% of the total 323 respondents from Pachhunga University College and 23.16% of the total 177 respondents from Government Saiha College were found to be Non-

Tobacco Consumers. This shows that the percentage of Non-Tobacco Consumers in Pachhunga University College is comparatively higher than Government Saiha College.

3.4.2 Course Composition of Non-Tobacco Consumers

59.44% of the Non-Tobacco Consumers were studying Bachelor of Arts (BA), followed by 31.47% who were studying Bachelor of Commerce (BCom), followed by 9.09% of the Non-Tobacco Consumers who were studying Bachelor of Science (BSc).

Exhibit 3.20
Course Composition of Non-Tobacco Consumers
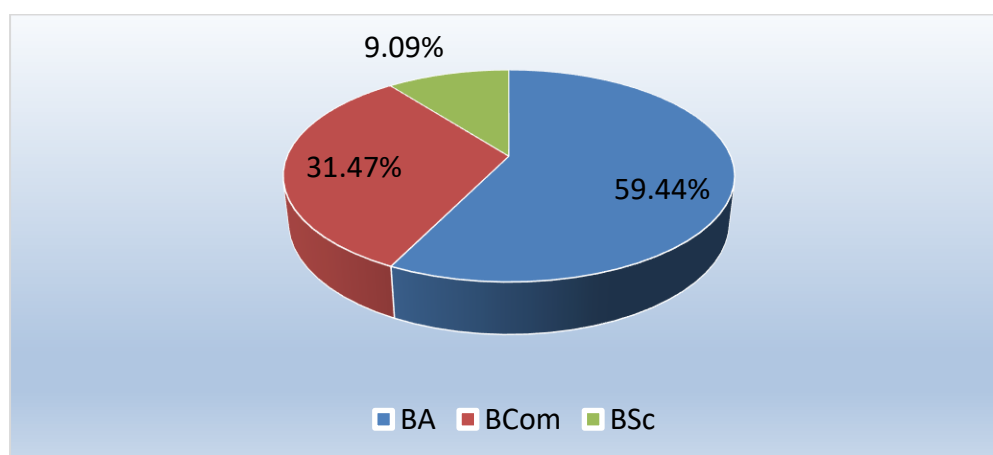
As pointed earlier that out of all these three courses, BSc and BCom is offered only at Pachhunga University College. Overall, it may be concluded that majority of the Non-Tobacco Consumers are pursuing BA followed by BCom and only few of them are pursuing BSc courses.

3.4.3 Age Composition of Non-Tobacco Consumers

Most of the Non-Tobacco Consumers were aged between 18 to 22 years. 23.1% of the Non-Tobacco Consumers were aged 20 which is followed by 21.7% aged 19 which is again closely followed by 20.3% Non-Tobacco Consumers who were aged 21.

Exhibit 3.21
Age Composition of Non-Tobacco Consumers
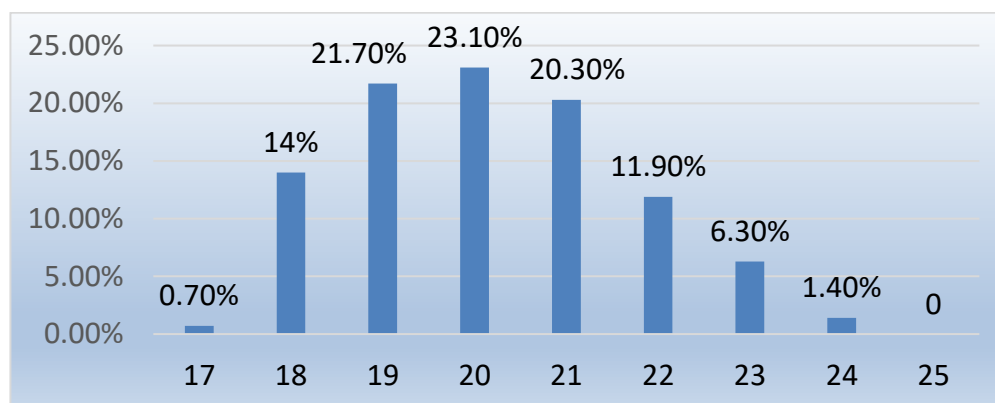
Therefore, overall, 91% of the Non-Tobacco Consumers were aged between 18 to 22 years which is the common age group for undergraduate students in general. Also, the average age of the Non-Tobacco Consumers is 20.2 years.

3.4.4 Gender Composition of Non-Tobacco Consumers

Out of all 143 undergraduate Non-Tobacco Consumers, 54 were found to be males and 89 were females. This means that 37.8% of all Non-Tobacco Consumers were males and remaining 62.2% were females.

Exhibit 3.22
Gender Composition of Non-Tobacco Consumers
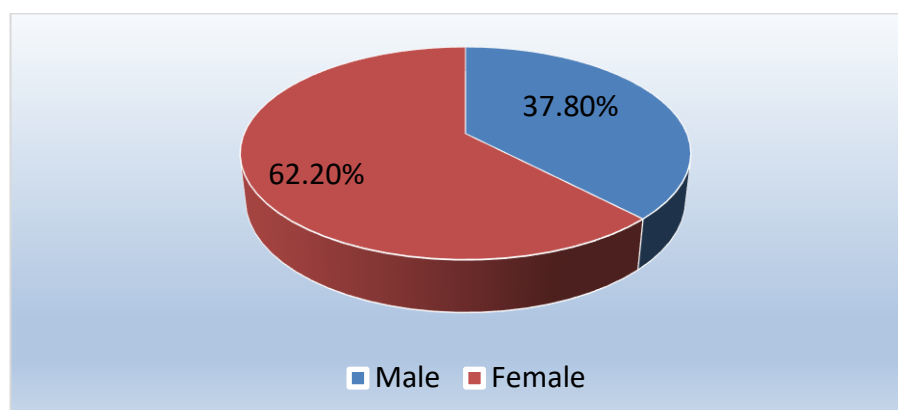
Therefore, there are much higher number of females compared to males among undergraduate Non-Tobacco Consumers. This also shows that in general the female

undergraduate students are less likely to consume tobacco compared to male undergraduate students.

3.4.5 Family Size Composition of Non-Tobacco Consumers

62.94% of the undergraduate Non-Tobacco Consumers have 4 to 6 members in their family which is followed by 21.68% Non-Tobacco Consumers who have 7 to 10 members in their respective families. There were only 11.49% Non-Tobacco Consumers who have less than 4 family members. Also, only 4.89% of the undergraduate Non-Tobacco Consumers have more than 10 family members.

Exhibit 3.23
Family Size Composition of Non-Tobacco Consumers
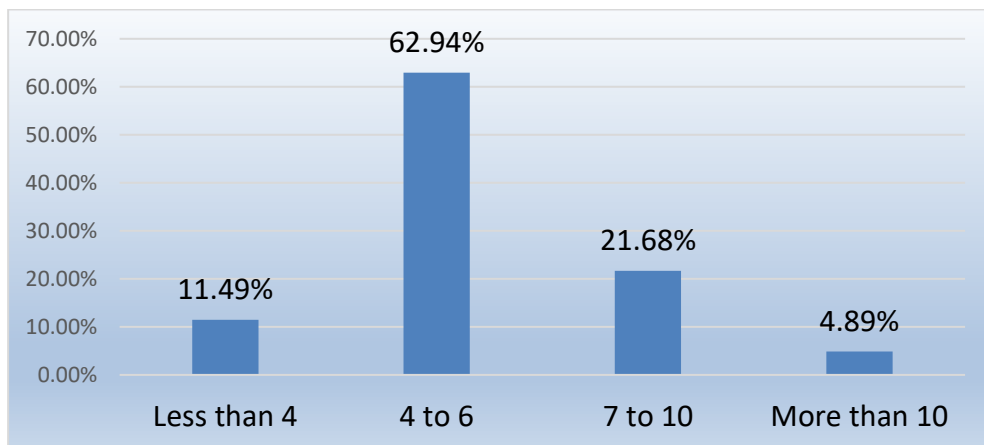
Therefore, it may be concluded that most of the Non-Tobacco Consumers (62.94%) have medium sized families with 4 to 6 family members and also some of the Non-Tobacco Consumers (21.68%) are from large families with 7 to 10 members. The percentage of Non-Tobacco Consumers from either small (less than 4 members) or very large (more than 10 members) sized families is much lower.

3.4.6 Relationship Status Composition of Non-Tobacco Consumers

83.2% of all the undergraduate Non-Tobacco Consumers are single. This is followed by 6.3% Non-Tobacco Consumers who are in an open relationship and 6.3% Non-Tobacco Consumers who are in a committed relationship.

Exhibit 3.24
Relationship Status Composition of Non-Tobacco Consumers
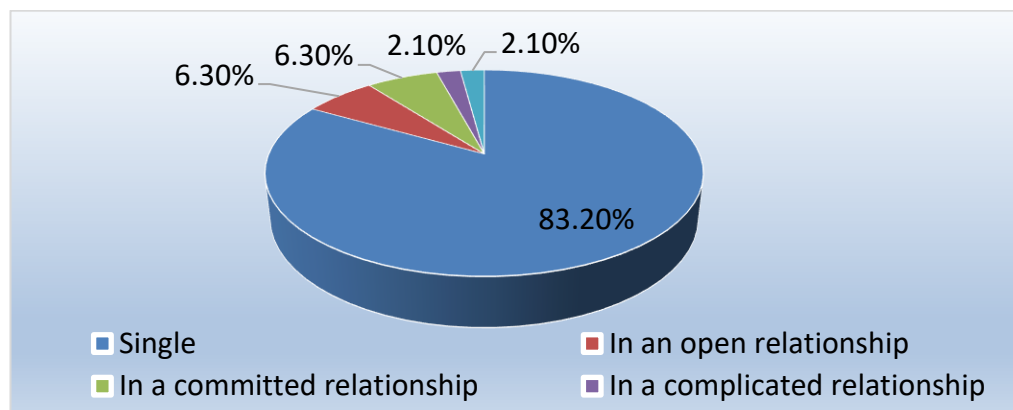
There were only 2.1% Non-Tobacco Consumers who revealed that they are in a complicated relationship and also only 2.1% of the Non-Tobacco Consumers were married. Therefore, most of the Non-Tobacco Consumers were found to be single.

3.4.7 Family Income Composition of Non-Tobacco Consumers

30.07% of the undergraduate Non-Tobacco Consumer's average monthly household income is in between ₹10,001 to ₹20,000 and 23.08% Non-Tobacco Consumer's average monthly household income is in between ₹20,001 to ₹30,000. There were also 27.27% of the Non-Tobacco Consumers whose average monthly income is less than ₹10,000. Only 4.2% Non-Tobacco Consumers have monthly family income of above ₹50,000.

Exhibit 3.25
Family Income Composition of Non-Tobacco Consumers
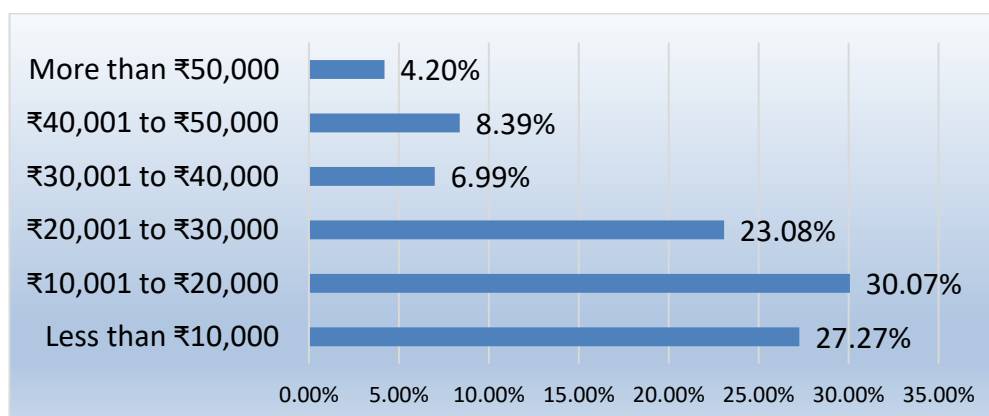
Therefore, it is evident that more than half (53.15%) of the undergraduate Non-Tobacco Consumer's average monthly household income falls between ₹10,000 to ₹30,000 and only 19.58% of the Non Tobacco Consumer's monthly family income is above ₹30,000. In addition, a substantial amount (27.27%) of undergraduate Non-Tobacco Consumers belongs to poor economic background where their family income is below ₹10,000 a month.

3.4.8 Family Occupation Composition of Non-Tobacco Consumers

44.1% of all the undergraduate Non-Tobacco Consumer's primary family occupation is service, followed by 25.2% of the Non-Tobacco Consumers whose primary family occupation is farming followed by 21.7% Non-Tobacco Consumers whose primary family occupation is business. Only 5.6% and 3.5% of the Non-Tobacco Consumer's primary family occupation involves pension and other means respectively.

Exhibit 3.26
Family Occupation Composition of Non-Tobacco Consumers
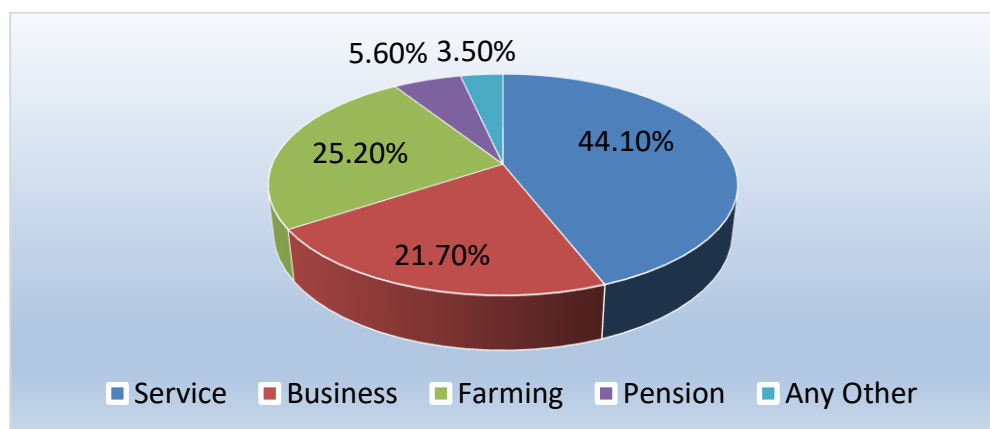
Therefore, majority of the undergraduate Non-Tobacco Consumer's primary family occupation is service, followed by farming and business.

3.4.9 Financial Dependency of Non-Tobacco Consumers

68.5% of the undergraduate Non-Tobacco Consumers are financially dependent on their respective families. Only 17.5% of the Non-Tobacco Consumers are financially independent and 14% of them are partially financially dependent on their families.

Exhibit 3.27
Financial Dependency of Non-Tobacco Consumers
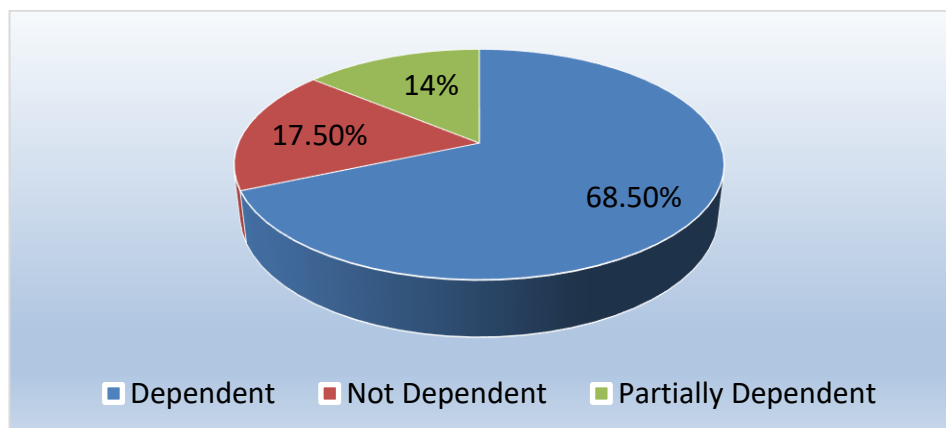
Therefore, majority of the undergraduate Non-Tobacco Consumers are dependent on their families for their respective financial needs.

3.4.10 Tobacco Consumption in the Family of Non-Tobacco Consumers

72.7% of the undergraduate Non-Tobacco Consumers have members in their family who consumes tobacco and 24.5% of them do not have any members in the family who consumes tobacco. Only 2.8% of the Non-Tobacco Consumers are not sure if they have any members in their family who are consuming tobacco.

Table 3.7
Tobacco Consumption in the Family of Non-Tobacco Consumers

Tobacco Consumption in the Family	Frequency	Percent
Have members in the family who consumes tobacco	104	72.7
Doesn't have any members in the family who consumes tobacco	35	24.5
Can't say if they have members in the family who consumes tobacco	4	2.8
Total	143	100.0

It is interesting to note that majority (72.7%) of the undergraduate Non-Tobacco Consumers have family members who consumes tobacco and in spite of that they have remained non-consumers of tobacco. The remaining 24.5% of the Non-Tobacco Consumers who does not have family members who consumes tobacco are likely to have a environment at their homes where they are influenced not to consume tobacco.

3.4.11 Daily Activities Performed by Non-Tobacco Consumers

There are various activities that are performed by the Non-Tobacco Consumers on a daily basis. 49.7% of the undergraduate Non-Tobacco Consumers spends 30 minutes to 2 hours daily in watching television. 31.5% and 32.2% of the Non-Tobacco Consumers spends less than 30 minutes and 30 minutes to 1 hour in listening music. Most of the undergraduate Non-Tobacco Consumers also spends considerable amount of time with their families. 31.5% of the Non-Tobacco Consumers spends more than 5 hours daily with their families and 37.8% of them spend 1 to 4 hours daily with their respective families. Most of the Non-Tobacco Consumers also spends considerable amount of time with their friends. 58.1% of them spends anywhere between 1 to 5 hours daily with their friends and 23.1% of them spends more than 5 hours daily with their friends. Regarding studies, 73.5% of the undergraduate Non-Tobacco Consumers spends 30 minutes to 3 hours on their daily studies. It seems that many of them are not very active regarding outdoor sports or physical exercise as 36.4% of the Non-Tobacco Consumers does not do any outdoor sports or physical exercise and 27.3% of them do it for less than 30 minutes on a daily basis. However, there are also 14% Non-Tobacco Consumers who spends 4 hours or more daily on outdoor sports and workouts.

Table 3.8
Daily Activities Performed by Non-Tobacco Consumers in Percentage

Activities	None	Less than 30 m	30 m to 1 hr	1 to 2 hours	2 to 3 hours	3 to 4 hours	4 to 5 hours	More than 5 hours
Watching TV	9.8	21.7	24.5	25.2	11.2	4.2	2.8	7
Listening Music	2.1	31.5	32.2	17.5	7	2.1	2.1	5.6
Time with Family	7.7	7	7	11.2	11.2	15.4	9.1	31.5
Time with Friends	1.4	7.7	9.8	18.2	13.3	10.5	16.1	23.1
Studying	3.5	9.1	20.3	32.9	20.3	9.1	2.1	2.8
Outdoor Sports/Workouts	36.4	27.3	13.3	14.3	4.2	2.8	7	7
Reading Newspapers/Magazines /Books	4.2	51	30.1	7.7	4.2	1.4	0.7	0.7
Playing indoor games	56.6	18.9	12.6	4.9	2.8	2.8	0.7	0.7
Surfing internet	2.1	17.5	21	14	15.4	12.6	6.3	11.2

Cooking & household works	13.3	14	19.6	23.8	11.9	11.2	2.8	3.5
Going out/Travelling	44.8	18.9	12.6	10.5	4.9	2.1	2.8	3.5
Religious activities	8.4	16.1	26.6	21.7	14	5.6	4.2	3.5
Other Hobbies	58	6.3	10.5	8.4	6.3	2.8	4.2	3.5

51% of the undergraduate Non-Tobacco Consumers spends less than 30 minutes daily and 30.1% spends 30 minutes to 1 hour daily in reading newspapers, magazines and books. Majority (56.6%) of the Non-Tobacco Consumers also does not play any indoor games. Regarding surfing of internet, the Non-Tobacco Consumers spends varied amount of time. 17.5% of them spend less than 30 minutes daily, 21% spends 30 minutes to 1 hour daily, 15.4% spends 2 to 3 hours daily and 11.2% spends more than 5 hours daily on surfing the internet. Regarding cooking and other household works, 43.4% of the Non-Tobacco Consumers spends 30 minutes to 2 hours daily. There are also 13.3% Non-Tobacco Consumers who does not do any cooking or household works. It is also noticed that 44.8% of the Non-Tobacco Consumers does not spends any time on a daily basis for going out and travelling. Also, 48.3% of the undergraduate Non-Tobacco Consumers spends 30 minutes to 2 hours on religious activities.

3.5 Socio-Economic Profile of Past Tobacco Consumers

This section presents the socio-economic profile of all the respondents who have been categorized as Past Tobacco Consumers. It includes Ex-Smokers and Ex-Users who did not smoke or consume any kind of tobacco other than smoking at the time of study but had smoked or consume any kind of tobacco other than smoking in the past daily for at least 6 months (WHO, 1983).

3.5.1 College Composition of Past Tobacco Consumers

The total number of Past Tobacco Consumers out of the 500 respondents was 41 which is 8.2% of the entire sample size. There were 28 Past Tobacco Consumers in Pachhunga University College and 13 Past Tobacco Consumers in Government Saiha College. Therefore, out of the 41 Past Tobacco Consumers in total, 68.3%

were from Pachhunga University College and 31.7% were from Government Saiha College.

Table 3.9
College Composition of Past Tobacco Consumers

Name of the College	Total Number of		Percentage of Past Tobacco Consumers	
	Respondents	Past Tobacco Consumers	Out of the Total Past Tobacco Consumers	In Respective Colleges
Pachhunga University College	323	28	68.3%	8.67%
Government Saiha College	177	13	31.7%	7.34%
Total	500	41	8.2%	

8.67% out of the total 323 respondents in Pachhunga University College and 7.34% of the 177 respondents from Government Saiha College were found to be Past Tobacco Consumers. Therefore, the percentage of Past Tobacco Consumers in Pachhunga University College is marginally higher than Government Saiha College.

3.5.2 Course Composition of Past Tobacco Consumers

Out of the 41 Past Tobacco Consumers, 31 were studying BA, 7 were studying BCom and 3 were studying BSc. Therefore, 75.61% of the total Past Tobacco Consumers were studying BA followed by 17.1% studying BCom and remaining 7.32% studying BSc.

Exhibit 3.28
Course Composition of Past-Tobacco Consumers
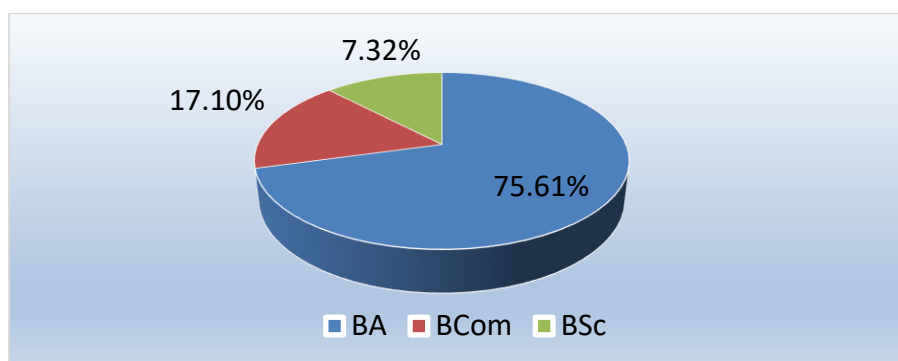
Majority (75.61%) of the undergraduate Past Tobacco Consumers are studying BA course. It may be pointed as earlier that the Pachhunga University College have students from all these three courses whereas Government Saiha College only has BA courses.

3.5.3 Age Composition of Past Tobacco Consumers

Out of all the undergraduate Past Tobacco Consumers, 80.6% were aged between 18 to 21 years. 26.8% of them were aged 20, followed by 24.4% of the Past Tobacco Consumers who were aged 19 years.

Exhibit 3.29
Age Composition of Past-Tobacco Consumers
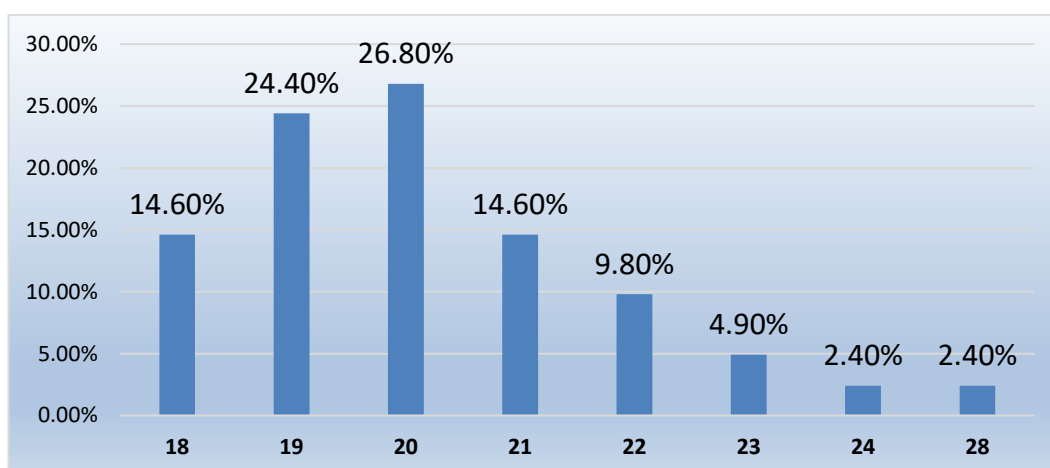
Therefore, majority of the Past Tobacco Consumers were aged between 18 to 21 years. Moreover, the average age for the undergraduate Past Tobacco Consumers is 20.24 years.

3.5.4 Gender Composition of Past-Tobacco Consumers

There were 26 males and 15 females out of the total 41 undergraduate Past Tobacco Consumers. This means 63.4% of all the Past Tobacco Consumers were males and 36.6% were females. Therefore, there are more male undergraduate students than female undergraduate students who used to consume tobacco in the past.

Exhibit 3.30
Gender Composition of Past-Tobacco Consumers
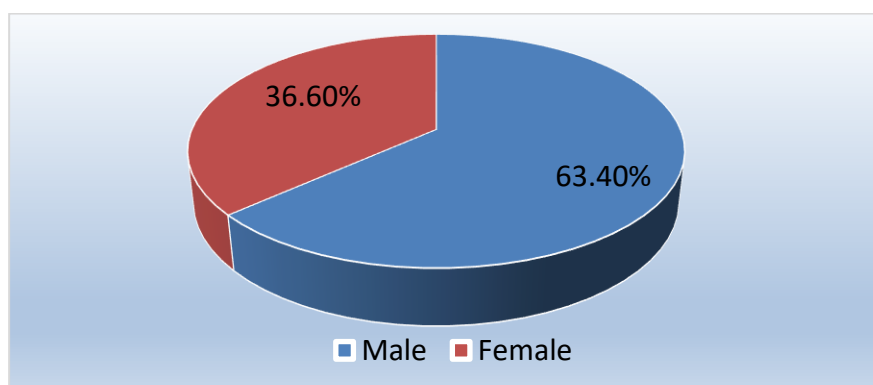
3.5.5 Family Size Composition of Past-Tobacco Consumers

Out of 41 undergraduate Past Tobacco Consumers, 33 were having 4 to 6 members in their family and 5 were having 7 to 10 members in their family. Therefore, 80.49% of the Past Tobacco Consumers were having 4 to 6 members in their family, followed by 12.19% of the Past Tobacco Consumers who were having 7 to 10 members in their family. Only 4.88% Past Tobacco Consumers were having less than 4 members in their family and 2.44% Past Tobacco Consumers were having more than 10 members in their respective families.

Exhibit 3.31
Family Size Composition of Past-Tobacco Consumers
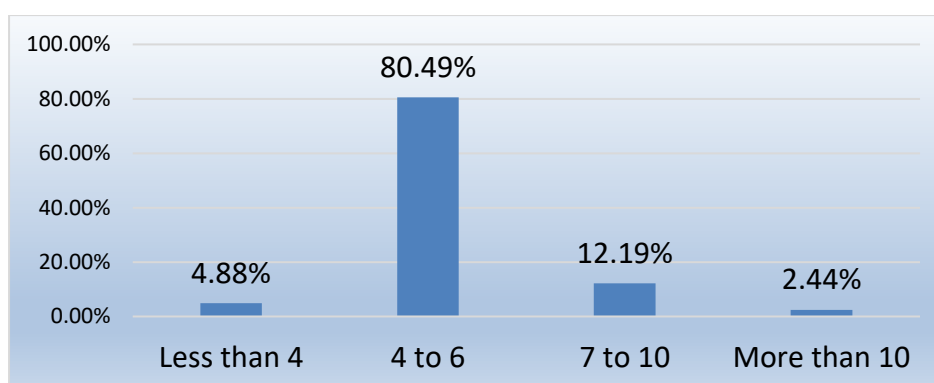
Therefore, majority of the undergraduate Past Tobacco Consumers were having mid-sized families of 4 to 6 members. The percentage of Past Tobacco Consumers having

small families (of less than 4 members) and very large families (of more than 10 members were found to be very few.

3.5.6 Relationship Status Composition of Past Tobacco Consumers

Out of 41 undergraduate Past Tobacco Consumers, 32 were found to be presently single. Therefore, 78% of all Past Tobacco Consumers were single, followed by 7.3% who were in an open relationship and 7.3% who were in a complicated relationship. Only 4.9% of the Past Tobacco Consumers were in committed relationship and 2.4% were married.

Exhibit 3.32
Relationship Status Composition of Past Tobacco Consumers
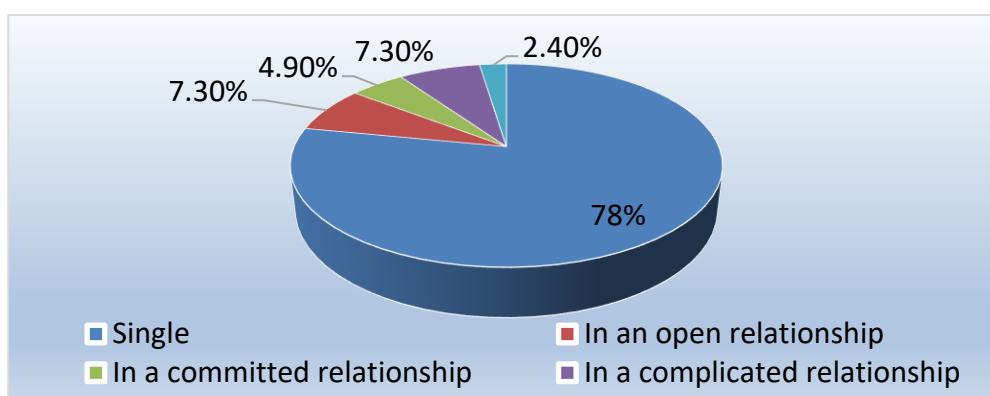
So, majority of the undergraduate Past Tobacco Consumers were presently found to be single in terms of their relationship status.

3.5.7 Family Income Composition of Past Tobacco Consumers

34.15% of the undergraduate Past Tobacco Consumer's average monthly household income is less than ₹10,000 followed by 26.83% Past Tobacco Consumers whose average monthly family income is between ₹10,001 to ₹20,000. Also, 19.51% of the Past Tobacco Consumers are having ₹20,001 to ₹30,000 as their average monthly household income. Only 7.32% of the Past Tobacco Consumers were having more than ₹50,000 as their average monthly household income.

Exhibit 3.33
Family Income Composition of Past Tobacco Consumers
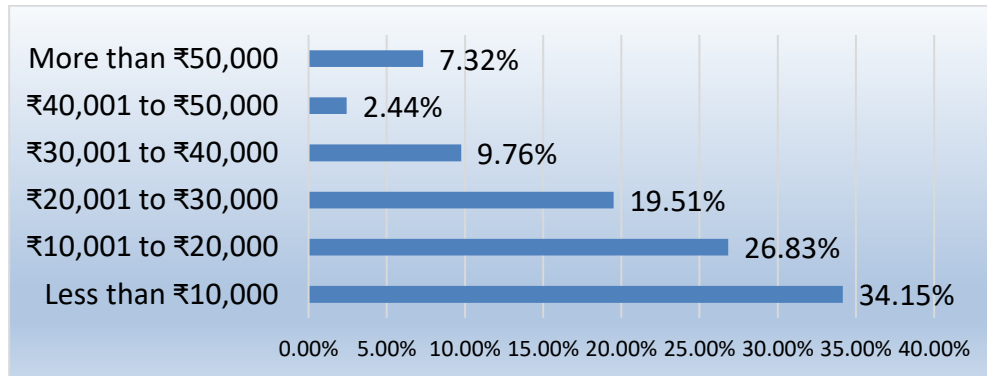
Therefore, 80.49% of the undergraduate Past Tobacco Consumer's average monthly family income is ₹30,000 or less. Only 19.52% of them have more than ₹30,000 as their average monthly household income. It is also noteworthy to observe that out of all the Past Tobacco Consumers, most of them are having an average monthly family income of less than ₹10,000.

3.5.8 Family Occupation Composition of Past Tobacco Consumers

Out of the total 41 undergraduate Past Tobacco Consumers, 31.7% Past Tobacco Consumer's primary family occupation is service which is closely followed by 29.3% Past Tobacco Consumers whose primary family occupation is farming which is again followed by 24.4% Past Tobacco Consumers whose primary family occupation is business. Only, 9.8% and 4.9% Past Tobacco Consumer's primary family occupation includes pension and other means, respectively.

Exhibit 3.34
Family Occupation Composition of Past-Tobacco Consumers
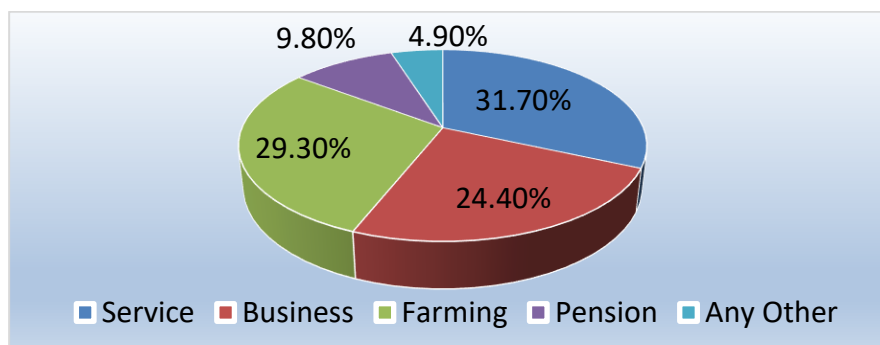
Therefore, most of the undergraduate Past Tobacco Consumer's primary family occupation involves service, farming and business. The most common family occupation for the Past Tobacco Consumers is service and farming.

3.5.9 Daily Expenditure on Tobacco Products by Past Tobacco Consumers

29 out of total 41 Past Tobacco Consumers used to spend less than ₹10 daily to consume tobacco in the past. This means 70.7% of the Past Tobacco Consumers daily tobacco expenditure used to be less than ₹10. Only 14.6% of the Past Tobacco Consumers used to spend between ₹10 to ₹20 daily on tobacco in the past. The percentage of Past Tobacco Consumers who used to spend between ₹21 to ₹30 and ₹31 to ₹40 were also very few at 7.3% each.

Exhibit 3.35
Daily Expenditure on Tobacco Products by Past-Tobacco Consumers
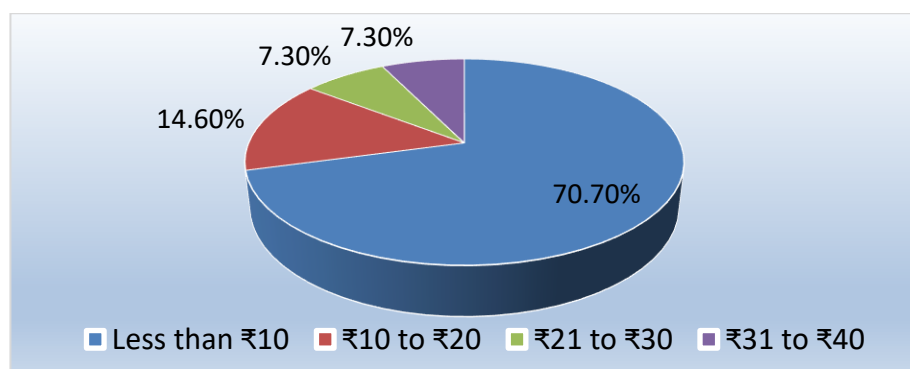
It may be assumed here that 70.7% of the undergraduate students who used to spend less than ₹10 daily to consume tobacco in the past were most likely to be light users of tobacco and thus it may have been easier for them to quit tobacco as they were not heavily addicted to it.

3.5.10 Financial Dependency of Past Tobacco Consumers

24 out of the total 41 Past Tobacco Consumers were financially dependent on their families. Only 8 Past Tobacco Consumers were financially independent and 9 past Tobacco Consumers were partially financially dependent on their families. Therefore, 58.5% of the undergraduate Past Tobacco Consumers were financially

dependent, followed by 22% of them who were partially financially dependent on their families. Only 19.5% were financially independent.

Exhibit 3.36
Financial Dependency of Past-Tobacco Consumers
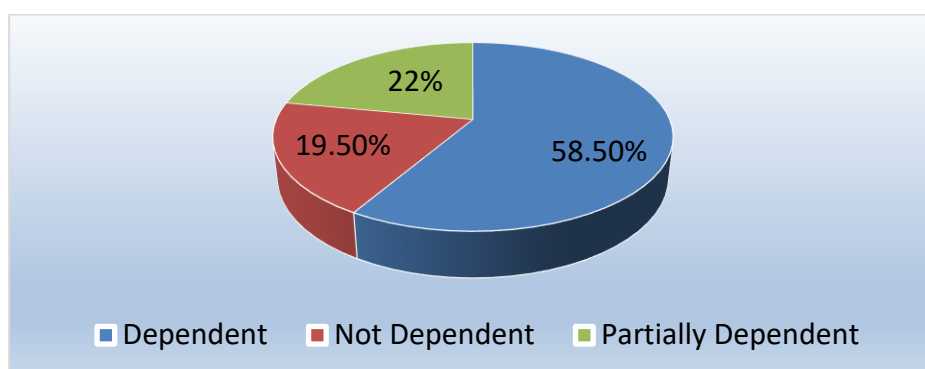
Therefore, majority of the undergraduate Past Tobacco Consumers were financially dependent on their families.

3.5.11 Tobacco Related Health Problems among Past Tobacco Consumers

14.6% and 24.4% of the undergraduate Past Tobacco Consumers had respectively strongly agreed and agreed that they have health problems that were caused due to their past habit of tobacco consumption. Only, 17.1% and 9.8% of the Past Tobacco Consumers had disagreed and strongly disagreed that they have tobacco related health problems. Besides, there were 34.1% Past Tobacco Consumers who were not sure if they have any health problems caused due to tobacco consumption.

Table 3.10
Tobacco Related Health Problems among Past-Tobacco Consumers

Feedbacks	Frequency	Percent
Strongly Agrees that they have tobacco related health problems	6	14.6
Agrees that they have tobacco related health problems	10	24.4
Not Sure that they have tobacco related health problems	14	34.1
Disagrees that they have tobacco related health problems	7	17.1
Strongly Disagrees that they have tobacco related health problems	4	9.8
Total	41	100.0

Therefore, majority (39%) of the undergraduate Past Tobacco Consumers either strongly agreed or agreed that they have had tobacco related health problems compared to the 26.9% Past Tobacco Consumers, who have either strongly disagreed or disagreed about the same. Also, there were substantial (34.1%) Past Tobacco Consumers who were not sure about having health problems caused due to their past habit of tobacco consumption. The realization of health problems caused due to tobacco may be one important reason for some Past Tobacco Consumers to quit tobacco.

3.5.12 Tobacco Consumption in the Family of Past Tobacco Consumers

33 out of the total 41 undergraduate Past Tobacco Consumers were having members in their family who consumes tobacco which is 80.5% of all Past Tobacco Consumers. Only 8 Past Tobacco Consumers were not having any members in their family who consumes tobacco, which is just 19.5% of all Past Tobacco Consumers.

Table 3.11
Tobacco Consumption in the Family of Past-Tobacco Consumers

Tobacco Consumption in Family	Frequency	Percent
Having members in the family consuming tobacco	33	80.5
Not having any members in the family consuming tobacco	8	19.5
Total	41	100.0

Therefore, most of the undergraduate Past Tobacco Consumers have family members who consume tobacco.

3.5.13 Daily Activities Performed by Past Tobacco Consumers

31.7% of the total undergraduate Past Tobacco Consumers watches television less than 30 minutes per day and 51.2% of them watches television between 30 minutes to 2 hours every day. Similarly, 31.7% of the total undergraduate Past Tobacco Consumers listens to music less than 30 minutes per day and 41.5% of them listens to music between 30 minutes to 2 hours every day. Also, 19.5% of the Past Tobacco Consumers listens to music between 2 to 5 hours every day. 22% of the Past Tobacco Consumers spends more than 5 hours every day with their families and

53.7% of them spend 1 to 5 hours daily with their families. 82.9% of the Past Tobacco Consumers spends 30 minutes to 5 hours daily with their friends and 17.1% of them spend more than 5 hours daily with their friends. 68.3% of the Past Tobacco Consumers spends 30 minutes to 3 hours daily on their studies but there were also 24.4% of them who spends less than 30 minutes per day on studies. 48.9% of the Past Tobacco Consumers spends anywhere between 30 minutes to 3 hours daily on playing outdoor sports and doing physical workouts. However, 26.8% of the Past Tobacco Consumers does not spend any time on a daily basis for playing outdoor sports and doing physical exercise and only 24.4% spend less than 30 minutes daily on such activities.

Table 3.12
Daily Activities Performed by Past Tobacco Consumers in Percentage

Activities	None	Less than 30 m	30 m to 1 hour	1 to 2 hours	2 to 3 hours	3 to 4 hours	4 to 5 hours	More than 5 hours
Watching TV	7.3	31.7	26.8	24.4	7.3	2.4	0	0
Listening Music	7.3	31.7	29.3	12.2	7.3	7.3	4.9	0
Time with Family	2.4	14.6	7.3	12.2	9.8	14.6	17.1	22
Time with Friends	0	0	14.6	17.1	14.6	19.5	17.1	17.1
Studying	12.2	12.2	17.1	34.1	17.1	4.9	2.4	0
Outdoor Sports/Workouts	26.8	24.4	22	17.1	9.8	0	0	0
Reading Newspapers/Magazines/ Books	12.2	36.6	36.6	4.9	9.8	0	0	0
Playing indoor games	51.2	22	12.2	2.4	4.9	7.3	0	0
Surfing internet	0	19.5	19.5	24.4	14.6	2.4	4.9	14.6
Cooking & household works	17.1	17.1	24.4	19.5	7.3	4.9	2.4	7.3
Going out/Travelling	36.6	22	17.1	7.3	7.3	4.9	2.4	2.4
Religious activities	14.6	4.9	29.3	17.1	22	7.3	4.9	0
Other Hobbies	63.4	9.8	7.3	9.8	4.9	0	0	4.9

73.2% of the Past Tobacco Consumers spends less than 1 hour daily in reading newspapers, magazines and books and 12.2% of them does not spend any time on reading such materials. When it comes to surfing the internet, 58.5% Past Tobacco Consumers spends 30 minutes to 3 hours daily, 19.5% spends less than 30 minutes

and 14.6% spends more than 5 hours daily. 43.9% of Past Tobacco Consumers spends 30 minutes to 2 hours daily in cooking and household works and 34.2% spends less than 30 minutes daily, out of which 17.1% does not spend any time at all on cooking and household works. 39.1% of the Past Tobacco Consumers spends less than 1 hour daily on going out and travelling related activities and 36.6% does not spend any time at all in such activities. 46.4% of the Past Tobacco Consumers spends 30 minutes to 2 hours daily on religious activities but 14.6% does not spend any time daily on religious activities.

3.5.14 Age of Initiation of Past-Tobacco Consumers

The average age of initiation of tobacco by the Past Tobacco Consumers is 13.73 years. This age of initiation for Past Tobacco Consumers is much lower compared to the initiation age for Active Tobacco Users which is 15.89 years.

Table 3.13
Age of Initiation of Past Tobacco Consumers

Age of Initiation	Frequency	Percent	(Age) × (Frequency)
7	1	2.4	7
8	3	7.3	24
10	2	4.9	20
11	1	2.4	11
12	4	9.8	48
13	11	26.8	143
14	4	9.8	56
15	1	2.4	15
16	7	17.1	112
17	3	7.3	51
18	2	4.9	36
19	1	2.4	19
21	1	2.4	21
Total	41	100	563
Average Age of Initiation (563/41) = 13.73 Years			

The average age of initiation for Past Tobacco Consumers in our findings is also much lower compared to the 17.8 years and 17.4 years age of initiation revealed in GATS 2016-2017 and GATS 2009-2010 surveys, respectively.

3.6 Comparison of Socio-Economic Profiles between Active, Non and Past Tobacco Consumers

This section presents a comparative analysis of socio-economic profiles between three groups of undergraduate students who are classified as Active Tobacco Consumers, Non-Tobacco Consumers and Past Tobacco Consumers.

3.6.1 College Comparison between Active, Non and Past Tobacco Consumers

Out all the 500 respondents, 64.6% were from Pachhunga University College and rest 35.4% were from Government Saiha College. 71.33% of all the Non-Tobacco Consumers were from Pachhunga University College and 28.67% were from Government Saiha College. Similarly, 61.08% of all Active Tobacco Consumers were from Pachhunga University College and 38.92% were from Government Saiha College. Lastly, 68.29% of all Past Tobacco Consumers were from Pachhunga University College and rest 31.71% were from Government Saiha College.

Exhibit 3.37
College Comparison between Active, Non and Past Tobacco Consumers
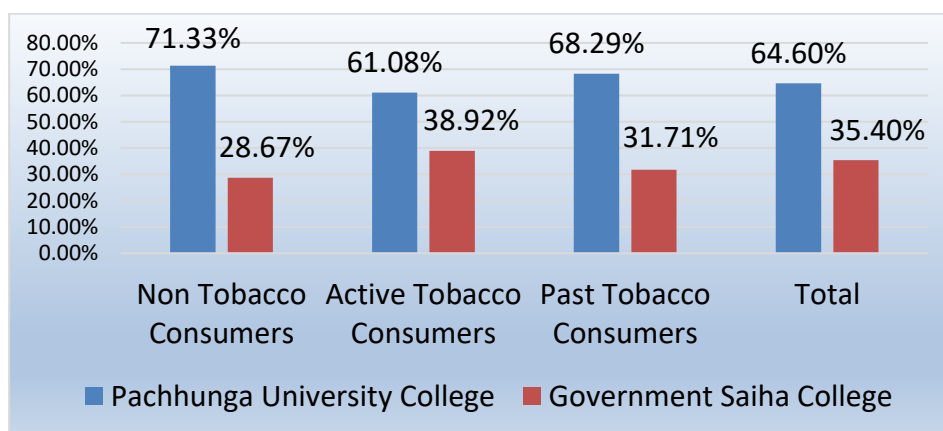
Since, majority (64.6%) of the total respondents were from Pachhunga University College, therefore it is obvious to observe more respondents from Pachhunga

University College among Non-Tobacco Consumers, Active Tobacco Consumers and Past Tobacco Consumers. However, the percentage of Non-Tobacco Consumers and Past Tobacco Consumers compared to Active Tobacco Consumers is slightly more in Pachhunga University College and the percentage of Active Tobacco Consumers compared to Non-Tobacco Consumers and Past Tobacco Consumers is slightly more in Government Saiha College. 69.49% of the 177 respondents that were surveyed in Saiha Government College were found to be Active Tobacco Consumers and this is much higher compared to 59.75% Active Tobacco Consumers out of the 316 respondents surveyed in Pachhunga University College. Therefore, it may be concluded that Saiha Government College have much more Active Tobacco Consumers than Pachhunga University College.

3.6.2 Course Comparison between Active, Non and Past Tobacco Consumers

The respondents in the sample were studying any of the three courses namely Bachelor of Arts (BA), Bachelor of Commerce (BCom) and Bachelor of Science (BSc). Out of all 500 respondents, 358 or 71.6% were studying BA, 105 or 21% were studying BCom and only 37 or 7.4% were studying BSc courses. Among the Non Tobacco Consumers, 59.44% were studying BA, 31.47% were studying BCom and 9.09% were studying BSc courses. Among Active Tobacco Consumers, 76.58% were studying BA, followed by 16.77% studying BCom, followed by 6.65% studying BSc courses. Finally, among the Past Tobacco Consumers, 75.61% were studying BA, 17.07% were studying BCom and 7.32% were studying BSc courses.

Exhibit 3.38
Course Comparison between Active, Non and Past Tobacco Consumers
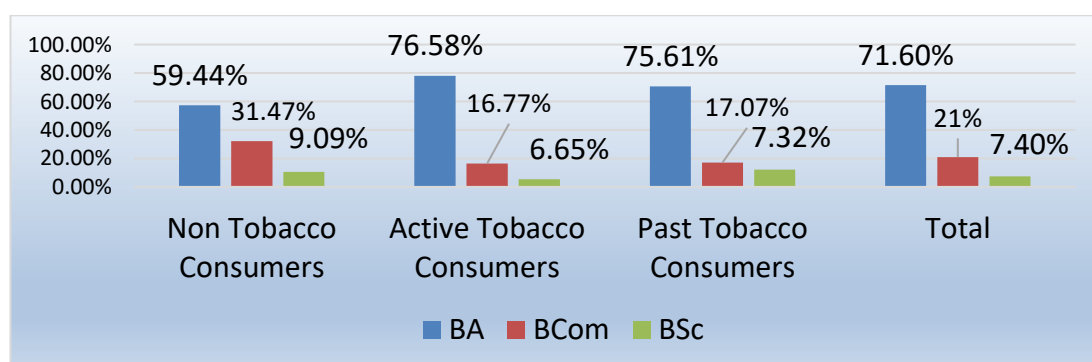
As majority of the respondents were studying BA, therefore, they dominates across all consumer categories. However, if the course wise percentage of Active Tobacco Consumers, Non Tobacco Consumers and Past Tobacco Consumers are compared, then it appears that the Active Tobacco Consumers are highest (67.59%) among respondents studying BA, followed by BSc (56.76%) and BCom (50.48%) respondents. On the other hand, Non-Tobacco Consumers are highest among BCom (42.86%) respondents, followed by BSc (35.14%) respondents and finally followed by BA (23.74%) respondents. Past Tobacco Consumers are highest among BA (8.66%) respondents, followed by BSc (8.11%) respondents and BCom (6.67%) respondents.

Exhibit 3.39
Course-wise Percentage of Active, Non and Past Tobacco Consumers
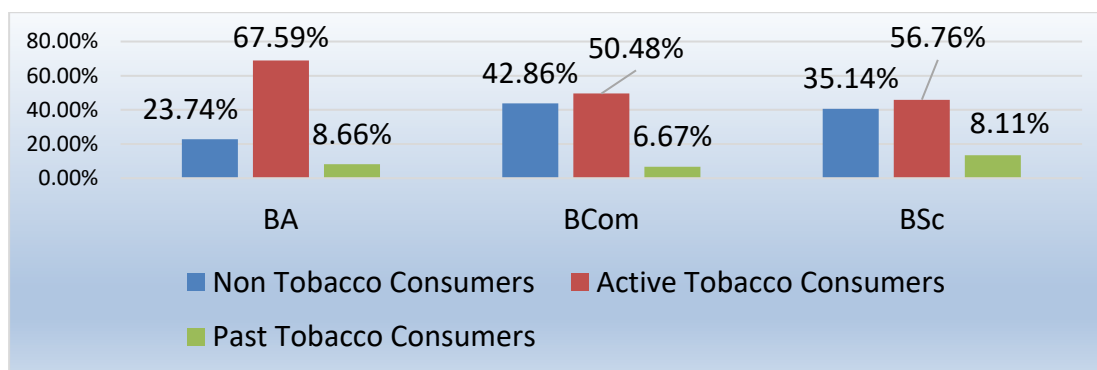
Some studies have found links between course of study and tobacco use. For example, one study found that students pursuing non-science subjects are more inclined to tobacco use (Katulanda et al., 2015) and another revealed that students of attending professional courses are more likely to smoke than students attending general courses (Nichter, Nichter & Sickle, 2004). However, in context of the present study, it may be observed that respondents who are studying BA are more likely to be Active Tobacco Consumers. Also, respondents from BCom and BSc are slightly more likely to be Active Tobacco Consumers than Non-Tobacco Consumers but very less likely to be Past Tobacco Consumers. However, among the BSc respondents the percentage of Past Tobacco Consumers is more which suggest that they might be little more health conscious than rest of the respondents from BA and BCom courses.

3.6.3 Age Comparison between Active, Non and Past Tobacco Consumers

The average age of all the 500 respondents was 20.52 years. The highest average age was 20.71 years from the Active Tobacco Consumers followed by 20.24 years from the Past Tobacco Consumers, which is closely followed by 20.2 years from the Non Tobacco Consumers.

Exhibit 3.40
Average Age Comparison between Active, Non and Past Tobacco Consumers
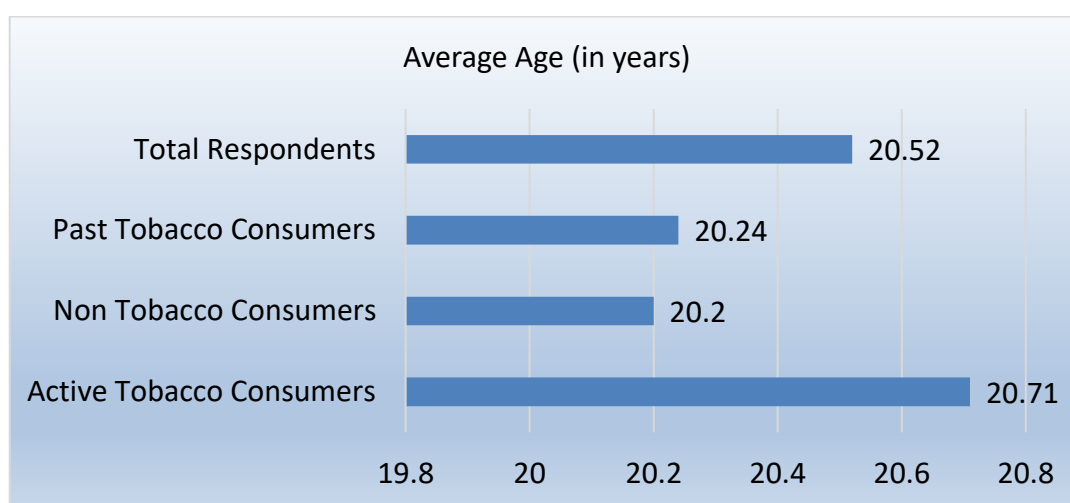
Therefore, the average age of the undergraduate Active Tobacco Consumers were slightly higher compared to the Past Tobacco Consumers and Non Tobacco Consumers. However, as undergraduate students most of the respondent's age commonly falls between 18 to 23 years.

3.6.4 Gender Comparison between Active, Non and Past Tobacco Consumers

Out of the total 500 undergraduate respondents, 50.2% were male and 49.8% were females. Among the Non-Tobacco Consumers 62.24% were females and 37.76% were males. However, among the Active Tobacco Consumers 54.11% were males and the rest 45.89% were females. In addition, among the Past Tobacco Consumers, 63.41% were males and remaining 36.59% were females.

Exhibit 3.41
Gender Comparison between Active, Non and Past Tobacco Consumers
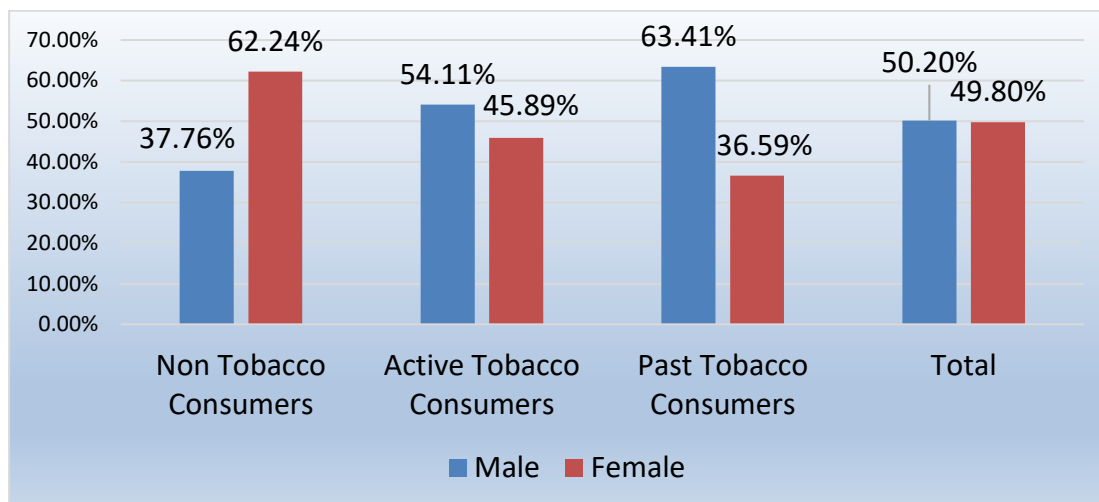
It can be observed that out of the total undergraduate Active Tobacco Consumers and Past Tobacco Consumers, majority were males and out of the total undergraduate Non-Tobacco Consumers, majority were females. This also in general conforms to the GATS 2016-2017 findings, where 64.9% of the all the adult males compared to 52.4% of all the adult females in Mizoram were consuming tobacco (Ministry of Health and Family Welfare, 2017). Therefore, we may conclude that tobacco consumption is more prevalent among male undergraduate students than female undergraduate students.

3.6.5 Comparison of Family Sizes between Active, Non and Past Tobacco Consumers

Out of the total respondents, majority (65.8%) belongs to medium sized families with 4 to 6 members, which is distantly followed by 22% respondents who belongs to large families with 7 to 10 members. The percentage of respondents from small families of less than 4 members and from very large families of more than 10 members is very less.

Exhibit 3.42
Family Size Comparison between Active, Non and Past Tobacco Consumers
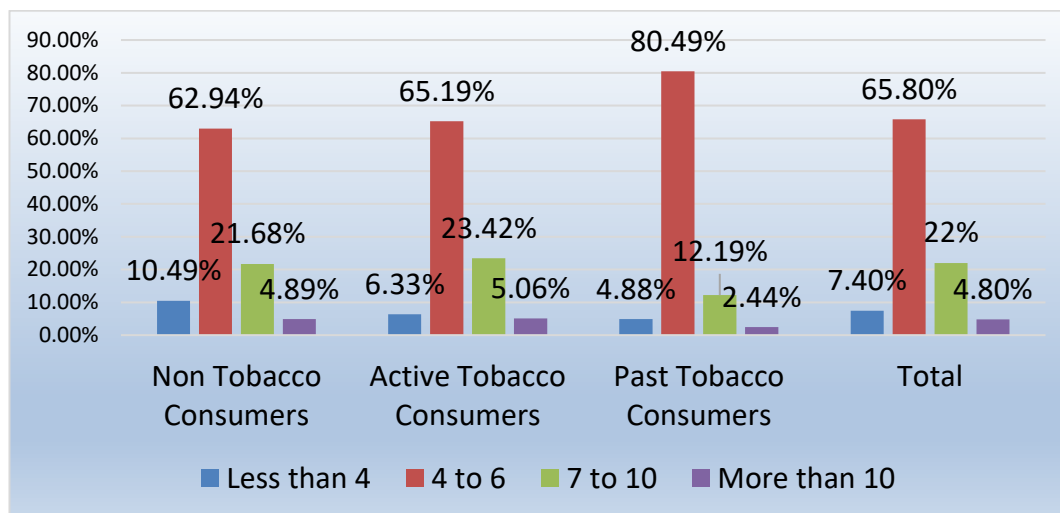
The pattern of family sizes of the undergraduate students across Non Tobacco Consumers, Active Tobacco Consumers and Past Tobacco Consumers is not very different from the pattern of family sizes of overall undergraduate respondents. However, the percentage of Past Tobacco Consumers who belongs to medium sized families of 4 to 6 members is comparatively higher (80.49%) then the percentage of Non-Tobacco Consumers (62.94%) and Active Tobacco Consumers (65.19%), who belongs to similar sized families.

3.6.6 Relationship Status Comparison between Active, Non and Past Tobacco Consumers

Out of all the respondents, 77.8% were single. However, the highest percentage of singles has been found among the Non Tobacco Consumers where, 83.22% of them have revealed that they are presently single. This is followed by 78.05% of the past Tobacco Consumers and 75.32% of the Active Tobacco Consumers, who were found to be singles in terms of their relationship status. The percentage of undergraduate students who revealed that they are in an open relationship is slightly more at 9.18% among the Active Tobacco Consumers compared to 7.32% among the Past Tobacco Consumers and 6.29% among the Non Tobacco Consumers. The percentage of undergraduate students who are in a committed relationship is also slightly higher

among Active Tobacco Consumers (7.59%), followed by Non Tobacco Consumers (6.29%) and Past Tobacco Consumers (4.88%). The percentage of students who said that they are in a complicated relationship is higher among the Past Tobacco Consumers (7.32%) compared to Active Tobacco Consumers (3.8%) and Non Tobacco Consumers (2.1%).

Exhibit 3.43
Relationship Status Comparison between Active, Non and Past Tobacco Consumer
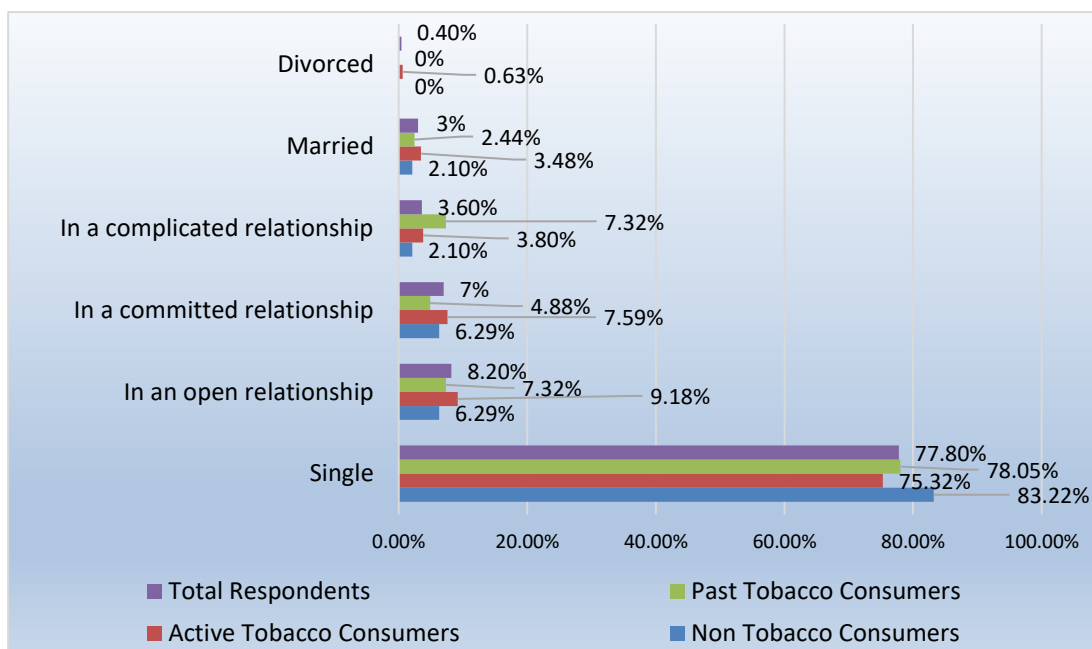
It may be concluded that in terms of relationship status of the respondents, most of them were single and the percentage of singles is highest among the Non Tobacco Consumers. Also, the percentage of undergraduate students who were in an open relationship is highest among the Active Tobacco Consumers and the percentage of undergraduate students who were in a complicated relationship is highest among the Past Tobacco Consumers. In this context, it may be pointed that one study had found that having girlfriend or boyfriend who smokes was significantly correlated with smoking among schoolchildren in Colombo, Sri Lanka (Katulanda., 2015). The percentage of married undergraduate students is generally low across all the different tobacco consumer segments except the Active Tobacco Consumers of whom 3.48% were found to be married.

3.6.7 Income Comparison between Active, Non and Past Tobacco Consumers

30.2% and 21.2% of the respondent's average monthly household income falls between ₹10,001 to ₹20,000 and ₹20,001 to ₹30,000 respectively. Similarly, 30.07% and 23.08% of the Non Tobacco Consumers, 30.7% and 20.57% of the Active Tobacco Consumers and 26.83% and 19.51% of the Past Tobacco Consumers have ₹10,001 to ₹20,000 and ₹20,001 to ₹30,000 respectively as their average monthly family incomes. The students whose monthly family income is more than ₹40,000 is highest among the Active Tobacco Consumers (21.21%) compared to Non Tobacco Consumer (12.59%) and Past Tobacco Consumers (9.76%). The respondents having less than ₹10,000 as their average monthly household income is more among the Past Tobacco Consumers (34.15%) followed by Non Tobacco Consumers (27.27%) and Active Tobacco Consumers (19.62%).

Exhibit 3.44
Income Comparison between Active, Non and Past Tobacco Consumers
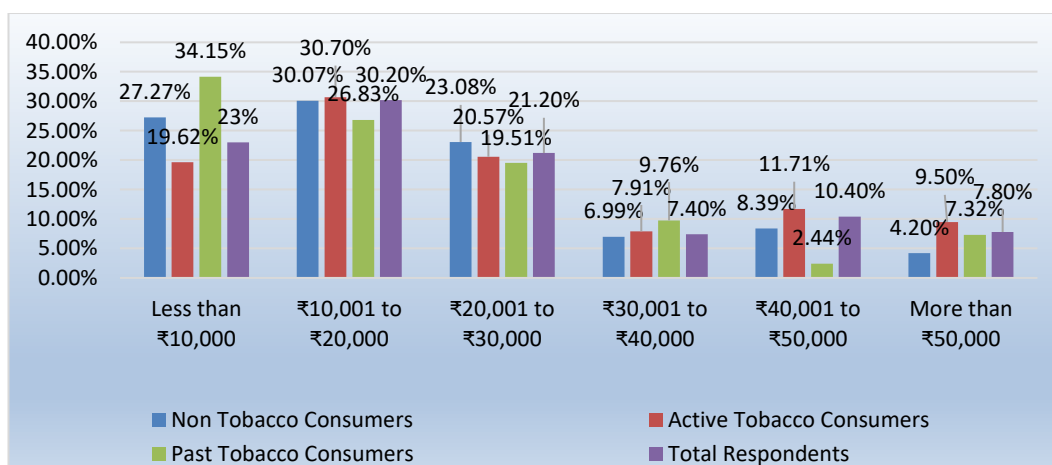
Therefore, more than half of the respondents have an average monthly household income of ₹10,001 to ₹30,000. However, the Active Tobacco Consumers seems to be less poor compared to Non Tobacco Consumers and Past Tobacco Consumers as they have least percentage (19.62%) of students having less than ₹10,000 as their average monthly household income. This assumption is also strengthened by the fact that there are more Active Tobacco Consumers (21.21%) than Non-Tobacco Consumers (12.59%) and Past Tobacco Consumers (9.76%) who have more than

₹40,000 as their average monthly family income. On the other hand, the Past Tobacco Consumers seems to be the poorer as they have the highest percentage of students who have less than ₹10,000 as their average monthly family income and also, they have less percentage of students having monthly household income of ₹10,001 to ₹20,000, ₹20,001 to ₹30,000 and more than ₹40,000 compared to Non Tobacco and Active Tobacco Consumers. Therefore, economic constraints could be a key factor for the motivation to quit tobacco among the Past Tobacco Consumers and higher income or affordability may be another key factor for many undergraduate Active Tobacco Consumers to continue the habit of tobacco consumption.

3.6.8 Family Occupation Comparison between Active, Non and Past Tobacco Consumers

Out of all the respondents, majority's primary family occupation is service (43.4%), followed by business (26%) and farming (22.4%). Similarly, among the Active Tobacco Consumers the most common family occupation is service (44.62%), followed by business (28.16%) and farming (20.25%). Among the Non Tobacco Consumers, the most common family occupation is again service (44.06%), but it is followed by farming (25.17%) and then business (21.68%). Among the Past Tobacco Consumers, again the most common family occupation is service (31.71%), which is closely followed by farming (29.27%) and then business (24.39%).

Exhibit 3.45
Family Occupation Comparison between Active, Non and Past Tobacco Consumers
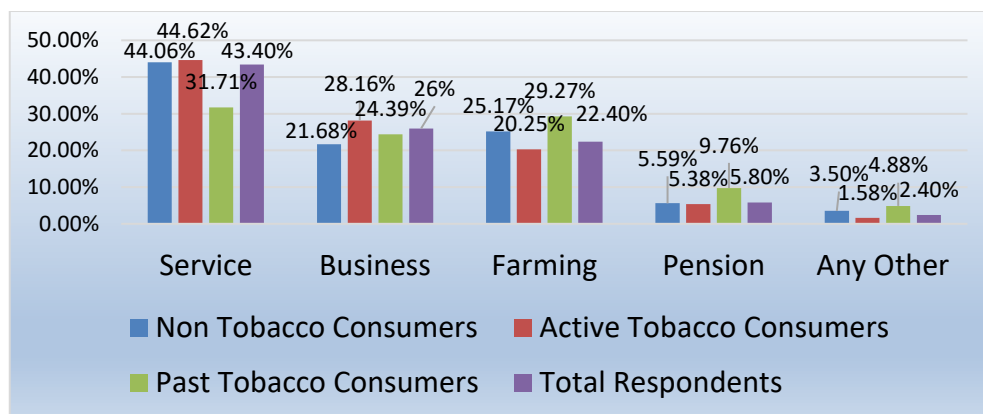
Therefore, service is the most common family occupation across respondents. However, business is the second most common family occupation only for Active Tobacco Consumers whereas farming is the second most common primary family occupation for both Non Tobacco Consumers and Past Tobacco Consumers. Also, there are very less respondents whose family's primary occupation includes pension and other sources but Past Tobacco Consumers includes slightly higher (9.76%) percentage of students whose family's primary occupation involves pension. Though some prior studies have suggested relationship between occupation and tobacco use (Sorensen et al., 2005), but no major differences are being observed here among the various tobacco user categories.

3.6.9 Daily Expenditure on Tobacco Products Comparison between Active and Past Tobacco Consumers

Out of the total 357 respondents which included 316 Active Tobacco Consumers and 41 Past Tobacco Consumers, 31.65%, 27.45% and 22.41 daily spends less than ₹10, ₹10 to ₹20 and ₹21 to ₹30 respectively. Out of this, 26.58%, 29.11% and 24.37% of the Active Tobacco Consumers daily spends less than ₹10, ₹10 to ₹20 and ₹21 to ₹30 respectively. Similarly, 70.73%, 14.63%, 7.32% and 7.32% of the Past Tobacco Consumers used to daily spend less than ₹10, ₹10 to ₹20, ₹21 to ₹30 and ₹31 to ₹40 respectively.

Exhibit 3.46
Comparison of Tobacco Expenditure between Active and Past Tobacco Consumers
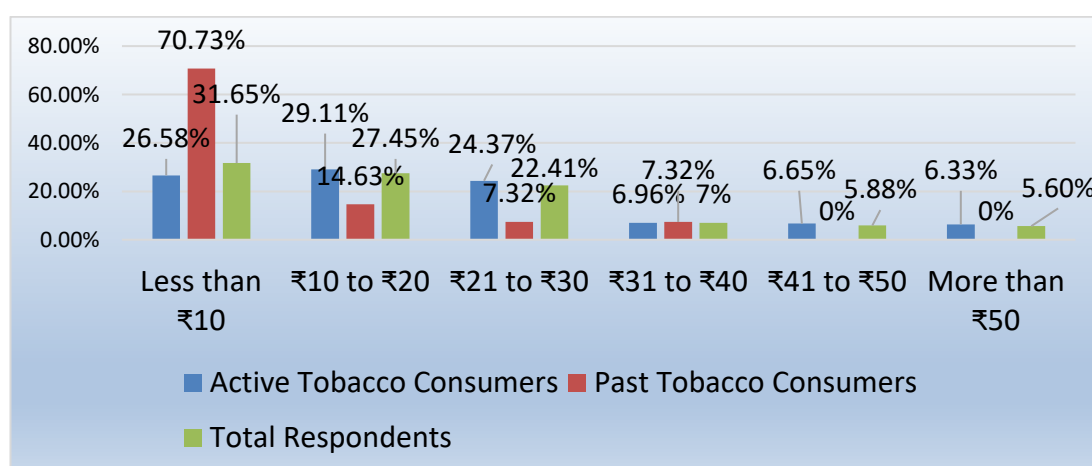
Therefore, it may be concluded that 81.51% of the Active and Past Tobacco Consumers spends ₹30 or less, daily on purchasing tobacco products. Within this bracket, around 80.06% of the Active Tobacco Consumers and 92.68% of the Past Tobacco Consumers used to spend ₹30 or less daily on tobacco consumption. Also, 70.73% of the Past Tobacco Consumers used to spend less than ₹10 daily on tobacco.

3.6.10 Financial Dependency Comparison between Active, Non and Past Tobacco Consumers

Out of the Total 500 respondents, 62% are financially dependent, 18.2% are financially independent and the rest 19.8% are partially financially dependent on their families. Among the Non Tobacco Consumers, 68.53%, 17.48% and 13.99% are dependent, independent and partially dependent respectively on their families for their financial needs. Among the Active Tobacco Consumers, 59.49%, 18.35% and 22.15% are dependent, independent and partially dependent respectively for their financial needs. Similarly, Among the Past Tobacco Consumers, 58.54%, 19.51% and 21.95% are dependent, independent and partially dependent on their families respectively for their financial needs.

Exhibit 3.47
Financial Dependency Comparison between Active, Non and Past Tobacco Consumers
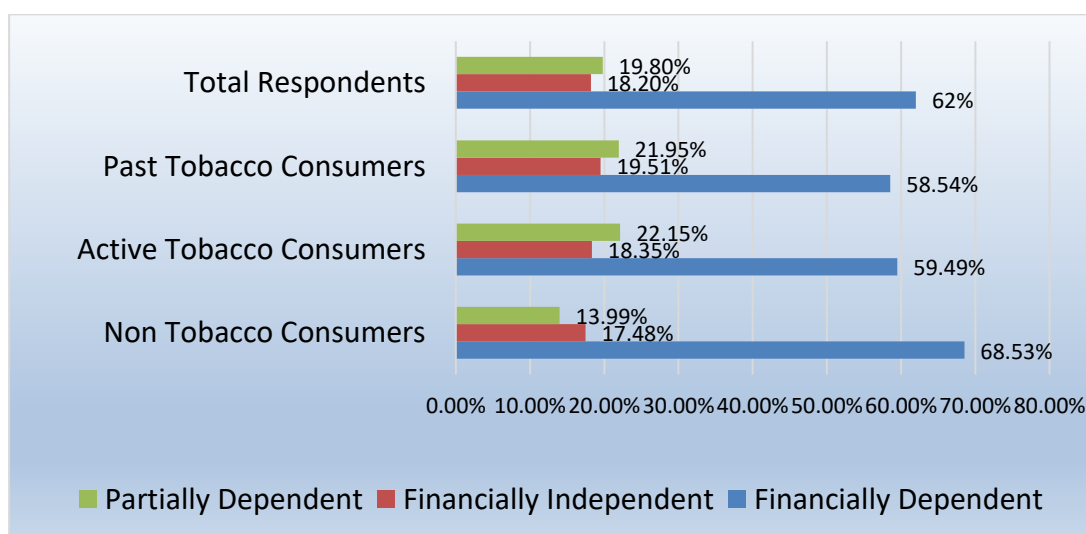
Overall, majority of the respondents and respondents across the Non Tobacco Consumers, Active Tobacco Consumers and Past Tobacco Consumers are financially dependent on their families. However, the percentage of financially dependent students is more among Non Tobacco Consumers (68.53%) than Active Tobacco Consumers (59.49%) and Past Tobacco Consumers (58.54%). On the other hand, financially independent students are also more among both Active Tobacco Consumers (18.35%) and Past Tobacco Consumers (19.51%) compared to Non Tobacco Consumers (17.48%). Similarly, partially financially dependent students are more among both Active Tobacco Consumers (22.15%) and Past Tobacco Consumers (21.95%) compared to Non Tobacco Consumers (13.99%). This gives an indication that, students who are financially independent or partially dependent (that is students who have their own sources of income) are more inclined towards tobacco consumption than students who are financially dependent.

3.6.11 Comparison of Tobacco Related Health Problems between Active and Past Tobacco Consumers

Out of the total 357 consumers which include 316 Active Tobacco Consumers and 41 Past tobacco Consumers, 40.33% strongly agrees or agrees, 39.22% are not sure, 20.45% strongly disagrees or disagrees that they have health related problems caused due to their habit of tobacco consumption. Similarly, among Active Tobacco Consumers, 40.51% strongly agrees or agrees, 39.87% are not sure and 19.62% strongly disagrees or disagrees that they have health related problems caused due to their habit of tobacco consumption. Similarly, among the Past Tobacco Consumers 39.02% strongly agrees or agrees, 34.15% are not sure and 26.83% strongly disagrees or disagrees that they have health related problems caused due to tobacco.

Table 3.14
Health Problems Comparison between Active and Past Tobacco Consumers

Feedback	Active Tobacco Consumers	Past Tobacco Consumers	Total
Strongly Agrees that they have tobacco related health problems	9.18%	14.63%	9.80%
Agrees that they have tobacco related health problems	31.33%	24.39%	30.53%

Not Sure that they have tobacco related health problems	39.87%	34.15%	39.22%
Disagrees that they have tobacco related health problems	14.56%	17.07%	14.85%
Strongly Disagrees that they have tobacco related health problems	5.06%	9.76%	5.60%
Total	316	41	357

Therefore, most of the Active Tobacco Consumers and Past Tobacco Consumers agree that they have health problems caused due to their habit of consuming tobacco. However, the percentage of Past Tobacco Consumers (26.83%) is slightly more compared to Active Tobacco Consumers (19.62%) who either strongly disagrees or disagrees that they have tobacco related health problems. Also, there is substantial percentage of both Active Tobacco Consumers (39.87%) and Past Tobacco Consumers (34.15%) who are not sure if they have any health related problems that are caused due to their habit of consuming tobacco.

3.6.12 Comparison of Tobacco Consumption in the Family between Active, Non and Past Tobacco Consumers

Out of the total 500 undergraduate respondents, 80.2% have members in the family who consumes tobacco and 17% do not have any members in the family who consumes tobacco. Only 2.8% were uncertain of having member in the family who consumes tobacco. 72.73% Non Tobacco Consumers, 83.54% Active Tobacco Consumers and 80.49% of the Past Tobacco Consumers have members in their families who consume tobacco.

Table 3.15
Comparison of Tobacco Consumption in Family between Active, Non and Past Tobacco Consumers

Tobacco Consumption in Family	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
Have members in the family who consumes tobacco	72.73%	83.54%	80.49%	80.2%
Don't have members in the family who consumes tobacco	24.48%	13.29%	19.51%	17%
Can't say if they have members in the family who consumes tobacco	2.80%	3.16%	0%	2.8%
Total	143	316	41	500

Therefore, a vast majority of the respondents have family members who consume tobacco. However, it is indicative that there are more percentage of Active Tobacco Consumers (83.54%) than Non Tobacco Consumers (72.73%) and Past Tobacco Consumers (80.49%) who have members in the family who consumes tobacco. Hence, tobacco consumption by family members is likely to have an influence on students who consumes tobacco.

3.6.13 Comparison of Daily Activities Performed between Active, Non and Past Tobacco Consumers

Watching television is one of the most common daily activities performed by the people in Mizoram. Television provides not only entertainment but also it is a popular media for disseminating information. Though majority (89%) of the students do spend some time daily in watching television but there are 11% undergraduate students out of the total 500 respondents who does not watch television at all. It is also likely that among these 11% students many might not have access to television. The percentage of students who does not watch television is slightly more among Active Tobacco Consumers (12.03%) compared to Non Tobacco Consumers (9.79%) and Past Tobacco Consumers (7.32%). Furthermore, 23% of the total respondents watch television for less than 30 minutes daily and the percentage of Past Tobacco Consumers are highest (31.71%) compared to Non (21.68%) and Active Tobacco Consumers (22.47%) who watches television for less than 30 minutes. The respondents who generally watches television for 30 minutes to 2 hours daily is highest among Past Tobacco Consumers (51.22%), followed by Non Tobacco Consumers (49.65%) and Active Tobacco Consumers (44.93%).

Table 3.16
Comparison of Time Spent in Watching TV between Active, Non and Past Tobacco Consumers

Time Spend in Watching TV	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total Respondents
None	9.79%	12.03%	7.32%	11%
Less than 30 minutes	21.68%	22.47%	31.71%	23%
30 minutes to 1 hour	24.48%	23.73%	26.83%	24.2%
1 to 2 hours	25.17%	21.2%	24.39%	22.6%

2 to 3 hours	11.19%	10.76%	7.32%	10.6%
3 to 4 hours	4.2%	4.43%	2.44%	4.2%
4 to 5 hours	2.8%	3.48%	0%	3%
More than 5 hours	0.7%	1.9%	0%	1.4%
Total	143	316	41	500

It is observed that most of the undergraduate respondents watch television and 46.8% of the total respondents spend around 30 minutes to 2 hours daily in watching television. However, only 8.6% of the total respondents watch television for more than 3 hours daily and it is lowest among the Past Tobacco Consumers, where only 2.44% of them watch television for more than 3 hours daily. So, overall, most of the respondents seem to spend moderate amount of time in watching television daily.

Apart from television, listening music is another activity which is popular among the people in Mizoram. Out of the total undergraduate respondents only 3.8% students said that they do not listen to music. However, the percentage of respondents who does not listen to music at all is slightly higher among Past Tobacco Consumers (7.32%) and Active Tobacco Consumers (4.11%) then Non Tobacco Consumers (2.1%). The percentage of respondents who listens to music for less than 30 minutes daily is highest among Past Tobacco Consumers (31.71%), which is very closely followed by Non Tobacco Consumers (31.47%) and then lowest among the Active Tobacco Consumers (27.85%). The percentage of respondents who listens to music for 30 minutes to 1 hour is highest among Non Tobacco Consumers (32.17%), followed by Past Tobacco Consumers (29.27%), and again lowest among the Active Tobacco Consumers (25.63%).

Table 3.17
Comparison of Time Spent in Listening Music between Active, Non and Past Tobacco Consumers

Time Spend in Listening Music	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	2.1%	4.11%	7.32%	3.8%
Less than 30 minutes	31.47%	27.85%	31.71%	29.2%
30 minutes to 1 hour	32.17%	25.63%	29.27%	27.8%
1 to 2 hours	17.48%	15.51%	12.2%	15.8%
2 to 3 hours	6.99%	12.66%	7.32%	10.6%

3 to 4 hours	2.1%	7.28%	7.32%	5.8%
4 to 5 hours	2.1%	2.22%	4.88%	2.4%
More than 5 hours	5.59%	4.75%	0%	4.6%
Total	143	316	41	500

Overall, listening music is very popular among the undergraduate students. 72.8% of the total respondents listen to music daily for 2 hours or less. However, the percentage of students who listens to music daily for 2 hours or less is least among the Active Tobacco Consumers (68.99%) compared to Non Tobacco Consumers (81.12%) and Past Tobacco Consumers (73.17%).

8.2% of the total undergraduate respondents do not spend any time with their families. These may include students who are pursuing their studies while staying away from their home and families. The percentage of students who does not spend any time with their families is highest among the Active Tobacco Consumers (9.18%) and least among Past Tobacco Consumers (2.44%). However, 46.6% of the respondents spends anywhere between 30 minutes to 4 hours daily with their families. Also, 29.2% of the total respondents spend more than 5 hours daily with their families. The percentage of students spending more than 5 hours daily with their families is highest among Non Tobacco Consumers (31.47%), followed by Active Tobacco Consumers (29.11%) and Past Tobacco Consumers (21.95%).

Table 3.18
Comparison of Time Spent with Family between Active, Non and Past Tobacco Consumers

Time Spent with Family	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	7.69%	9.18%	2.44%	8.2%
Less than 30 minutes	6.99%	5.7%	14.63%	6.8%
30 minutes to 1 hour	6.99%	10.76%	7.32%	9.4%
1 to 2 hours	11.19%	10.76%	12.2%	11%
2 to 3 hours	11.19%	13.61%	9.76%	12.6%
3 to 4 hours	15.38%	12.66%	14.63%	13.6%
4 to 5 hours	9.09%	8.23%	17.07%	9.2%
More than 5 hours	31.47%	29.11%	21.95%	29.2%
Total	143	316	41	500

Most undergraduate students also enjoy spending time with their friends. Only 3% of the total undergraduate students say that they do not spend any time with their friends. The percentage of students who does not spends any time with their friends is highest among Active Tobacco Consumers (4.11%), followed by Non Tobacco Consumers (1.4%). There are no Past Tobacco Consumers who spends less than 30 minutes with their friends. Overall, 61% of the total respondents spends anywhere between 1 to 5 hours daily with their friends. The percentage of students who spends 1 to 5 hours daily with their friends is highest among Past Tobacco Consumers (68.29%), followed by Active Tobacco Consumers (61.39%) and Non Tobacco Consumers (58.04%). The percentage of students who spends more than 5 hours daily with their friends, is highest among Non Tobacco Consumers (23.08%), followed by Active Tobacco Consumers (18.04%) and Past Tobacco Consumers (17.07%). Overall, 19.4% of the total respondents spend more than 5 hours daily with their friends.

Table 3.19
Comparison of Time Spent with Friends between Active, Non and Past Tobacco Consumers

Time Spend with Friends	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	1.4%	4.11%	0%	3%
Less than 30 minutes	7.69%	4.75%	0%	5.2%
30 minutes to 1 hour	9.79%	11.71%	14.63%	11.4
1 to 2 hours	18.18%	15.19%	17.07%	16.2%
2 to 3 hours	13.29%	15.51%	14.63%	14.8%
3 to 4 hours	10.49%	16.46%	19.51%	15%
4 to 5 hours	16.08%	14.24%	17.07%	15%
More than 5 hours	23.08%	18.04%	17.07%	19.4%
Total	143	316	41	500

One of the most important activities performed by undergraduate students is the time spent by them on their daily studies. Only 5.6% out of the total respondents says that they do not spend any time daily on their studies. The percentage of students, who does not spend any time daily on their studies is unusually high among the Past Tobacco Consumers (12.2%), followed by Active Tobacco Consumers (5.7%) and then Non Tobacco Consumers (3.5%). The percentage of students who spends 30

minutes to 3 hours daily in studying is highest among the Non Tobacco Consumers (73.43%), followed by Active Tobacco Consumers (68.99%) and Past Tobacco Consumers (68.29%). Overall 70.2% of all respondents spend 30 minutes to 3 hours daily in studying. The percentage of students who spends more than 5 hours daily in their studies is highest among Non Tobacco Consumers (2.8%), followed by Active Tobacco Consumers (1.9%). Noticeably, there were no Past Tobacco Consumers who studies more than 5 hours daily. Overall, only 2% of the total respondent studies for more than 5 hours daily. So, it may be concluded that in general most of the respondents spends moderate time daily on their studies.

Table 3.20
Comparison of Time Spent in Studies between Active, Non and Past Tobacco Consumers

Time Spent in Studies	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	3.5%	5.7%	12.2%	5.6%
Less than 30 minutes	9.09%	12.97%	12.2%	11.8%
30 minutes to 1 hour	20.28%	17.41%	17.07%	18.2%
1 to 2 hours	32.87%	30.06%	34.15%	31.2%
2 to 3 hours	20.28%	21.52%	17.07%	20.8%
3 to 4 hours	9.09%	6.01%	4.88%	6.8%
4 to 5 hours	2.1%	4.43%	2.44%	3.6%
More than 5 hours	2.8%	1.9%	0%	2%
Total	143	316	41	500

Spending time in physical activities such as sports and exercises is very important for the physical and psychological wellbeing of the students. In general, people of Mizoram have a strong affiliation towards sports and many students are found to be enthusiastically participating in different types of sports. However, 33.8% of the total respondents were found to be not spending any time daily on any outdoor sports or physical workouts. Percentage of such students who does not play outdoor sports or do physical exercise is highest among Non Tobacco Consumers (36.36%), followed by Active Tobacco Consumers (33.54%) and lowest among Past Tobacco Consumers (26.83%). The percentage of undergraduate students who spends less than 30 minutes on outdoor sports or physical workouts is highest among Non Tobacco Consumers (27.27%) followed by Past Tobacco Consumers (24.39%) and Active

Tobacco Consumers (23.73%). Overall, 24.8% of all respondents spend less than 30 minutes daily on playing outdoor sports or workouts. Also, 37.2% of all respondents spend 30 minutes to 3 hours daily on outdoor sports or workouts. The percentage of such students is highest among the Past Tobacco Consumers (48.78%), followed by Active Tobacco Consumers (37.97%) and lowest among Non Tobacco Consumers (32.17%). There are only 4.2% of the total respondents who spends more than 3 hours daily in outdoor sports or physical workouts. It may be pointed that one prior study in Sri Lanka had found significant assocuation between smoking and participation in sports among school children (Katulanda et al., 2015).

Table 3.21
Comparison of Time Spent in Playing Outdoor Sports/Workouts between Active, Non and Past Tobacco Consumers

Time Spend in Playing Outdoor Sports/Workouts	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	36.36%	33.54%	26.83%	33.8%
Less than 30 minutes	27.27%	23.73%	24.39%	24.8%
30 minutes to 1 hour	13.29%	15.82%	21.95%	15.6%
1 to 2 hours	14.69%	15.19%	17.07%	15.2%
2 to 3 hours	4.2%	6.96%	9.76%	6.4%
3 to 4 hours	2.8%	2.85%	0%	2.6%
4 to 5 hours	0.7%	1.27%	0%	1%
More than 5 hours	0.7%	0.63%	0%	0.6%
Total	143	316	41	500

Reading is one activity which not only provides spare time entertainment but also is a vital source of gaining knowledge beyond formal education. Overall, it has been found that 9% of the total undergraduate students do not spend any time daily on reading newspapers, magazines and books. The percentage of such students is highest among the Past Tobacco Consumers (12.2%), followed by Active Tobacco Consumers (10.76%) and lowest among the Non Tobacco Consumers (4.2%). Overall, 44% of the total respondents spend less than 30 minutes daily in reading and 29.2% respondents spends 30 minutes to 1 hour daily in reading. The percentage of students who spends less than 30 minutes daily in reading is highest among Non Tobacco Consumers (51.05%), followed by Active Tobacco Consumers (41.77%) and lowest among the Past Tobacco Consumers (36.59%). The percentage of

students who spends 30 minutes to 1 hour daily in reading is highest among Past Tobacco Consumers (36.59%), followed by Non Tobacco Consumers (30.07%) and Active Tobacco Consumers (27.85%). The percentage of students who spends 1 to 3 hours in reading is 15% among total respondents, 16.46% among Active Tobacco Consumers, 14.63% among Past Tobacco Consumers and 11.89% among Non Tobacco Consumers. Overall, there are very few respondents who spend more than 3 hours daily in reading.

Table 3.22
Comparison of Time Spent in Reading News Papers/Magazines/Books between Active, Non and Past Tobacco Consumers

Time Spent in Reading News Papers/Magazines/Books	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	4.2%	10.76%	12.2%	9%
Less than 30 minutes	51.05%	41.77%	36.59%	44%
30 minutes to 1 hour	30.07%	27.85%	36.59%	29.2%
1 to 2 hours	7.69%	11.39%	4.88%	9.8%
2 to 3 hours	4.2%	5.06%	9.76%	5.2%
3 to 4 hours	1.4%	1.58%	0%	1.4%
4 to 5 hours	0.7%	0.63%	0%	0.6%
More than 5 hours	0.7%	0.95%	0%	0.8%
Total	143	316	41	500

Out of the total respondents, 55.8% does not spend any time daily in playing indoor games, 21% of them plays indoor games for less than 30 minutes daily and 10.2% of them plays indoor games for 30 minutes to 1 hour daily. The percentage of students who plays indoor games for less than 30 minutes daily is almost same among Active Tobacco Consumers (21.84%) and Past Tobacco Consumers (21.95%) but less among Non Tobacco Consumers (18.88%). The percentage of students who plays indoor games for 30 minutes to 1 hour daily is almost similar among Non Tobacco Consumers (12.59%) and Past Tobacco Consumers (12.2%) but less among Active Tobacco Consumers (8.86%).

Table 3.23
Comparison of Time Spent in Playing Indoor Games between Active, Non and Past Tobacco Consumers

Time Spent in Playing Indoor Games	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	56.64%	56.01%	51.22%	55.8%
Less than 30 minutes	18.88%	21.84%	21.95%	21%
30 minutes to 1 hour	12.59%	8.86%	12.2%	10.2%
1 to 2 hours	4.9%	6.01%	2.44%	5.4%
2 to 3 hours	2.8%	4.11%	4.88%	3.8%
3 to 4 hours	2.8%	1.58%	7.32%	2.4%
4 to 5 hours	0.7%	1.27%	0%	1%
More than 5 hours	0.7%	0.32%	0%	0.4%
Total	143	316	41	500

12.6% of the undergraduate students spends anywhere between 1 hour to 5 hours daily on playing indoor games. It is highest among Past Tobacco Consumers (14.63%), followed by Active Tobacco Consumers (12.97%) and Non Tobacco Consumers (11.19%). There are only 0.4% undergraduate students out of the total respondents who spend more than 5 hours on playing indoor games daily. The percentage of students who play indoor games for more than 5 hours daily is highest among Non Tobacco Consumers (0.7%) followed by Active Tobacco Consumers (0.32%). There are no students among the Past Tobacco Consumers who plays indoor games for more than 5 hours daily. Therefore, overall, it appears that playing indoor games is popular among few undergraduate students.

Surfing the internet is a very common activity performed by people in general.. Earlier studies conducted in parts of Mizoram had also revealed that students spend a lot of their available time on internet (Lallianzela, 2014). Another study revealed that 62.96% of the Late Teens are using more than 4 hours averagely per day on internet and 85.16% of all the respondents are found to be frequent users of social networking sites (Dash and Akhtar, 2012). With the availability of cheaper and faster mobile devices and internet connectivity, the number of internet users in Mizoram has grown much bigger and a lot of young users are likely to be driving this trend.

Table 3.24
Comparison of Time Spent in Surfing Internet between Active, Non and Past Tobacco Consumers

Time Spent in Surfing Internet	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	2.1%	4.75%	0%	3.6%
Less than 30 minutes	17.48%	7.28%	19.51%	11.2%
30 minutes to 1 hour	20.98%	16.14%	19.51%	17.8%
1 to 2 hours	13.99%	19.94%	24.39%	18.6%
2 to 3 hours	15.38%	20.89%	14.63%	18.8%
3 to 4 hours	12.59%	14.24%	2.44%	12.8%
4 to 5 hours	6.29%	6.96%	4.88%	6.6%
More than 5 hours	11.19%	9.81%	14.63%	10.6%
Total	143	316	41	500

Out of the total undergraduate respondents, only 3.6% says that they do not spend any time daily on using the internet. Only 4.75% of the Active Tobacco Consumers and 2.1% Non Tobacco Consumers are non-internet users when it comes to daily internet usage. On the other hand, 68% out of the total 500 undergraduate respondents spends anywhere between 30 minutes to 4 hours daily on surfing the internet. The percentage of students who spends 30 minutes to 4 hours daily in internet surfing is highest among the Active Tobacco Consumers (71.20%), followed by Non Tobacco Consumers (62.94%) and Past Tobacco Consumers (60.98%). Also, 10.6% of all the respondents spend more than 5 hours on a daily basis for surfing the internet. The percentage of students who spends more than 5 hours daily on internet is highest among Past Tobacco Consumers (14.63%), followed by Non Tobacco Consumers (11.19%) and Active Tobacco Consumers (9.81%). Therefore, overall internet surfing seems to be one of the favourite activities performed daily by the undergraduate students.

The undergraduate students, besides performing the above discussed activities, may also participate in general household works like cooking, cleaning, maintenance etc. It may be common for many students to help their parents or elders in cooking and other household activities. However, 18% of the total undergraduate respondents revealed that they do not spend any time on household activities. The percentage of such students is highest among the Active Tobacco Consumers (20.25%), followed

by Past Tobacco Consumers (17.07%) and Non Tobacco Consumers (13.29%). It is quite likely that majority of such students may actually be living in hostels away from their homes and families. 15.8% of the total respondents spend less than 30 minutes daily in cooking and other household works. The percentage of such students who spends less than 30 minutes daily is highest among Past Tobacco Consumers (17.07%), followed by Active Tobacco Consumers (16.46%) and Non Tobacco Consumers (13.99%).

Table 3.25
Comparison of Time Spent in Cooking and Household Works between Active, Non and Past Tobacco Consumers

Time Spend in Cooking and Household Works	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	13.29%	20.25%	17.07%	18%
Less than 30 minutes	13.99%	16.46%	17.07%	15.8%
30 minutes to 1 hour	19.58%	19.62%	24.39%	20%
1 to 2 hours	23.78%	18.04%	19.51%	19.8%
2 to 3 hours	11.89%	14.56%	7.32%	13.2%
3 to 4 hours	11.19%	5.38%	4.88%	7%
4 to 5 hours	2.8%	3.48%	2.44%	3.2%
More than 5 hours	3.5%	2.22%	7.32%	3%
Total	143	316	41	500

60% of the total respondents spends anywhere between 30 minutes to 4 hours daily on cooking and other household works. The percentage of students who spends 30 minutes to 4 hours daily on cooking and other household works is highest among the Non Tobacco Consumers (66.43%), followed by Active Tobacco Consumers (57.59%) and Past Tobacco Consumers (56.1%). Only 3% of the total respondents spend more than 5 hours daily in cooking and other household works. However, the percentage of students who spends more than 5 hours daily in cooking and other household works is highest among the Past Tobacco Consumers (7.32%), followed by Non Tobacco Consumers (3.5%) and lowest among the Active Tobacco Consumers (2.22%).

Out of the total respondents, 43.6% does not spend any time on a daily basis for going out or travelling. The percentage of such students is highest among the Non

Tobacco Consumers (44.76%), followed by Active Tobacco Consumers (43.99%) and lowest among Past Tobacco Consumers (36.59%). 17.2% of the total respondents spends less than 30 minutes daily on travelling. The percentage of students who spends less than 30 minutes daily on travelling or going out is highest among Past Tobacco Consumers (21.95%), followed by Non Tobacco Consumers (18.88%) and Active Tobacco Consumers (15.82%).

Table 3.26
Comparison of Time Spent in Going Out/Travelling between Active, Non and Past Tobacco Consumers

Time Spent in Going Out/Travelling	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	44.76%	43.99%	36.59%	43.6%
Less than 30 minutes	18.88%	15.82%	21.95%	17.2%
30 minutes to 1 hour	12.59%	12.03%	17.07%	12.6%
1 to 2 hours	10.49%	14.24%	7.32%	12.6%
2 to 3 hours	4.9%	6.96%	7.32%	6.4%
3 to 4 hours	2.1%	4.11%	4.88%	3.6%
4 to 5 hours	2.8%	0.63%	2.44%	1.4%
More than 5 hours	3.5%	2.22%	2.44%	2.6%
Total	143	316	41	500

35.2% of the total respondents spends anywhere between 30 minutes to 4 hours daily on going out or travelling. The percentage of such students who spends 30 minutes to 4 hours is highest among the Active Tobacco Consumers (37.34%), followed by Past Tobacco Consumers (36.59%) and least among the Non Tobacco Consumers (30.07%). Overall, only 2.6% of the respondents spend more than 5 hours daily on travelling or going out. The percentage of such students who spends more than 5 hours daily on travelling or going out is highest among the Non Tobacco Consumers (3.5%), followed by Past Tobacco Consumers (2.44%) and Active Tobacco Consumers (2.22%)

Religion plays a very central role in the lifestyle of the people of Mizoram. Children are brought up in a society where they are favourably influenced by religious customs, practices and values. Only 11.8% out of the total 500 undergraduate students revealed that they do not spend any time daily on religious activities. The

percentage of students who does not spend any time on religious activities is highest among the Past Tobacco Consumers (14.63%), followed by Active Tobacco Consumers (12.97%) and least among Non Tobacco Consumers (8.39%). In addition, 14.4% of the total respondents spend only less than 30 minutes daily on religious activities. The percentage of such students who spends less than 30 minutes daily on religious activities is highest among the Non Tobacco Consumers (16.08%), followed by Active Tobacco Consumers (14.87%) and least among the Past Tobacco Consumers (4.88%).

Table 3.27
Comparison of Time Spent in Religious Activities between Active, Non and Past Tobacco Consumers

Time Spent in Religious Activities	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	8.39%	12.97%	14.63%	11.8%
Less than 30 minutes	16.08%	14.87%	4.88%	14.4%
30 minutes to 1 hour	26.57%	25.32%	29.27%	26%
1 to 2 hours	21.68%	25.32%	17.07%	23.6%
2 to 3 hours	13.99%	12.03%	21.95%	13.4%
3 to 4 hours	5.59%	5.7%	7.32%	5.8%
4 to 5 hours	4.2%	2.53%	4.88%	3.2%
More than 5 hours	3.5%	1.27%	0%	1.8%
Total	143	316	41	500

68.8% of the total respondents spend anywhere between 30 minutes to 4 hours daily on religious activities. The percentage of such students who spends between 30 minutes to 4 hours daily on religious activities is highest among the Past Tobacco Consumers (75.61%), followed by Active Tobacco Consumers (68.35%) and Non Tobacco Consumers (67.83%). Moreover, 1.8% of the total respondents spend more than 5 hours daily on religious activities. The percentage of students who spends more than 5 hours daily on religious activities is highest among the Non Tobacco Consumers (3.5%) followed by Active Tobacco Consumers (1.27%) and absent among the Past Tobacco Consumers.

Table 3.28
Comparison of Time Spent in Other Hobbies between Active, Non and Past Tobacco Consumers

Time Spent in Other Hobbies	Non Tobacco Consumers	Active Tobacco Consumers	Past Tobacco Consumers	Total
None	58.04%	60.44%	63.41%	60%
Less than 30 minutes	6.29%	6.65%	9.76%	6.8%
30 minutes to 1 hour	10.49%	7.59%	7.32%	8.4%
1 to 2 hours	8.39%	9.81%	9.76%	9.4%
2 to 3 hours	6.29%	5.38%	4.88%	5.6%
3 to 4 hours	2.8%	4.43%	0%	3.6%
4 to 5 hours	4.2%	2.22%	0%	2.6%
More than 5 hours	3.5%	3.48%	4.88%	3.6%
Total	143	316	41	500

60% of the total undergraduate respondents do not spend any time on other hobbies. The percentage of such students who do not spend any time on other hobbies is highest among the Past Tobacco Consumers (63.41%), followed by Active Tobacco Consumers (60.44%) and Non Tobacco Consumers (58.04%). Only 6.8% of the total respondents spend less than 30 minutes on other hobbies. The percentage of students who spends less than 30 minutes on other hobbies is highest among the Past Tobacco Consumers (9.76%), followed by Active Tobacco Consumers (6.65%) and Non Tobacco Consumers (6.29%). However, 27% of the total respondents spends anywhere between 30 minutes to 4 hours daily on other hobbies. The percentage of such students who spends 30 minutes to 4 hours daily on other hobbies is highest among the Non Tobacco Consumers (27.97%), closely followed by the Active Tobacco Consumers (27.22%) and lowest among the Past Tobacco Consumers (21.95%). Also, 3.6% of the total respondents, 4.88% of the Past Tobacco Consumers, 3.5% of the Non Tobacco Consumers and 3.48% of the Active Tobacco Consumers spends more than 5 hours daily on other activities.

3.6.14 Initiation Age Comparison between Active and Past Tobacco Consumers

The average age of initiation to tobacco for the total 357 tobacco consumers (Active and Past) is 15.64 years. The average age of initiation for Active Tobacco Consumers is 15.89 years and for Past Tobacco Consumers is 13.73 years.

Exhibit 3.48
Comparison of Average Age of Initiation between Active and Past Tobacco Consumers

Average Age of Initiation

Active Tobacco Consumers: 15.89	Past Tobacco Consumers: 13.73	Total Consumers (Active + Past): 15.64
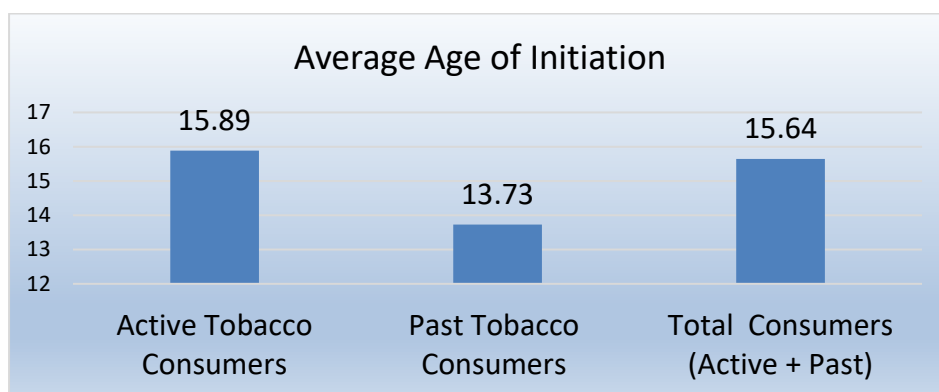
It is likely that most of the Past Tobacco Consumers initiated tobacco consumption during their early teens. On the other side, the Active Tobacco Consumers initiated tobacco consumption mostly during high school. However, both these facts point out that the initiation and experimentation with tobacco happens at an early stage for most of the students. Therefore, in Mizoram, it is necessary to start educating students regarding the harmful effects of tobacco in schools and strictly control tobacco consumption from the school level.

Chapter 4

Behaviour of Undergraduate Students regarding Tobacco Consumption

4.1 Introduction

This chapter explores the tobacco consumption behaviour of undergraduate students in Mizoram. Consumer Behaviour is broadly defined as "the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society" (Hawkins et al., 2007, p. 6). To understand consumers and their choices, it is necessary to investigate consumer responses categorized under affective, cognitive and behavioral responses. Affective responses are related to feelings and emotions experienced by consumers when they read, hear or see products or product related information or their feelings during and after purchase, use and disposal of the products. Cognitive responses are the beliefs, opinions, attitudes and intentions related to products and services. Behavioral responses includes the purchasing decisions, actions and consumption related practices of the consumers regarding particular product or services (Kardes, 2009).

Exhibit 4.1
A Model of Consumer Decision Making
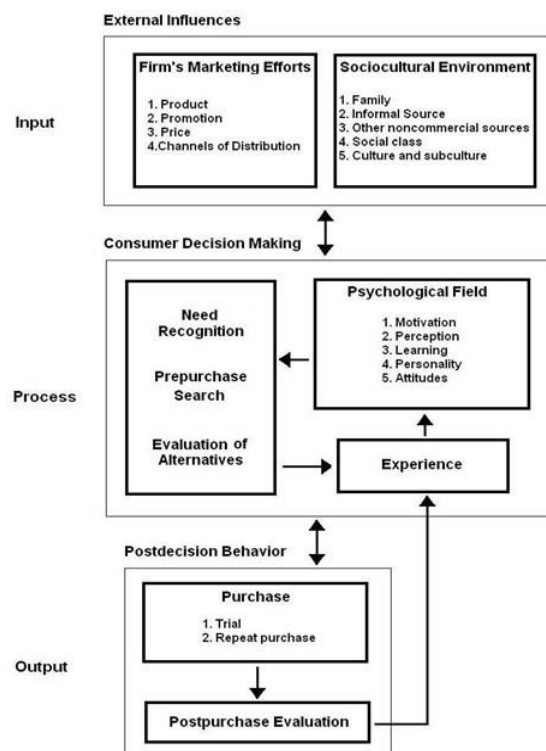
Source: Schiffman & Kanuk (2007), p. 36

The consumer behaviour regarding the consumption of any product or product category can be explained by the simple model of consumer decision making proposed by Schiffman and Kanuk (2007). This consumer decision-making model is similar to an earlier model developed by Engel, Kollat & Blackwell (1968) which includes input, information processing, decision process, and variables influencing the decision process as its basic components. Further the decision process components under this model consist of five stages which include need recognition, search, alternative evaluation, purchase, and outcomes (Stankevich, 2017). The Schiffman and Kanuk (2007) model of consumer decision-making (Exhibit 4.1) explains the dynamics of consumer behaviour using a three step approach as follows:

a) **Input:** It explores all the external influences that trigger desire for consumption. It basically includes a firm's marketing efforts and factors in the socio-cultural environment.

b) **Process**: This step involves the actual consumer decision making which includes various psychological factors, experiences, need recognition, pre-purchase search and evaluation of alternatives.

c) **Output:** The final step explores the purchase and post-purchase evaluation by the consumers.

The following sections explore the tobacco consumption behaviour of undergraduate students in Mizoram using the above consumer decision-making model.

4.2 External Influences for Tobacco Consumption

The external influences for tobacco consumption basically include a firm's marketing efforts and the various factors in the socio-cultural environment that influences the consumer. A firm's marketing efforts are related to the four elements of the Marketing Mix namely Products, Price, Distribution and Promotion. A firm uses specific strategies under each of these elements and formulates its overall marketing strategy to attract consumers from its target market. In addition to this, tobacco consumers are also exposed various socio-cultural factors (McKay, 2015)

like family, social class, culture, sub-culture etc. which influences the consumer towards particular consumption behaviour.

4.2.1 Marketing Efforts by Tobacco Firms

According to Karmakar (2008), the tobacco industry is guided by their profit motive and will "continue to design and market their products to expand its commercial horizon". In India, the marketing activities of tobacco companies are much regulated by the government. The tobacco market in Mizoram constitutes both organized and unorganized players who deal in a variety of tobacco products. In general, the following types of tobacco products are available in Mizoram:

- Domestically manufactured and branded smoking tobacco products like Cigarettes, Cigars, Roll-ons and *Bidis*.

- Domestically manufactured and branded non-smoking tobacco products like *Gutkhas* (marketed as pan masalas but mostly consumed with additional supplementary zarda packs), *Zarda* (consumed along with beetle leafs), *Khaini* (chewing tobacco) etc.

- Imported branded smoking tobacco products like Cigarettes and Cigars.

- Contraband smoking tobacco products like Cigarettes and Cigars manufactured in China/Myanmar and sourced from Myanmar.

- Locally manufactured generic smoking tobacco products known as *Zial*.

- Locally manufactured generic *Khaini* (chewing tobacco).

- Locally manufactured generic *Tuibur* (liquid tobacco).

Besides tobacco products of Indian companies, the contraband cigarettes sourced from Myanmar and the locally manufactured tobacco products like *Zial*, *Khaini* and *Tuibur* are all part of a flourishing tobacco industry in Mizoram. However, due to legal restrictions the marketing efforts of tobacco companies in Mizoram are not very different from rest of India and rely heavily on passive and subliminal marketing techniques such as point-of-sales displays, attractive packaging, extensive and targeted distribution strategies, surrogate advertising and indirect promotion of tobacco consumption culture using platforms like movies, internet, social media etc.

It is an established fact that consumption of tobacco increases with increased spending on advertising and promotions by the tobacco industry (Agaku & Ayo-Yusuf, 2014; Brown & Moodie, 2009; CDC, 1994; Dube et al., 2013; Mohan & Lando, 2016; Pierce & Gilpin, 1995; Smee, 1992) and even a brief exposure to tobacco advertising by young people has the potential to create favourable impressions about smokers (Evans et al., 1995). Students who are exposed to tobacco advertising in more than four places are 1.5 times more likely to become tobacco users than students who are unexposed to such advertising (Arora et al., 2012a). The influence of tobacco industry's promotional tactics may create favourable conditions for youth to illegally purchase tobacco (Widome et al., 2012). The exposure from retailer level tobacco advertising has been linked with early initiation of tobacco by adolescents (Feighery et al., 2006; Henriksen et al., 2010; MacFadyen et al., 2001; Schooler et al., 1996; Slater et al., 2007; Wakefield et al., 2006), current youth smoking (Kim et al., 2013), relapse among past smokers (Kirchner et al., 2013), and unplanned cigarette purchases (Carter, Mills & Donovan, 2009). The tobacco industry has also been accused of using youth-oriented contemporary media like social media to promote their products (Freeman & Chapman, 2010). In many Asian countries where smoking by women is culturally considered inappropriate, tobacco companies targets young women by linking smoking with independence, stress relief and weight control (Kaufman & Nichter, 2001).

Exhibit 4.2
Affects of Tobacco Marketing on Tobacco Use
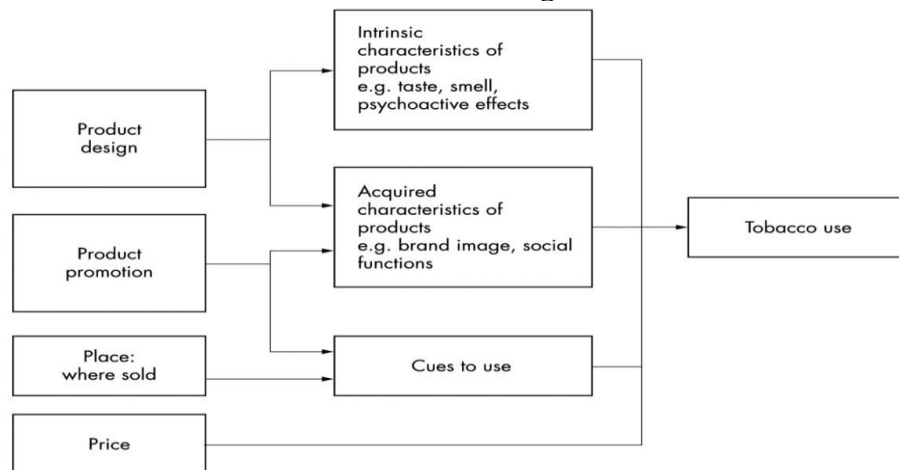
Source: Borland (2003), p. 375

The Indian tobacco industry is dominated by few organized tobacco companies. With 84.27% market share, ITC Ltd is the market leader in cigarettes based on its sales. The rest of the market share is distributed among smaller companies like Kothari Products Ltd, Godfrey Phillips India Ltd, VST Industries Ltd etc (Business Wire, March 20, 2019). Over the years, the presence of multinational tobacco companies through their advertising, promotions, sponsorship, direct investment, and lobbying of governments has increased in developing countries (Esson & Leeder, 2004) like India. It has been observed that such multinational companies often uses sophisticated advertising and promotional techniques when they enters a new market which causes other domestic tobacco companies to increase their marketing activities as a counter response (Australia India Institute, 2012). In India, the tobacco companies and sellers are subjected to various restrictions on marketing and sales of tobacco products. According to Chikkala (2014), there have been several significant structural changes over the years in marketing of tobacco in India due to active involvement of government and other agencies. Except for limited Point-of-Sale advertising (Reddy & Gupta, 2004), there is a blanket ban on all forms of tobacco advertising imposed by The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act of 2003 (COTPA, 2003). According to Chaudhry et al., (2007), the provision for point-of-sale has distorted the comprehensive tobacco control act of India. Before the ban on advertising, the tobacco industry used to contribute ₹3000 to ₹4000 million to the Indian advertising industry every year (Reddy & Gupta, 2004). However, after COTPA, tobacco companies have found other alternatives to direct advertising, where they often exploits existing loopholes in the system and resort to indirect ways for promoting tobacco products in India. It has been observed that tobacco companies extensively advertise non-tobacco products by same brand names (Jhanjee, 2011; Reddy & Gupta, 2004) of their existing tobacco products with the aim of indirectly promoting them. Brand stretching strategies is being used like Wills Life Style Apparel from ITC (Jhanjee, 2011) which may reinforce brand recognition of tobacco brands among tobacco consumers in India. In India, many public events are being sponsored by companies that have substantial presence in the tobacco industry. There are instances of movie award and bravery award functions being

sponsored by such companies, which use the platform to indirectly promote their tobacco brands (Jandoo & Mehrotra, 2008; Jhanjee, 2011). Therefore, it is clear that due to the blanket ban on tobacco advertising in India, companies now often resort to surrogate advertising to promote their products (Business Wire, March 20, 2019). In 2016, Pierce Brosnan, the famous British actor of James Bond fame appeared in an Indian pan masala brand advertisement (Exhibit 4.3). Such promotions are classic example of surrogate advertising as pan masala though by itself is manufactured as a non-tobacco product but is designed for consumption with tobacco. The fact that, the actor later in a written clarification to Delhi State Tobacco Control Cell has stated that he got cheated by the company which did not disclosed the true nature of the product during signing of contract (Financial Express, March 15, 2018) further proves the manipulative strategies adopted by such companies. Some smokeless tobacco products are also promoted by printing pictures of their packages and brand names on kites to specifically target children (Arora et, al., 2012). In addition to direct ways of promotion like point-of-sales displays and advertising at kiosks (Kalra, 2017), tobacco and particularly smoking is also indirectly promoted through characters depicted in movies and television programs (Chadda and Sengupta, 2002; Mishra et al., 2005). Such exposures through movies and tobacco-branded merchandise make adolescents more receptive to tobacco advertising and more likely to try tobacco (Arora et al., 2012b; Mohan & Lando, 2016; WHO, 2003). Tobacco companies in India also invests on sales promotions like offering free packets on bulk purchases by shopkeepers (Mohan & Lando, 2016) which pushes tobacco to more potential customers.

Exhibit 4.3
Surrogate Advertising of Tobacco in India

Source: https://spicyip.com/wp-content/uploads/2017/01/161007-pierce-brosnan-pan-masala-pan-bahar-ad-3.jpg (accessed on September 9, 2020)

It may be pointed that surrogate advertisements, brand stretching and brand extension of tobacco products by the tobacco industry also amounts to violation of Section 5 of COTPA and is also against Article 13 of the WHO FCTC (Kaur & Jain, 2011). However, there are also various other instances of tobacco companies going to the extent of directly violating norms to market their products in India. For instance, in 2017, there were allegations against Philip Morris International for its involvement in putting Marlboro cigarettes ads at tobacco shops and free distribution of cigarettes at nightclubs and bars to promote the brand (Kalra, 2017). Even there is often violation of the provision of allowing point-of-sale advertisement like reduction of the specified area for display of health warnings (Jhanjee, 2011) by tobacco companies and retailers. Such aggressive marketing strategies of the tobacco industry are one of the most important factors leading to initiation of tobacco use among children and teenagers (Chadda and Sengupta, 2002). According to Lal et al., (2015), "substantial and stable revenue streams accrue to the industry over the lifetime of tobacco users who begin use as minors". In countries like the U.S., the tobacco companies have long recognized the importance of social smoking and use marketing strategies that targets young adults in bars, clubs, and college campuses (Rigotti et al., 2000). According to Pierce and Giplin (1995), targeted advertising by tobacco companies can lead to increase in the rate of tobacco consumption by specific groups. Such strategies are now being explored by tobacco companies in countries like India. After changes in tobacco control laws in India, tobacco companies have been found to be distributing free cigarettes to adolescents (Sinha et al., 2008). The innovative product and marketing strategies by tobacco companies has resulted in the increase of tobacco experimentation and consumption among youths (Planning Commission, Government of India, 2002).

The pricing of tobacco products by tobacco companies is also largely affected by government's taxation policies. One study in Illinois revealed a decrease in industry price advertisements over time because of tobacco price increases resulting from the master settlement (Jason et al., 2004). However, the same study also found an increase in industry brand advertisements over time by tobacco industry to maintain sales through brand recognition and point of sales promotions (Jason et al., 2004). In

India, the taxes on tobacco products are among the highest in the world. Currently on cigarettes, there is 64% excise duty, 28% GST, and 5% cess charged by the government which makes them unaffordable for many consumers and for which the tobacco companies relies on the fact that the higher income growth compensates for the increasing price of cigarettes, which leads to greater consumption (Business Wire, March 20, 2019). John et al., (2010) had also suggested that increase in consumer income may lead to more than proportionate increase in cigarette consumption. However, according to Gupta (2006), the taxes for tobacco products in India are low and not collected effectively for all tobacco products except for cigarettes making them easily affordable for even school children. He further noted that the proportion of taxes in relation to the actual retail price of a cigarette pack is lower in India compared to many countries. Besides GST and compensation cess at present, there is also ad valorem of 5% for cigarettes of all length except more than 75 mm, for which it is 36% and the National Calamity Contingent Duty (NCCD) continues to be applicable on tobacco products even after the GST (Prasad, 2019). Even after adding all the taxes, the final retail price is estimated to increase by only 0.18% for cigarettes, 8.8% for bidi (about ₹1.30 per pack of 25 sticks) and 6% for smokeless tobacco resulting in a more than 50% fall of tax revenue for states (in comparison to the value added tax (VAT) collected before GST) and very little reduction of consumption especially for cigarettes (John, Dauchy & Goodchild, 2019). According to Jhanjee (2011), tobacco taxation in India is rather discriminatory, covers only the organized sector, and not applied uniformly. John et al., (2010) had remarked, "Taxation of tobacco products in India is complicated by a myriad of tax structures, loopholes, exemptions, different collection systems and other challenges of tax administration".

Cussen and McCool (2011) had remarked that "low and lower-middle income countries are acutely vulnerable to exploitation by tobacco industry". According to a monograph jointly produced by the U.S. National Cancer Institute and World Health Organization (2016) "The global tobacco market has become increasingly concentrated over the past 25 years and is being driven by the same forces that have contributed to globalization in other industries, including reductions in barriers to

trade and foreign direct investment, privatization of state-owned tobacco enterprises, and a wave of mergers and acquisitions. Policies aimed at limiting the market power of tobacco companies are largely untested but hold promise for reducing tobacco use."

4.2.2 Socio-cultural Environment and its Influence on Tobacco Consumption

The concept of culture can be defined as "the complex whole that includes knowledge, belief, art, law, morals, customs, and any other capabilities and habits acquired by humans as members of society" (Hawkins et al., 2007). The socio-cultural environment includes family, friends, social class, culture, sub culture, values etc. The various factors such as influences from the family, friends, community, culture etc. can influence people's behaviour to a large extent. According to Mohan et al., (2018), "tobacco use is deeply ingrained as a cultural practice". Hastings and MacFadyen (2002) stressed on considering cultural determinants of smoking. Cussen and McCool (2011) had highlighted that tobacco use in the Pacific region has complex association with cultural practices. Reddy & Gupta (2004) remarked, "as traditional values slacken their stranglehold in rural societies, the socio-cultural influences that encourage or discourage tobacco use are altering. These need to be studied carefully to control tobacco consumption". Mathur et al., (2014) has stated that "understanding the social class gradient in tobacco use, including trends over time, and related psychosocial factors of influence is extremely important in halting the tobacco epidemic in India". It has been confirmed that psychosocial factors were associated with early initiation and significantly higher use of tobacco among the youth (Dhekaleet al., 2011; Mathur et al., 2008; Reddy et al., 2006; Stigler et al., 2006; Tyas & Pederson, 1998).

Mizoram is a well-knit society without any caste or class system and the Mizo community is free from any rank or status consciousness (Pachuau, 2009), and Mizo society in general is characterized by closely knit families with strong tradition of shared family values among the family members. In general, one of the important factors that affect the nature of consumption is family size (Espenshade, Kamenske & Turchi, 1983; Kiran & Dhawan, 2015).

Exhibit 4.4
Family Size of the Respondents
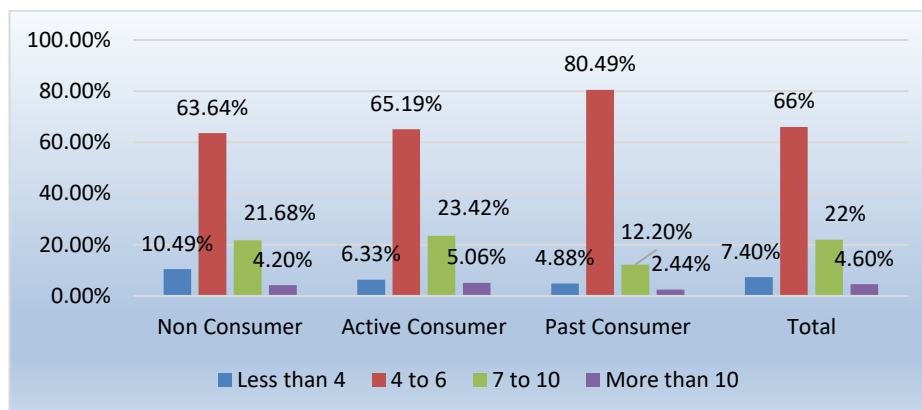
An analysis of the primary data reveals that majority (66%) of the respondents have 4 to 6 members in their family followed by respondents (22%) with 7 to 10 family members. As shown in Exhibit 4.4, there is not much difference between Active Tobacco Consumers and Non Tobacco Consumers in terms of family sizes. However, 80.49% of the Past Tobacco Consumers have 4 to 6 family members which is little higher compared to both Non Tobacco Consumers and Active Tobacco Consumers.

Table 4.1
Test of Association between Family Size and Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Fisher's Exact Test	9.250			.316
N of Valid Cases	500			

A test of significance (Table 4.1) also shows that there is no significant association between family size and tobacco user categories as Fisher's exact test demonstrate p value of 0.316 (i.e. p>.05). Therefore, family sizes are not determining factor for consumption of tobacco by undergraduate tobacco consumers in Mizoram.

The family occupation is an important socio-economic factor that influences or determines the nature of lifestyle, economic prosperity and consumption behaviour of people to a large extent. In general, service, business and farming are the major occupational choices and sources for steady income for the vast population in Mizoram.

Exhibit 4.5
Family Occupation of Respondents
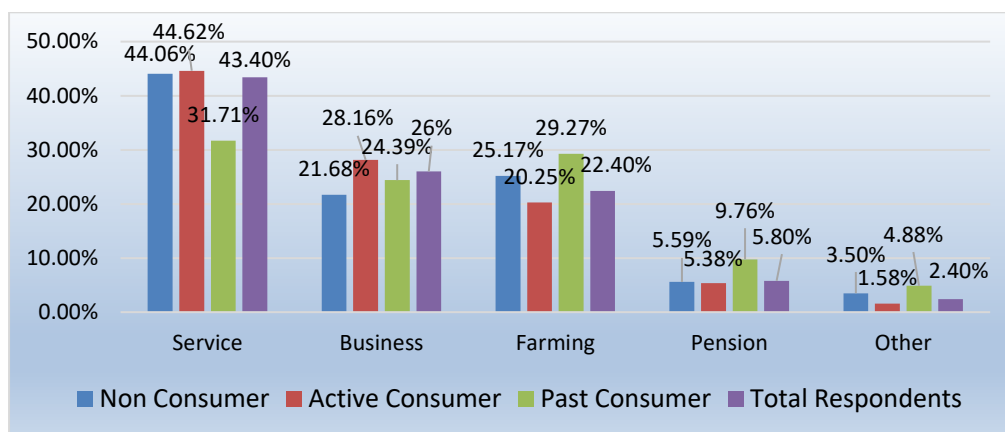
43.4% of the respondent's primary family occupation is service followed by 26% respondents whose primary family occupation is business which is again followed by 22.4% of respondents whose primary family occupation is farming. The percentage of respondent's families whose primary family occupation is service is almost same among the Non-Tobacco Consumers (44.06%) and Active Tobacco Consumers (44.62%) but less among Past Tobacco Consumers (31.71%). Business as a primary family occupation is highest among Active Tobacco Consumers (28.16%) compared to Non-Tobacco Consumers (21.68%) and Past Tobacco Consumers (24.39%). Farming as a primary family occupation is highest among Past Tobacco Consumers (29.27%) compared to Non-Tobacco Consumers (25.17%) and Active Tobacco Consumers (20.25%).

Table 4.2
Test of Association between Family Occupation and Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	8.916[a]	8	.349	.346
Fisher's Exact Test	9.803			.251
N of Valid Cases	500			
a. 3 cells (20.0%) have expected count less than 5. The minimum expected count is .98.				
b. The standardized statistic is .502.				

Fisher's Exact Test shows significant level of 0.251 i.e. ($p>0.05$), indicating a non-significant association between tobacco user category and family occupation.

Therefore, family occupation may not be regarded as a determining factor for tobacco consumption among undergraduate students in Mizoram.

Income in general is one of the most important factors that determine the aspiration, choice, selection, quantity and frequency of consumption (Thomas, 2013; Terzioğlu, Mehmet & Doğangün, 2013).

Exhibit 4.6
Average Monthly Household Income of Respondents
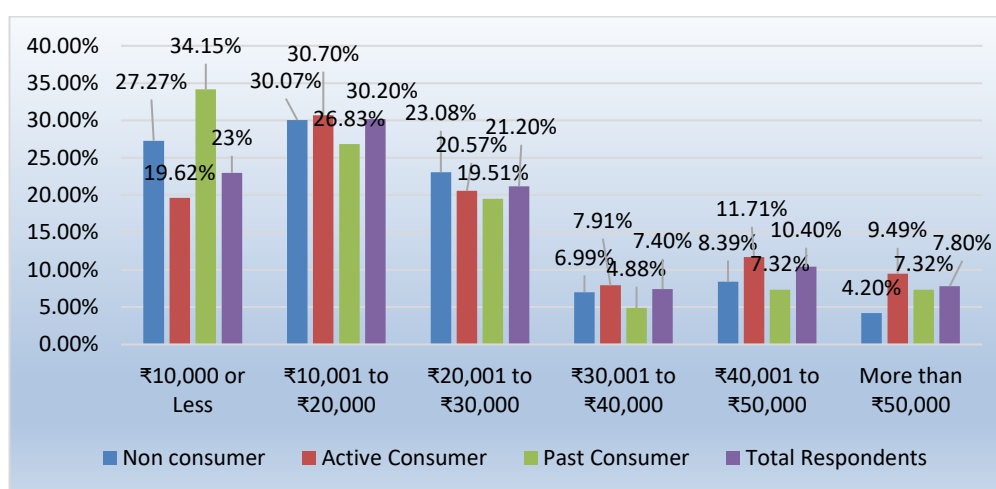
The average monthly household income of most of the respondents falls below ₹30,000, where 23%, 30.2% and 21.2% of the respondent's average monthly household income is ₹10,000 or less, between ₹10,000 to ₹20,000 and between ₹20,000 to ₹30,000 respectively. Moreover, only 19.62% of the Active Tobacco Consumers, have average monthly household income of ₹10,000 or less, compared to Non-Tobacco Consumers (27.27%) and Past Tobacco Consumers (34.15%).

Table 4.3
Test of Association between Family Income and Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	24.459[a]	20	.223	.[b]
N of Valid Cases	500			
a. 8 cells (24.2%) have expected count less than 5. The minimum expected count is 1.15.				
b. Cannot be computed because there is insufficient memory.				

Pearson Chi-Square test (Table 4.3) reveals that there is no significant association between family income and tobacco user category as the p value is 0.223 (i.e. p>.05).

Most of the students surveyed were in their early twenties and are not financially independent to their families. It may be assumed that there are difficulties for the financially dependent students to indulge themselves in daily tobacco consumption as they have limited resources to spend. However on the other side, students who are financially independent or partially dependent may find it little easier to spend the extra money they possess on tobacco products. Moreover, such students may also experience greater sense of personal freedom and lesser sense of accountability about their lifestyle choices and decisions.

Exhibit 4.7
Financial Dependency of Respondents
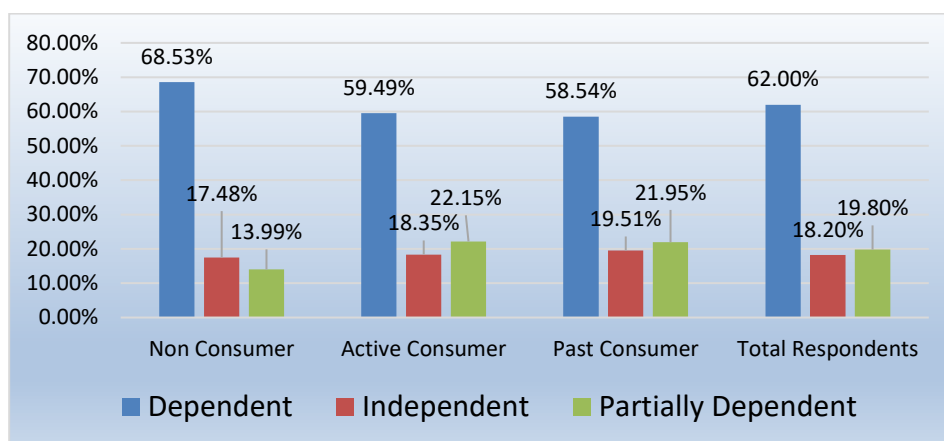
62% of the respondents surveyed have been found to be financially dependent on their families and only 18.2% are found to be independent and 19.8% have said that they are partially dependent financially on their family. Among the Non Tobacco Consumers 68.53% are financially dependent on their family whereas only 17.48% are independent and the rest 13.99% are partially dependent on their family for their financial needs. In contrast to the Non-Tobacco Consumers who are financially dependent, the Active Tobacco Consumers and Past Tobacco Consumers are slightly less dependent financially on their families. Only 59.49% of Active Tobacco Consumers and 58.54% of Past Tobacco Consumers have revealed that they are financially dependent on their families.

Table 4.4
Test of Association between Financial Dependency and Tobacco User Category

Test	Value	df	Asymptotic Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.887[a]	4	.299	.300
Fisher's Exact Test	5.072			.278
N of Valid Cases	500			
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.46.				
b. The standardized statistic is 1.951.				

There may be a slight tendency among the respondents who are less financially dependent on their families to feel free to buy and consume tobacco products. However, Pearson Chi-Square Test (Table 4.4) shows significant level of 0.300 i.e. (p>0.05), indicating a non-significant association between tobacco user category and their status of financial dependency.

The relationship status of an individual may also be linked to a person's lifestyle choices, behavioral characteristics and emotional wellbeing. Katulanda et al., (2015) found that having girlfriend or boyfriend who smokes was significantly correlated with smoking among schoolchildren in Colombo, Sri Lanka. On the other hand, Mousawi (2014) found that smoking was positively related to being unmarried among university students in Iraq.

Exhibit 4.8
Relationship Status of Respondents
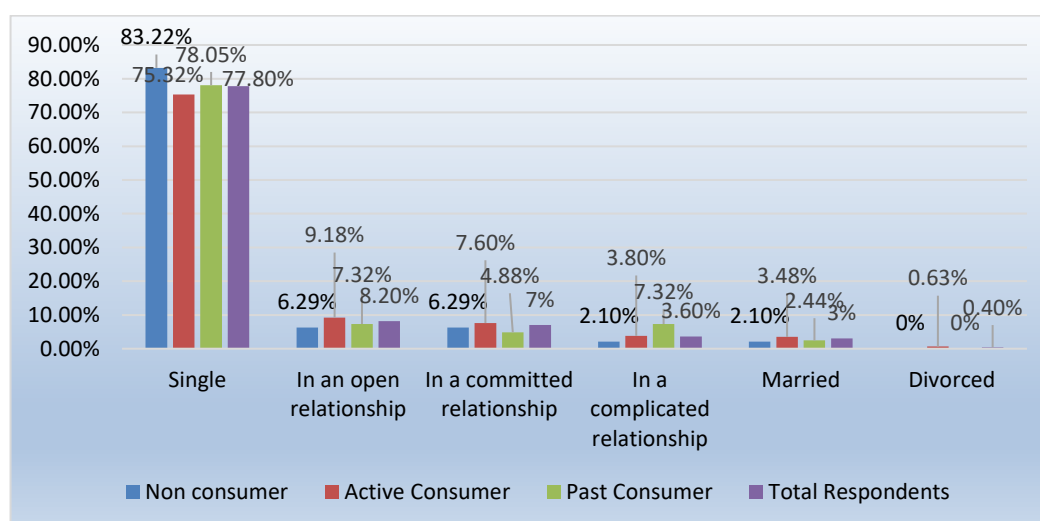
The respondents were asked to reveal their relationship status under few predefined categories namely, "Single" (having no partner), "In an open relationship" (having one or more partner without any commitment), "In a committed relationship" (having a partner with commitment), "In a complicated relationship" (having one or more partner where the nature of relationship is taboo or difficult to define), "Married" and "Divorced". Out of all the respondents, 77.8% have revealed that they are presently single, 8.2% are in an open relationship, 7% are in a committed relationship, 3.6% are in a complicated relationship, 3% are married and only 0.4% are divorced. The percentage of students who are in an open relationship and in committed relationship is slightly higher at 9.18% and 7.6% respectively among Active Tobacco Consumers. Students who revealed that they are in a complicated relationship is higher among Past Tobacco Consumers which is 7.32%. The percentage of married students is also marginally higher among the Active Tobacco Consumers which is 3.48%. In conclusion, we can say that majority (77.8%) of the respondents are found to be single but the percentage of single students is higher among Non-Tobacco Consumers (83.22%) than Active Tobacco Consumers (75.32%).

Table 4.5
Test of Association between Relationship Status and Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	6.700[a]	10	.753	.747
Fisher's Exact Test	6.125			.797
N of Valid Cases	500			
a. 8 cells (44.4%) have expected count less than 5. The minimum expected count is .16.				
b. The standardized statistic is 1.525.				

Pearson Chi-Square Test shows significant level of 0.753 (i.e. $p>0.05$), indicating a non-significant association between tobacco user category and their relationship status. Therefore it seems that the relationship status of the undergraduate students is not a determining factor for their choice of tobacco consumption.

There are many external factors such as family, friends and the general society which influences people's consumption behaviour. Studies have found that parents and peers have strong influence on youth tobacco use (Agaku and Ayo-Yusuf, 2014;

Dhekale et al., 2011; Katulanda et al., 2015; Mishra et al., 2005; Vu et al., 2018). Ladusingh et al., (2017) found that the likelihood of using tobacco is 3.4 and 1.14 times more, respectively, for youths staying with mothers and fathers who use tobacco, in comparison to youths staying with parents who do not use tobacco.

Exhibit 4.9
Tobacco Consumption in Family of the Respondents
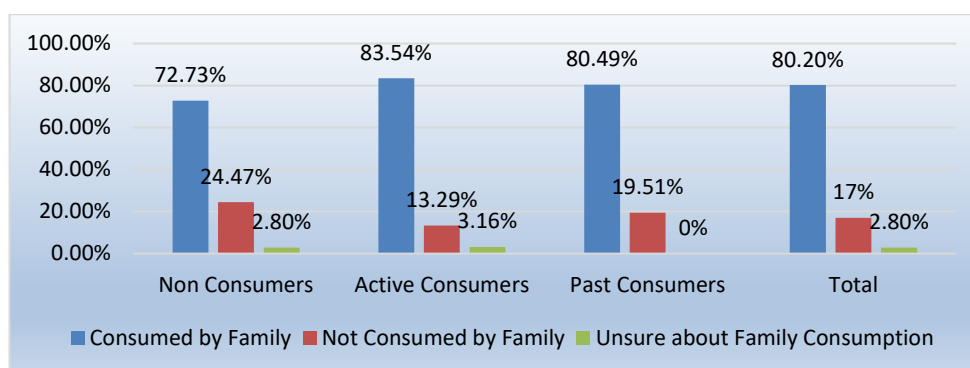
Out of all the respondents around 80.2% have confirmed that one or more member in their family consumes tobacco whereas only 17% of the respondents confirmed that none of their family members consumes tobacco and rest 2.8% of the respondents were unsure about tobacco consumption by any of their family members. Among the Non Tobacco Consumers, 72.73% have confirmed that they do have family members who consume tobacco whereas 24.47% of them confirmed that they do not have members in the family who consumes tobacco. On the other hand, 83.54% of the Active Tobacco Consumers and 80.49% of the Past Tobacco Consumers says that they have members in the family who consumes tobacco and only 13.29% of Active Tobacco Consumers and 19.51% of Past Tobacco Consumers says that they do not have members in the family who consumes tobacco.

Table 4.6
Test of Association between Family Tobacco Consumption & Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	10.145[a]	4	.038	.038
Fisher's Exact Test	9.370			.042
N of Valid Cases	500			
a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 1.15.				
b. The standardized statistic is -1.944.				

The tobacco consumption in the family members of both Active and Past Tobacco Consumers are comparatively higher than the tobacco consumption in the family members of Non Tobacco Consumers. The Fisher's exact test (Table 4.6) also indicates a significant (0.042) p value (i.e. $p < 0.05$), therefore, there is a significant association between tobacco consumption in family and tobacco user category. Thus, it may be concluded that tobacco consumption in the family does have an influence on undergraduate student's choice of tobacco consumption.

Peers can also have a potential negative influence which may promote tobacco use (Mishra et al., 2005). The 357 respondents which included 316 Active Tobacco Consumers and 41 Past Tobacco Consumers were asked to rank up to the order of 3 from the list of persons who influenced or initiated them to tobacco consumption.

Table 4.7
Persons who Influenced or Initiated Tobacco Consumption

Persons	Total Counts			Total Score [(A×3)+(B×2)+(C×1)]
	Rank 1 (A)	Rank 2 (B)	Rank 3 (C)	
Parents	40	26	35	207
Siblings	34	54	32	242
Friends	231	80	26	879
Relatives	13	50	104	243
Common People in the Society	34	131	100	464
Famous People or Celebrities	2	18	60	102

For majority of the respondents it was their 'Friends' (total score 879) who influenced or initiated them to consume tobacco. A substantial number of respondents also ranked the 'Common People in the Society' (total score 464) for their influence regarding tobacco consumption. 'Relatives' (total score 243), 'Siblings' (total score 242) and 'Parents' (total score 207) scored comparatively less and 'Famous People or Celebrities' (total score 102) were the least influence for the respondents to consume tobacco.

The commercial access to tobacco increases its consumption by youth (Forster et al., 2003; Harrison et al., 2000; Klonoff, Landrine & Alcaraz, 1997; Widome et al., 2007) and the easy access to tobacco products acts as a precursor to smoking by

adolescents (Stanton et al., 1993). Tobacco-free policies in campuses have been found to be effective in reducing both firsthand and secondhand tobacco exposure in the U.S. (Seitz et al., 2018). Out of all the 500 respondents, 89.8% said that tobacco products are available within the 100 meter radius around their college campuses. It may also be assumed that most of the remaining 10.2% respondents who said tobacco products are unavailable around 100 meter radius of their campus are non-consumers and thus may be unaware about tobacco availability.

Exhibit 4.10
Availability of Tobacco Products
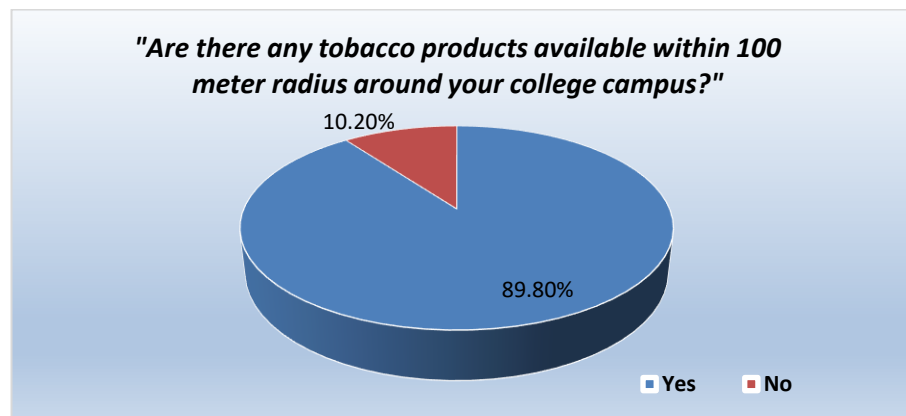
General observations during the survey also exposed that tobacco products are readily available in shops around both the college campuses selected for the survey. This is a violation of Section 6 of COTPA, 2003, according to which sales of tobacco products within 100 yards of educational institutions (EIs) in India is prohibited. A separate study had revealed that tobacco products were sold within a radius of 100 yards in 27 out 100 educational institutes in Delhi (Yadav et al., 2017). Therefore, there is much greater availability of tobacco products in and around college campuses in Mizoram compared to Delhi.

Many studies have confirmed that increased taxes on tobacco products reduce its consumption (John et al., 2010) and can be considered as most cost-effective measure of cessation (Ekpu & Brown, 2015). According to the International Agency for Research on Cancer (2011), the increases in tobacco excise taxes results in decline of overall tobacco use due to the following reasons:

- Inducing current tobacco users to quit.

- Lowering the consumption of tobacco products among continuing users.

- Reducing the initiation and uptake of tobacco use among young people, with a greater impact on the transition to regular use.

Therefore, it is important to understand the general perception among the respondents regarding increase of taxes on tobacco products by the government.

Exhibit 4.11
Perception Regarding Taxes on Tobacco Products
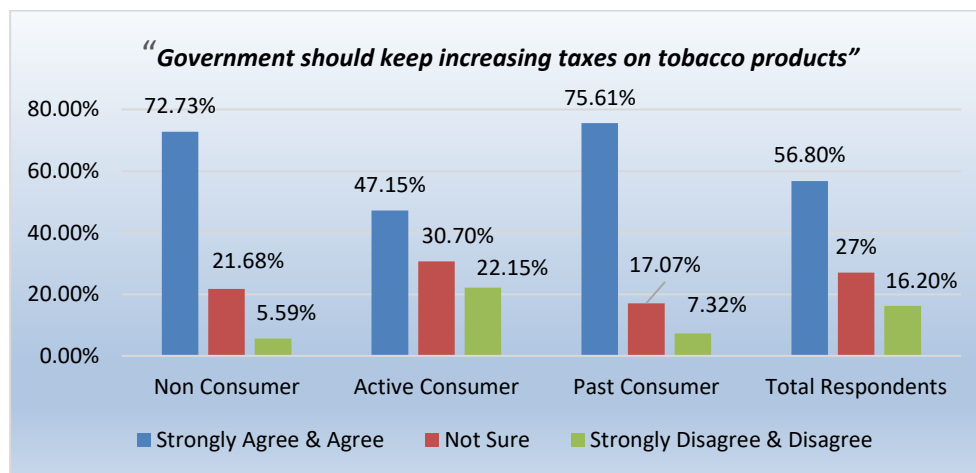
Both the Non-Tobacco Consumers (72.73%) and Past Tobacco Consumers (75.61%) seem to overwhelmingly support the Government's efforts to increase taxes on tobacco products. However, though less compared to non-consumers and past consumers of tobacco products, still, 47.15% of the Active Tobacco Consumers believes that the Government should increase taxes on Tobacco Products. The remaining 30.7% of Active Tobacco Consumers are not sure on this and only 22.15% does not support increase of taxes on tobacco products. The Pearson Chi-Square test also (Table 4.) indicates a significant (0.000) p value (i.e. $p<0.05$), therefore, there is a significant association between the perception regarding increase of taxes on tobacco and tobacco user category.

Table 4.8

Test of Association between Tobacco Tax Perception & Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	38.483[a]	8	.000	.[b]
N of Valid Cases	500			
a. 2 cells (13.3%) have expected count less than 5. The minimum expected count is 1.97.				
b. Cannot be computed because there is insufficient memory.				

The tax on tobacco products in India is among the highest in the world. However, the introduction of GST has increased the complexity of the taxation for tobacco products in India (John, Dauchy & Goodchild, 2019). It has been estimated that after GST the final retail price has increased by only 0.18% for cigarettes, 8.8% for bidi and 6% for smokeless tobacco resulting in a more than 50% fall of tax revenue for states in comparison to the value added tax (VAT) collected before GST (John, Dauchy & Goodchild, 2019).

Smoking has been correlated with various other health risk factors and conditions like gambling, unhealthy lifestyle, drinking etc (Robbins, 2010). Cigarette use has been also regarded as a "gateway drug" and its use may progress to use of marijuana and other illicit drugs (Gray, 1993). Mousawi (2014) found significant positive association between smoking and other substance use behaviours among university students in Iraq. Use of tobacco along with substances like alcohol or marijuana has been identified as influence for continuation of tobacco use (Vu et al., 2018). In particular, smoking and drinking have often been found to be complementary behavioral factors (Banta et al, 2012; Nichter et al., 2006; Romero et al., 2014). Nichter et al., (2006) found that smoking on campus is strongly associated with alcohol consumption and thus suggested that smoking among young men and women is not an independent behavior which needs to be studied in the context of other forms of risk behaviours. Banta et al., (2012) observed that by the age of 18 to 25 years, 47% of male smokers drank alcohol, and this pattern of alcohol and tobacco use increased to >55% through the fifth decade in Cambodia. John (2006) found that addictive behaviours such as alcohol and *pan* consumption were complementary to tobacco consumption in India. Therefore the other addictive behaviours like

alcoholism, substance abuse and gambling among the respondents were explored to understand if there is any pattern or relationship regarding tobacco users and their other addictive behaviours.

Exhibit 4.12
Other Addictive Habits of the Respondents
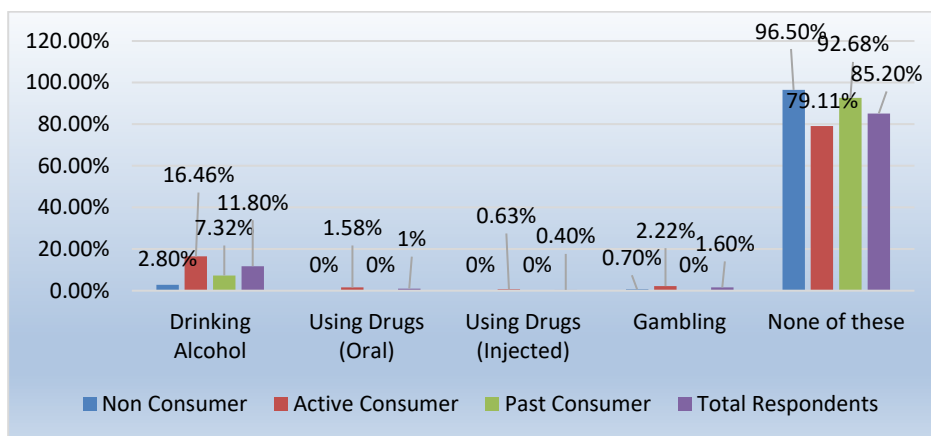
Out of all the respondents, it has been found that 11.8% have some amount of alcohol addiction, only 1% is using drugs orally and 0.4% is using injected drugs and 1.6% is addicted to gambling. However, 85.2% of the respondent also says that they do not have such addictions. Compared to only 2.8% of Non-Tobacco Consumers, there are 16.46% Active Tobacco Consumers who are addicted to alcohol. Also none of the Non-Tobacco Consumers have any drug related addictions compared to Active Tobacco Consumers of whom 1.58% and 0.63% are using drugs in oral and injected forms respectively.

Table 4.9
Test of Association between Other Addictive Habits & Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	26.317[a]	8	.001	.007
Fisher's Exact Test	26.614			.000
N of Valid Cases	500			
a. 9 cells (60.0%) have expected count less than 5. The minimum expected count is .16.				
b. The standardized statistic is -2.890.				

Fisher's Exact test (Table 4.9) indicates a significant (0.000) p value (i.e. p<0.05), therefore, there is a significant association between the other addictive habits and tobacco user category.

There are many socio-cultural factors which shape public opinions and influences people's behaviour. The level of social acceptance for tobacco use varies globally across different cultures. In United States, tobacco use is no longer an acceptable social behaviour (Gilbertson, 2007). However, in China, smoking is part of everyday social life where asking someone not to smoke is seen as impolite and smoking among males is perceived as cool and manly (Kohrman, 2010). In Indonesia, there is a popular idea among people that considers smoking as a "cultural behaviour" (Nichter & Muramoto, 2010). Dhekale et al., (2011) concluded that social customs were the major influencing factor for tobacco consumption in the tribal areas of Maharashtra. For investigating similar societal views, the respondents were asked if they have any objection regarding their partners consuming tobacco. Out of all the respondents, 22.4% agrees, 52% disagrees and 25.6% are not sure to objection towards their partner's tobacco consumption. Among the Past Tobacco Consumers, only 7.32% agrees, 82.93% disagrees and 9.76% are not sure to objection towards their partner's tobacco consumption. Among the Active Tobacco Consumers, 28.8% agrees 41.46% disagrees and 29.75% are not sure to objection towards their partner's tobacco consumption. Among the Non Tobacco Consumers, 12.59% agrees, 66.43% disagrees and 20.98% are not sure to objection towards their partner's tobacco consumption.

Exhibit 4.13
Attitude towards Partner's Tobacco Consumption
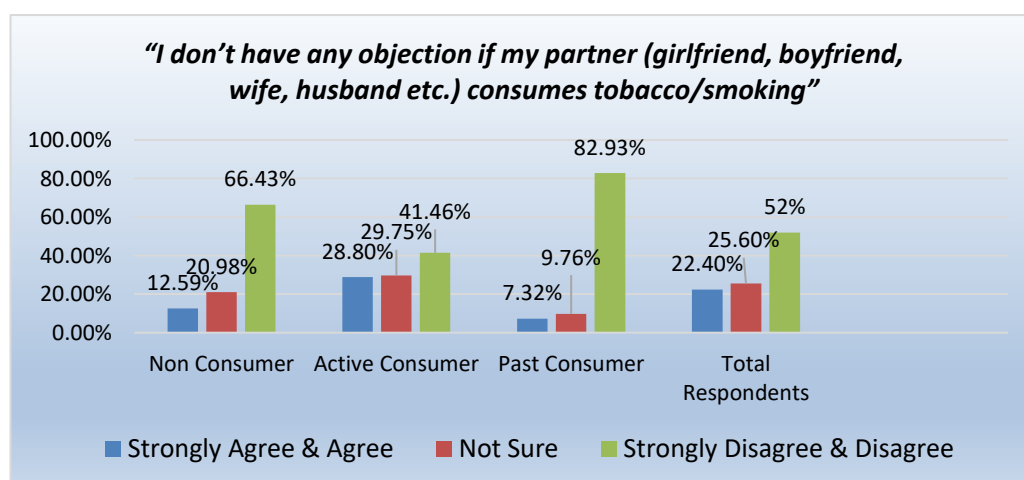
From the above findings it may be concluded that the Past Tobacco Consumers (82.93%) have the strongest objection followed by Non Tobacco Consumers (66.43%) and Active Tobacco Consumers (41.46%) on the matter of tobacco consumption by their partners.

Exhibit 4.14
Attitude towards Younger Generation's Tobacco Consumption
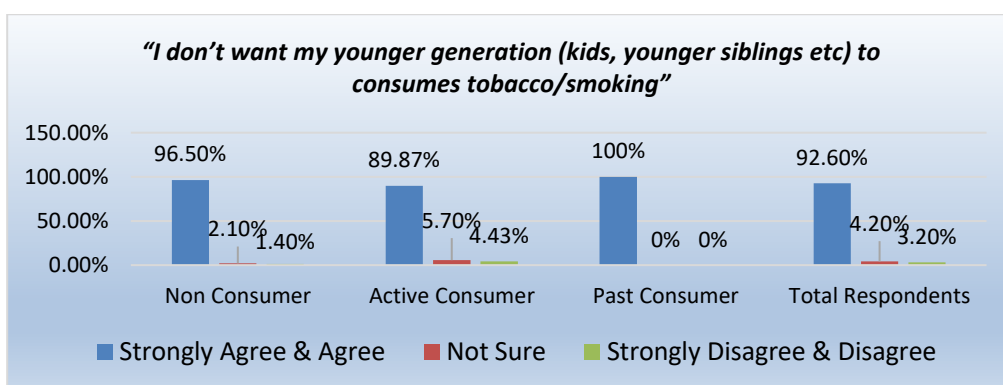
Gilbertson (2007) argued that the society must protect children from the dangers of tobacco use. Therefore, the respondents were asked about the younger generation's tobacco consumption. Out of the total respondents, 92.6% agrees, 3.2% disagrees and 4.2% were not sure whether they do not want their younger generation to consume tobacco. Among the Past Tobacco Consumers, an overwhelming 100% agrees that they do not want their younger generation to consume tobacco. Among the Active Tobacco Consumers, 89.87% agrees, 4.43% disagrees and 5.7% are not sure that they do not want their younger generation to consume tobacco. Among the Non Tobacco Consumers, 96.5% agrees, 1.4% disagrees and 2.1% are not sure that they do not want their younger generation to consume tobacco.

Table 4.10
Test of Association between Perception regarding Younger Generation's Tobacco Consumption & Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	21.428[a]	8	.006	.010
Fisher's Exact Test	18.558			.009
N of Valid Cases	500			
a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .57.				
b. The standardized statistic is .846.				

Fisher's Exact test (Table 4.10) indicates a significant (0.009) p value (i.e. p<0.05), therefore, there is a significant association between the perception regarding younger generation's tobacco consumption and tobacco user category. From the above findings it may be concluded that most of the respondents and particularly all of the Past Tobacco Consumers do not want their younger generation to consume tobacco. The extent of objection or approval of the respondents regarding their partner's and younger generation's tobacco consumption behaviour represents the overall concern regarding people's well-being and acceptance level of tobacco in the student community. Therefore, the students in general and particularly the Non Tobacco Consumers and Past Tobacco Consumers are a slightly more concern about their partners and the younger generation's wellbeing.

Exhibit 4.15
Perception of Smoking as Fashionable
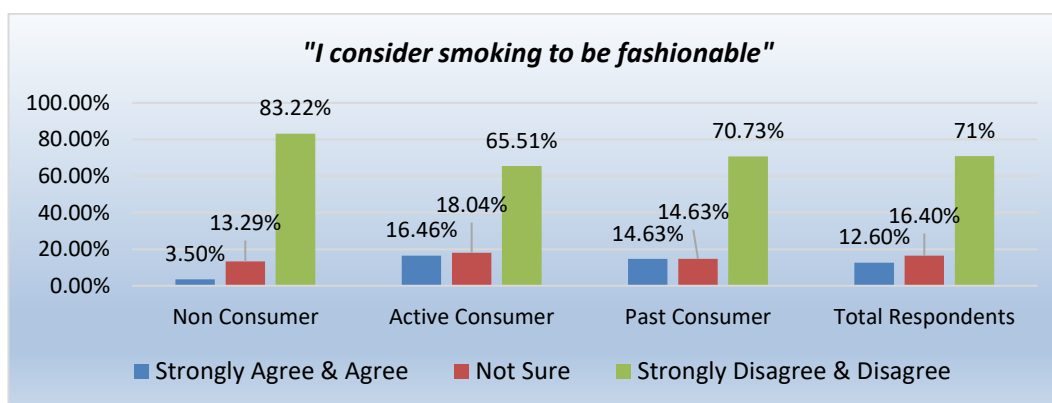
During the survey the respondents were asked whether if they considered smoking to be fashionable or not. Out of all the respondents, 71% does not consider smoking to be fashionable. Only 12.6% agrees that it is fashionable to smoke and the rest 16.4% were not sure about it. Among the Active and Past Tobacco Consumers, 65.51% and 70.73%, respectively, does not consider smoking as fashionable. Only 16.46% of Active Tobacco Consumers and 14.63% of Past Tobacco Consumers considers smoking to be fashionable and the rest 18.04% Active Tobacco Consumers and 14.63% Past Tobacco Consumers were not sure if smoking is fashionable or not. Among the Non Tobacco Consumers, 83.22% does not consider smoking as

fashionable and only 3.5% considers smoking to be fashionable. The rest 13.29% of the Non Tobacco Consumers are not sure if smoking is fashionable or not.

Table 4.11
Test of Association between considering Smoking as Fashionable & Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	55.586[a]	8	.000	.[b]
N of Valid Cases	500			
a. 3 cells (20.0%) have expected count less than 5. The minimum expected count is 1.23.				
b. Cannot be computed because there is insufficient memory.				

The Pearson Chi-Square test (Table 4.11) indicates a significant (0.000) p value (i.e. p<0.05), therefore, there is a significant association between consideration of smoking as fashionable and tobacco user category. On making a general comparison between Non-Tobacco Consumers, Active Tobacco Consumers and Past Tobacco Consumers, we can conclude that smoking is not considered fashionable more by Non-Tobacco Consumers than Active Tobacco Consumers and Past Tobacco Consumers.

Peer pressure is often cited as one of the major reasons for younger age group to succumb to tobacco use and their subsequent addiction to it (Dhekaleet al., 2011; Katulanda et al., 2015; Mishra et al., 2005; Mohan et al., 2005; Ravishankar & Nagarajappa, 2009). Therefore, to explore the extent of peer pressure in the society the respondents were asked if they consider whether it is unfriendly to refuse when others offer them tobacco or to smoke.

Exhibit 4.16
Perception of Unfriendliness regarding Refusal to other's Offering of Tobacco
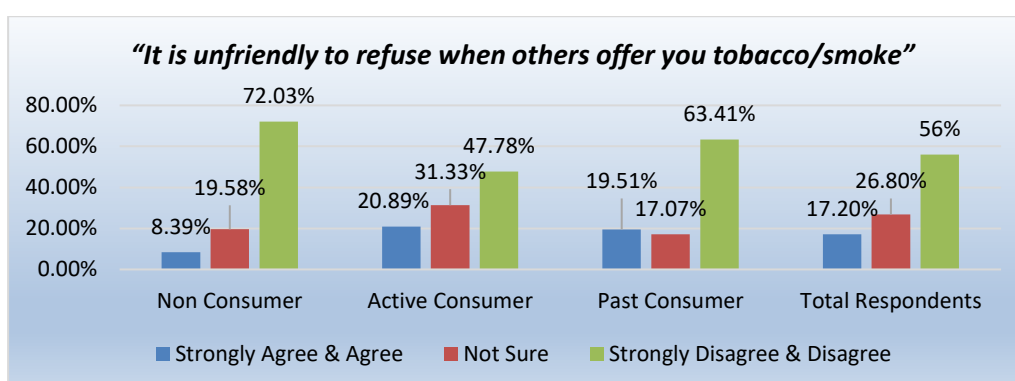
The findings revealed that more than half, that is 56% of the total respondents disagrees that it is unfriendly to refuse when others offers them tobacco or to smoke. However, 17.2% respondents agrees and the rest 26.8% are unsure about this. Among the Past Tobacco Consumers, 19.51% agrees, 63.41% disagrees and 17.07% are not sure whether it is unfriendly to refuse when others offer them tobacco or to smoke. Among the Active Tobacco Consumers, 20.89% agrees, 47.78% disagrees and 31.33% are not sure about the same statement. Among the Non Tobacco Consumers, 8.39% agrees, 72.03% disagrees and 19.58% are not sure whether it is unfriendly to refuse tobacco. Compared to Active Tobacco Consumers (20.89%) and Past Tobacco Consumers (19.51%), less number of Non Tobacco Consumers (8.39%) considers it unfriendly when others offer them tobacco.

Smokers often cite socialization as a reason for their smoking (Romero et al., 2014). The respondents were also asked whether if they consider tobacco/smoking as an easy way to socialize with others. Out of all the respondents, 31.8% agrees, 48.6% disagrees and 19.6% are not sure that consuming tobacco or smoking is an easy way to socialize with others. Among the Past Tobacco Consumers, 24.39% agrees, 53.66% disagrees and 21.95% are not sure that tobacco consumption helps in socializing with others. Among the Active Tobacco Consumers, 41.77% agrees, 39.56% disagrees and 18.67% are not sure that tobacco consumption helps in socializing. However, among the Non Tobacco Consumers, only 11.89% agrees, 67.13% disagrees, and 20.98% are not sure that consuming tobacco helps in socializing with others.

Exhibit 4.17
Perception regarding Tobacco as a Way to Socialize with Others
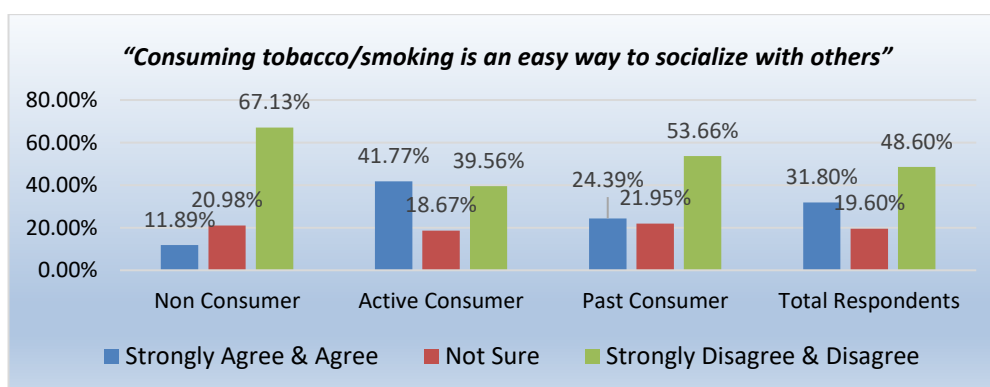
Therefore, there is a sharp contrast between Active Tobacco Consumers and Non Tobacco Consumers on how they consider tobacco consuming as a way to socialize with others. The majority of the Active Tobacco Consumers (41.77%) agrees and an overwhelming majority of the Non-Tobacco Consumers disagrees that Consuming tobacco/smoking helps in socializing with others.

The respondents were asked regarding their opinion on whether consuming tobacco or smoking is generally disapproved by people in public places. Out of the total respondents 52% agrees, 19.4% disagrees and 28.6% are not sure that consuming tobacco or smoking is generally disapproved by people in public places. Similarly among the Past Tobacco Consumers, 51.22% agrees, 17.07% disagrees and 31.71% are not sure about general disapproval of tobacco consumption in public places. Also among the Active Tobacco Consumers, 55.38% agrees, 18.35% disagrees and 26.26% are not sure about the disapproval of tobacco consumption in public places. Among the Non Tobacco Consumers, 44.76% agrees, 22.38% disagrees and 32.87% are not sure that tobacco consumption is generally disapproved in public places.

Exhibit 4.18
Perception regarding Tobacco Consumption in Public Places
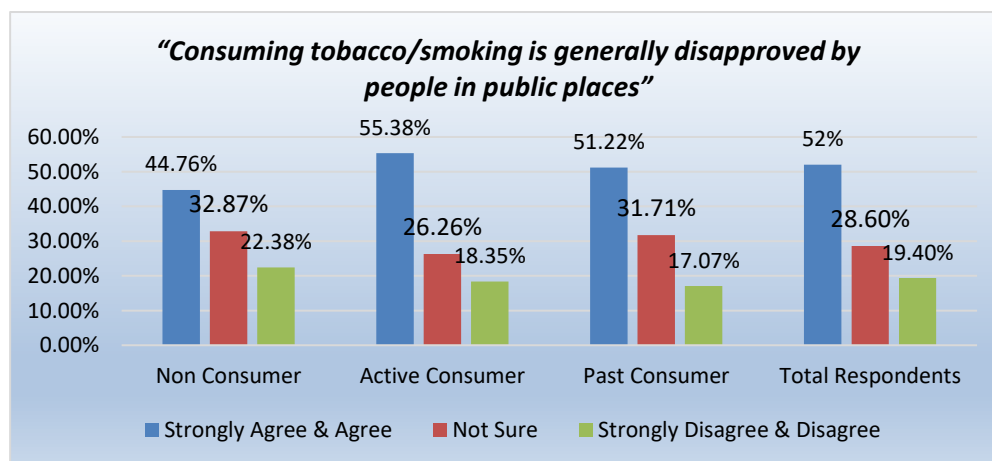
It may be concluded here that across Active Tobacco Consumers, Past Tobacco Consumers and Non Tobacco Consumers, majority of the respondents agrees that tobacco consumption is generally disapproved by people in public places. However, it may also be pointed out that across these segments, more than a quarter of

respondents are not quite sure if people in general disapprove tobacco consumption or smoking in public places.

The extent of exposure to different type of anti-tobacco messages and campaigns can reveal various aspects such as the effectiveness of such messages in reaching out to the target consumers and the choice of media by the target consumers. The respondents were asked to select the types of anti-tobacco campaigns they were exposed to from the following list:

- Anti-tobacco information and messages in newspapers and magazines
- Anti-tobacco information and messages on radio
- Anti-tobacco information and messages on internet
- Anti-tobacco information on television and in movies
- Health warnings on packets of cigarettes and other tobacco products
- Prohibitory signboards and stickers about smoking in common public places
- Prohibitory signboards and stickers about smoking and tobacco use inside the college campuses
- Visual health warnings about tobacco use in common public place

Exhibit 4.19
Respondent's Exposure to Anti-Tobacco Campaigns
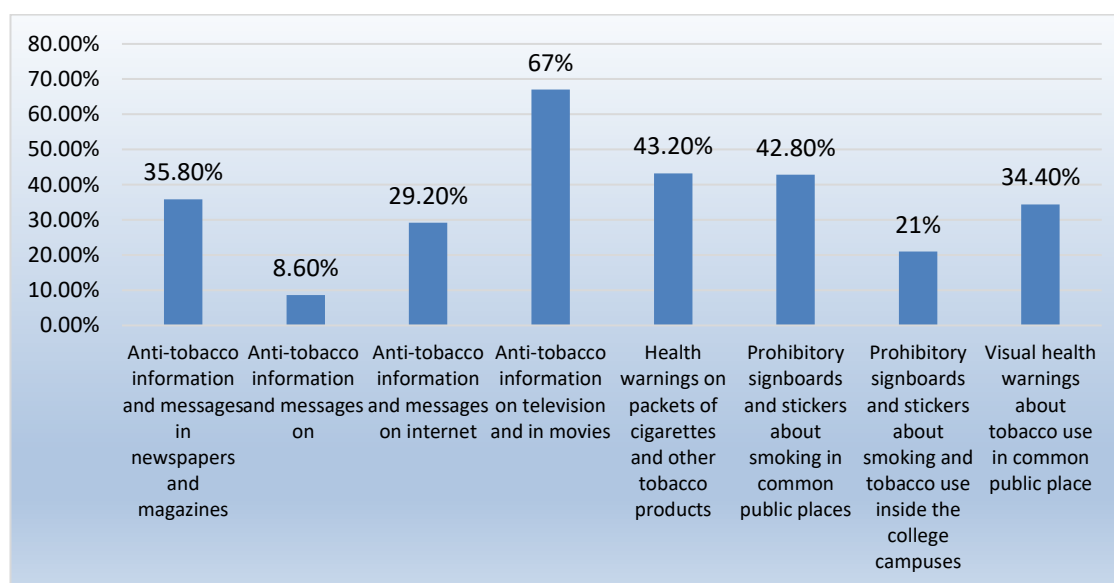
Out of all the respondents, 67% have been exposed to anti-tobacco information on television and movies. This is followed by 43.2% respondents who have exposed to the health warnings on packets of cigarettes and other tobacco products. This again is closely followed by 42.8% respondents who were exposed to the prohibitory signboards and stickers about smoking in common public places. The least exposed campaigns are anti-tobacco information and messages on radio (8.6%). In addition, comparatively a smaller number of students (21%) were exposed to the prohibitory signboards and stickers about smoking and tobacco use inside the college campuses.

Table 4.12
Test of Association between Campaign Exposures & Tobacco User Category

Campaign Type	Tests	Value	df	Asymp.Sig. (2-sided)	Exact Sig. (2-sided)
Anti-tobacco information and messages in newspapers and magazines	Pearson Chi-Square	4.594	2	.101	.103
Anti-tobacco information and messages on radio	Pearson Chi-Square	1.832	2	.400	.425
Anti-tobacco information and messages on internet	Pearson Chi-Square	.237	2	.888	.893
Anti-tobacco information on television and in movies	Fisher's Exact Test	4.965			.307
Health warnings on packets of cigarettes and other tobacco products	Fisher's Exact Test	18.758			.000
Prohibitory signboards and stickers about smoking in common public places	Pearson Chi-Square	.534	2	.766	.767
Prohibitory signboards and stickers about smoking and tobacco use inside the college campuses	Pearson Chi-Square	.889	2	.641	.657
Visual health warnings about tobacco use in common public place	Pearson Chi-Square	.812	2	.666	.676

The Table 4.12 shows that there is no significant association between exposure to various types of anti-tobacco messages and media campaigns and tobacco user category except for the exposure to the health warnings on packets of cigarettes and other tobacco products (where Fisher's Exact test shows a significant p value of .000 < .05). It may be concluded that TV and movies are the best platform where

respondents are mostly exposed to anti-tobacco campaigns and messages. However, the respondents were not much exposed to anti-tobacco campaigns and messages on radio. Moreover, it seems that the prohibitory signboards and stickers about smoking and tobacco use inside the college campuses were not much noticeable to the students.

The respondents were also asked about some health related questions on tobacco to understand their level of health awareness related to tobacco use.

Exhibit 4.20
Perception about Tobacco's effects on Health
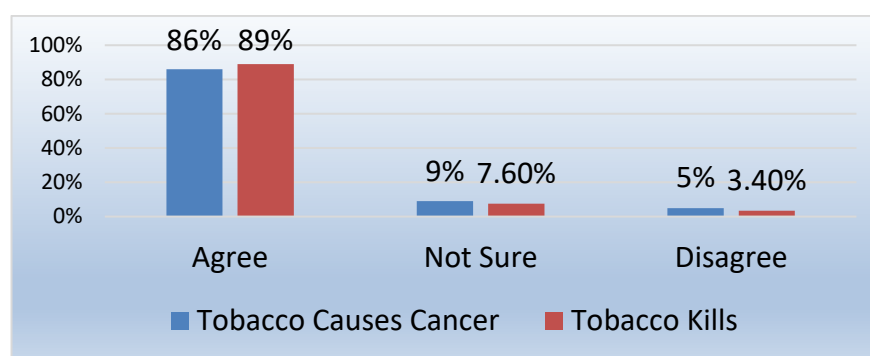
86% of the respondents agree that using tobacco is likely to increase their chances of getting cancer and 89% of the respondents agree that tobacco or smoking kills. Therefore, an overwhelming majority of the respondents seems to be quite aware about the adverse effects of tobacco on their health and wellbeing. The GATS 2016-2017 findings also revealed that 96.7% respondents believed tobacco use causes serious illness (Ministry of Health & Family Welfare, Government of India, 2018). Therefore, it may be assumed that the society in general in Mizoram is aware about the negative consequences of tobacco on people's health.

4.3 Consumer Decision Making regarding Tobacco Consumption

The consumer decision making is central to consumer behaviour regarding any given consumption. Within the broad ambit of consumer behaviour, the consumption of tobacco may be regarded as an Injurious Consumption and such consumption decisions have negative consequences for the long-term well-being of the consumers

(Hawkins, Mothersbaugh & Mookerjee, 2010). By exploring the decision making process adopted by the undergraduate students regarding tobacco consumption, various factors can be analysed that contributes towards such behaviour.

4.3.1 Psychological Factors for Tobacco Consumption

There are a number of factors or impulses that motivates or triggers tobacco consumers to consume tobacco. The respondents were asked to rank in order up to three from the following list of motivating factors for tobacco consumption:

- Displays of advertisements related to tobacco products
- The physical sight of others consuming tobacco/smoking
- The sight of tobacco products being displayed at the shops
- The depiction of someone consuming tobacco in movies or TV shows
- Mention of tobacco products or any associated words
- The conscious thought of personal possession of tobacco products

Table 4.13
Motivations and Impulses for Tobacco Consumption

Motivations for Tobacco Consumption	Active Tobacco Consumers				Past Tobacco Consumers			
	Total Counts			Total Score [(A×3) +(B×2) +(C×1)]	Total Counts			Total Score [(A×3) +(B×2) +(C×1)]
	Rank 1 (A)	Rank 2 (B)	Rank 3 (C)		Rank 1 (A)	Rank 2 (B)	Rank 3 (C)	
Displays of advertisements related to tobacco products	45	23	42	223	4	5	2	24
The physical sight of others consuming tobacco/smoking	86	82	51	473	16	9	5	71
The sight of tobacco products being displayed at the shops	45	52	59	298	2	9	9	33
The depiction of someone consuming tobacco in movies or TV shows	31	68	54	283	10	6	10	52
The mention of tobacco products or any words associated with it by someone or somewhere	19	22	38	139	1	2	5	12
The conscious thought of personal possession of tobacco products	93	66	72	483	9	10	10	57

The most common factor for consumption motivation among tobacco consumers has been found to be "*the conscious thought of personal possession of tobacco products*", which is closely followed by "*the physical sight of others consuming tobacco/smoking*". "*The sight of tobacco products being displayed at the shops*", "*The depiction of someone consuming tobacco in movies or TV shows*", and "*Displays of advertisements related to tobacco products*" were other relevant factors that motivates tobacco consumption among students.

The way tobacco products are packaged and branded also attracts consumers to consume tobacco products (Australia India Institute, 2012; Moodie et al., 2012). The restrictive marketing environment imposed by many countries often forces tobacco companies to promote their products using attractive packaging (Wakefield et al, 2002; Freeman, Chapman & Rimmer, 2008). Tobacco products are considered as "badge products" having high degree of social visibility and consumers often tend to identify with the brand image expressed through their attractive designs and packaging (WHO, 2016). In 2012, Australia became the first country to make plain packing of tobacco products as mandatory (Australia India Institute, 2012; Moodie et al., 2012, WHO, 2016). According to Articles 11 and 13 of WHO FCTC, plain packaging reduces the attractiveness of tobacco products thereby eliminating the effects of packaging as a form of advertising and promotion and increases the notice ability and effectiveness of health warnings on the packages (WHO, 2016).

Exhibit 4.21
Role of Packaging and Brand Name towards Tobacco Consumption
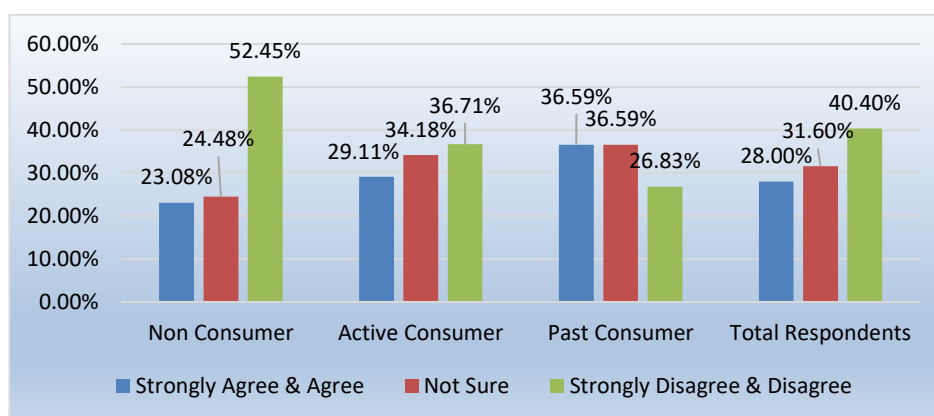
Out of all the respondents, 28% agrees, 40.4% disagrees and 31.6% are not sure that the attractive design and brand name displayed on packets of tobacco products increases their desire to smoke or consume tobacco. Among Non-Tobacco Consumers, 23.08% agrees, 52.45% disagrees and 24.48% are not sure about the same. Among the Active Tobacco Consumers, 29.11% agrees, 36.71% disagrees and 34.18% are not sure about the same. Among the Past Tobacco Consumers, 36.59% agrees, 26.83% disagrees and 36.59% are not sure that the attractive design and brand name of tobacco products increases their desire to consume tobacco products.

Table 4.14
Test of Association between Increased Consumption Desire due to Attractive Tobacco Packaging & Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	32.625[a]	8	.000	.[b]
N of Valid Cases	500			
a. 2 cells (13.3%) have expected count less than 5. The minimum expected count is 2.95.				
b. Cannot be computed because there is insufficient memory.				

Pearson Chi-Square test indicates a significant (0.000) p value (i.e. p<0.05), therefore, there is a significant association between increased consumption desire due to attractive tobacco packaging and tobacco user category. It may be concluded from the above finding that for many Past Tobacco Consumers (36.59%) and also for Active Tobacco Consumers (29.11%), the attractive packaging, design and display of brand name on tobacco products to certain extent consciously increases their desire to consume tobacco. However at the same time, it may also be added that among the Active Tobacco Consumers, opinion regarding the attractiveness of packaging and branding in increasing their desire to consume tobacco seems to be somewhat divided. 29.11% of the Active Tobacco Consumers agrees that the attractiveness of packaging and branding increases their desire for tobacco consumption whereas 36.71% disagrees and 34.18% are not sure about the same. It may be also a case where attractiveness of packaging subconsciously increases the desire for those Active Tobacco Consumers who are not sure. Therefore, it may be concluded that there exists a large number of young Active Tobacco Consumers who are attracted by the packaging and branding of tobacco products.

The respondents were asked to associate words with tobacco such as "*Pleasurable*", "*Harmful*", "*Addictive*", "*Annoying*" and any such words that come to their mind. As shown in Exhibit 4.22, more than half of the respondents (51%) have associated the word "*Addictive*", followed by "*Harmful*" (31.6%) with Tobacco. Similarly, most of the Non-Consumers have associated "Harmful" (48.95%), followed by "Addictive" (32.17%), followed by "Annoying" (13.99%). On the other hand, most of the Active Consumers finds Tobacco to be "Addictive" (60.76%). In addition a substantial Active Tobacco Consumers seems to have been aware that tobacco is "Harmful" (22.78%) but at the same time 11.39% of Active Tobacco Consumers prefers to associate the word "Pleasurable" with tobacco. Among the Past Consumers we find that most of them consider tobacco to be "Addictive" (41.46%) and "Harmful" (39.02%) and around 12.2% of them also consider it as "Annoying".

Exhibit 4.22
Words Associated with Tobacco in the Minds of Respondents
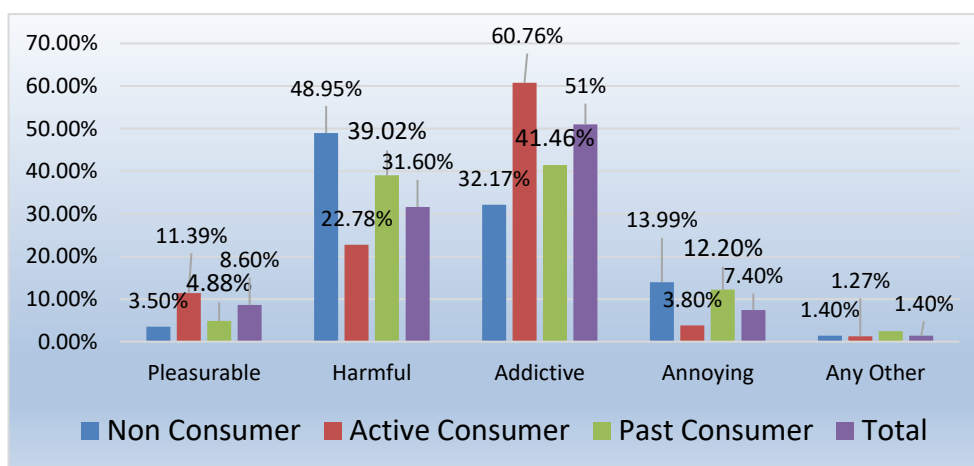
Therefore it may be concluded that the Non Tobacco Consumers and Active Tobacco Consumers have a very different perception when they think about the word Tobacco.

The cost of any product is one of the most important factors which is considered by consumers before they make the purchase decision (Albari & Safitri, 2018; Kenesei & Todd, 2004). Costs can be classified into two groups namely, monetary and non-monetary costs. The non-monetary cost may include things like the time, physical

effort, psychological discomfort etc. incurred by the consumer during and after the purchase (Petrick, 2002). The cost dimension for tobacco consumption can be broaden to include financial cost attributable to healthcare costs and productivity losses caused by tobacco use (Gilbertson, 2007). The cost of smoking can be classified into direct, indirect and intangible costs, where direct and indirect costs are quantifiable, whereas costs such as loss of life and illness caused by tobacco are intangible costs and difficult to quantify (Ekpu & Brown, 2015). One of the objectives of government of India to increase taxes on tobacco is to increase its monetary cost to discourage its consumption. Due to this the monetary cost of tobacco has consistently increased over the years. In one survey conducted among 2,500 people above 18 years of age in the eight districts of Mizoram, 84.2% admitted that their expenditure on cigarettes was a financial burden (The Indian Express, May 27, 2010). This was in spite of the fact that in Mizoram, contraband tobacco products especially cigarettes sourced from neighboring Myanmar are freely available and since such products are not taxed they are considerably cheaper than the Indian cigarettes. Therefore, the general perception of the respondents regarding cost of tobacco consumption was sought during the survey.

Exhibit 4.23
Perception regarding Tobacco Cost

"The monetary cost of consuming tobacco/smoking is very high"

■ Strongly Agree & Agree ■ Not Sure ■ Strongly Disagree & Disagree
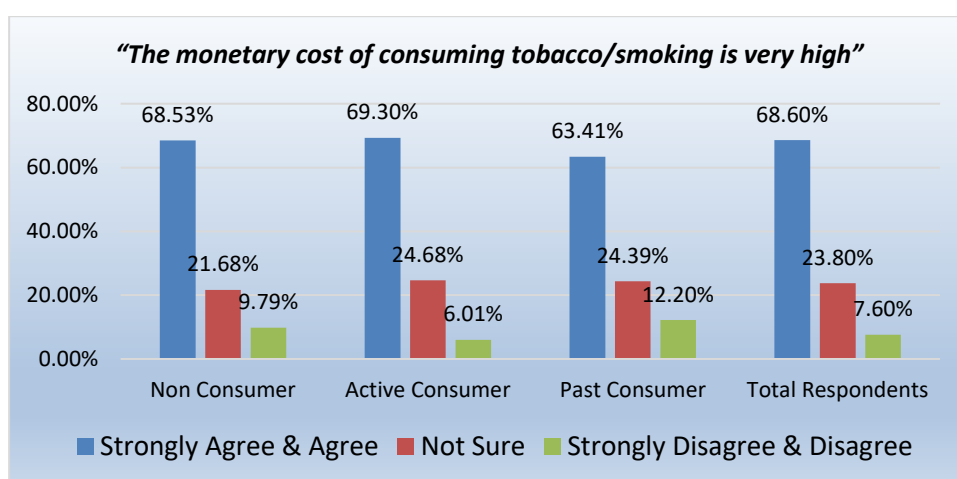
The respondents were asked if they agree with the statement that the monetary cost of consuming tobacco is very high. 68.6% of the respondents agree, 7.6% disagrees and 23.8% are not sure that the monetary cost of consuming tobacco is high. Further,

68.53% of the Non Tobacco Consumers, 69.3% of the Active Tobacco Consumers and 63.41% of the Past Tobacco Consumers agrees whereas 9.79% of Non-Tobacco Consumers, 6.01% Active Tobacco Consumers and 12.2% of Past Tobacco Consumers disagrees that cost of tobacco consumption is high. The rest 21.68% of Non-Tobacco Consumers, 24.68% of Active Tobacco Consumers and 24.39% of Past Tobacco Consumers are not sure about the same. Therefore, it appears that though most of the respondents consider the cost of tobacco consumption to be high. However, the percentage of respondents who does not consider the cost of tobacco consumption to be very high is highest among Past Tobacco Consumers (12.2%) and lowest among Active Tobacco Consumers (6.01%).

Table 4.15
Test of Association between Perception of Tobacco Cost & Tobacco User Category

Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	20.271[a]	8	.009	.[b]
Fisher's Exact Test	.[b]			.[b]
N of Valid Cases	500			
a. 3 cells (20.0%) have expected count less than 5. The minimum expected count is 1.39.				
b. Cannot be computed because there is insufficient memory.				
c. The standardized statistic is 1.140.				

There is also a significant association (Table 4.15) between perception of cost of consuming tobacco and tobacco user category as the p value (Pearson Chi-Square test) is 0.009 (i.e. p<.05). So, it may be concluded that perception regarding the cost of tobacco consumption is somewhat different for the consumers, non-consumers and past-consumers of tobacco among the respondents.

The personality and attitudes of a person affects his or her consumption behaviour to a large extent (Onu, Emmanuel, & Garvey, 2014). The respondents were asked about their attitude regarding tobacco consumption as a matter of personal choice and freedom. Out of the total respondents, 47.4% agrees, 30.8% disagrees and 21.8% are not sure whether consuming tobacco or smoking is their personal choice which others have no right to object. Among the Past Tobacco Consumers, 41.46% agrees, 36.59% disagrees and 21.95% are not sure to consider tobacco consumption as their personal choice. Among the Active Tobacco Consumers, 57.91% agrees, 20.57%

disagrees and 21.52% are not sure about tobacco consumption being a matter of their personal choice. However among the Non Tobacco Consumers, 25.87% agrees, 51.75% disagrees and 22.38% are not sure about the same.

Exhibit 4.24
Attitude towards Tobacco Consumption as a Personal Choice
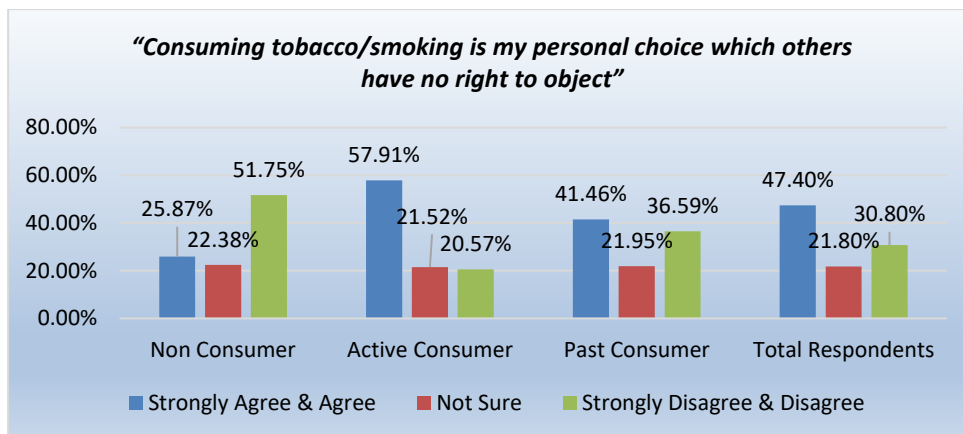
A sharp contrast can be observed between Active Tobacco Consumers and Non Tobacco Consumers in their attitude regarding tobacco consumption being a matter of personal choice. It is observed that majority of the Active Tobacco Consumers (57.91%) agrees and majority of the Non Tobacco Consumers (51.75%) disagree that consuming tobacco or smoking is their personal choice which others have no right to object.

It is important to know the self-image students form about them when they imagine themselves as tobacco consumers. In one study among college students of U.S., male smokers were described as "looking masculine or manly," "looking like a tough guy," and "giving off a bad boy image" (Nichter et al., 2006). Similarly, male college students from Karnataka thought that smoking a cigarette enhanced one's manliness (Nichter, Nichter & Sickle, 2004). To understand self-image of the respondents, they were asked if they considers consuming tobacco makes them look cool and matured in front of others. Out of all the respondents, 11% agrees but 71.6% disagrees, and 17.4% are not sure about this. Among the Past Tobacco Consumers, 4.88% agrees but 78.05% disagrees and 17.07% are not sure that tobacco consumption makes them look cool or mature. Among the Active Tobacco Consumers, 14.56% agrees but

65.51% disagrees and 19.94% are not sure that consuming tobacco makes them look cool and mature. Among the Non Tobacco Consumers, only 4.9% agrees but 83.22% disagrees and 11.89% are not sure about the same.

Exhibit 4.25
Perception of Self-image regarding Tobacco Consumption by Respondents
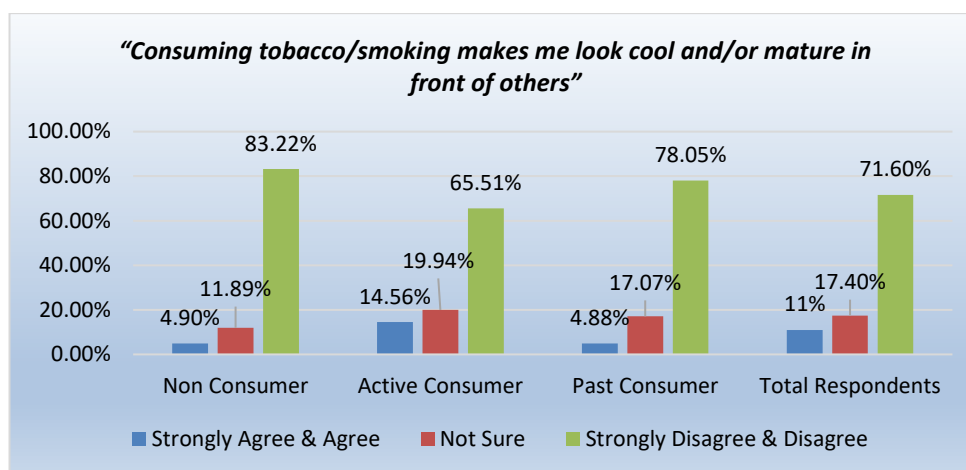
Therefore, it is observed that most of the respondents do not agree that consuming tobacco makes them look cool and mature. However, this attitude is stronger among Non-Tobacco Consumers (83.22%) compared to the Active Tobacco Consumers (65.51%).

4.3.2 Decision Making Process by Tobacco Consumers

The decision making process for consumption can be explained using the "five-stage model of the consumer buying process" which involves five steps that consumers move through during their purchase of a particular product or service (Stankevich, 2017). These five stages include Needs recognition, Information search, Evaluation of alternatives, Purchase and Post-purchase behavior. The first three stages which includes needs recognition, information search (pre-purchase search) and evaluation of alternatives for tobacco consumption by undergraduate consumers is explained here and the last two stages of purchase and post-purchase behavior has been discussed in the next section. As discussed earlier, the consumer decision-making for tobacco by undergraduate tobacco consumers is first affected by the external influences of marketing by tobacco companies and sellers and the overall socio-

cultural environment. The need recognition for tobacco consumption by undergraduate tobacco consumers is affected by various motivating factors like the conscious thought of tobacco possession, sight of others consuming tobacco, sight of tobacco products displayed in shops, tobacco use depicted in movies or TV shows and attractive packaging of tobacco products. Tobacco consumption in family, the perception of tobacco as addictive and pleasurable by many tobacco consumers and the strong pro-tobacco attitude by the undergraduate tobacco consumers also determines their realization of need, pre-purchase search and evaluation of alternatives about tobacco products. Easy availability, flavor and feel and low price are some of the important factors that are being considered by the undergraduate tobacco consumers while evaluating the various alternatives. The experience from these evaluations further strengthens the psychological field consisting motivation, perception, learning, personality and attitude.

4.4 Post Decision Behaviour of Tobacco Consumers

The post decision behavior of undergraduate tobacco consumers includes the purchase and consumption of particular tobacco products by the respondents and the post purchase evaluation about the various aspects of tobacco consumption by them. The post-decision behavior of the undergraduate tobacco consumers reveals how they purchase and consume tobacco and their feelings related to consumption experience which are important factors that determines their future intentions to continue or quit tobacco.

4.4.1 Purchase & Consumption Pattern of Tobacco Consumers

The age of initiation is an important determinant that shows how early the students were exposed to tobacco and tobacco related factors that influence their consumption. In India, the most susceptible age of tobacco initiation is between 15 and 24 years (National Sample Survey Organization, 1998). According to GATS 2016-2017, the mean age of initiating to tobacco consumption in Mizoram is 17.8 years, which has increased from 17.4 years revealed during GATS 2009-2010 (Ministry of Health & Family Welfare, Government of India, 2018).

Table 4.16
Age of Initiation of Tobacco Consumers

Initiation Age (A)	Active Consumers		Past Consumers		Total
	Frequency (B)	(A) × (B)	Frequency (C)	(A) × (C)	(A×B) + (A×C)
2	1	2	0	0	2
5	3	15	0	0	15
6	3	18	0	0	18
7	1	7	1	7	14
8	1	8	3	24	32
9	5	45	0	0	45
10	4	40	2	20	60
11	4	44	1	11	55
12	17	204	4	48	252
13	14	182	11	143	325
14	25	350	4	56	406
15	35	525	1	15	540
16	54	864	7	112	976
17	47	799	3	51	850
18	55	990	2	36	1026
19	23	437	1	19	456
20	18	360	0	0	360
21	2	42	1	21	63
22	3	66	0	0	66
23	1	23	0	0	23
Total	**316**	**5021**	**41**	**563**	**5584**
Average Age of Initiation	**(5021/316) = 15.89 Years**		**(563/41) = 13.73 Years**		**(5584/357) = 15.64 Years**

In the present study the average age of tobacco initiation among Active Tobacco Consumers is 15.89 years, which is much lower compared to the GATS 2016-2017 findings. Moreover, the average age of initiation to tobacco among the Past Tobacco Consumers is 13.73 years which is much lower compared to the Active Tobacco Consumers.

The daily expenditure on tobacco products has vital implications on consumer behaviour regarding tobacco consumption and financial consequences for the user and his or her family. Lal et al., (2015) concluded that there is substantial expenditure on tobacco products by underage tobacco users in India and pointed that though Mizoram has the highest daily tobacco users, but Meghalaya has highest average daily spending on tobacco products. In the present study, it has been found that 80.06% of the Active Tobacco Consumers spend ₹30 or less on daily basis for

purchasing tobacco products. This is followed by 13.61% of consumers who spends ₹31 to ₹50. Only a small section of consumers (6.33%) were found to be spending more than ₹50 daily on tobacco products. There are 26.58% consumers who spend less than ₹10 and 29.11% consumers who spend ₹10 to ₹20 on tobacco products. In case of smokers, these consumers are most likely to buy cigarettes in loose quantities. The heavy smokers out of the 24.37% consumers who spend ₹21 to ₹30 are also likely to consume contraband cigarettes sourced through Myanmar.

Exhibit 4.26
Daily Expenditure on Tobacco Products by Tobacco Consumers
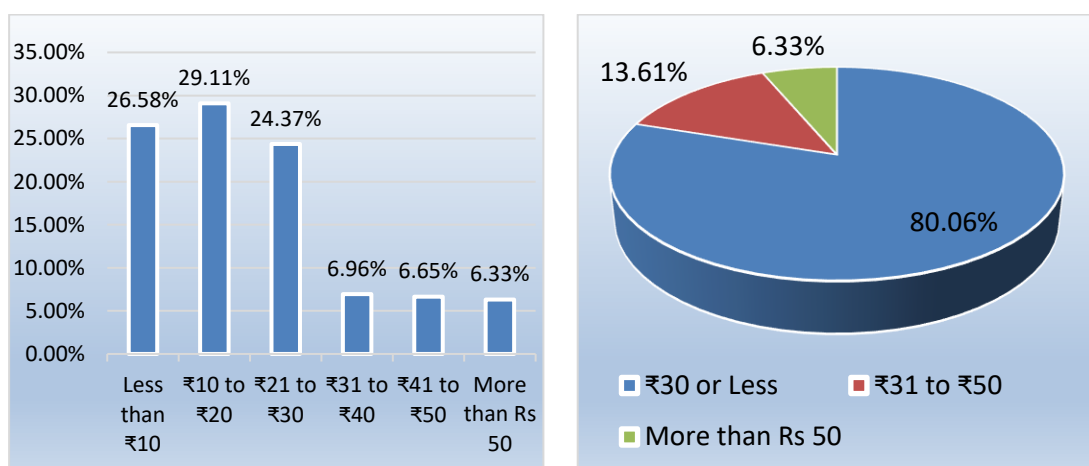
Based on these findings it may be assumed that most smokers who smoke contraband cigarettes of Myanmar origin are buying one full pack of cigarette as these are presently available at ₹30 per pack. The smokers of Indian branded cigarettes may preferably purchase cigarettes in loose quantity as most Indian branded cigarettes presently costs more than ₹30. In case of other forms of tobacco users like most *Guthkha* consumers may buy 2 to 3 packets daily as these products are sold at the local market at ₹10 to ₹15 per packet. The users of other remaining forms of tobacco products which are relatively cheaper than cigarettes and *Gutkha,* may be considered by heavy users and they may spend more than ₹10 daily on such tobacco products.

In India, tobacco is consumed in both smoked and smokeless forms which includes cigarettes, bidis and various forms of smokeless tobacco (SLT) (Mohan et al, 2018; Singh & Ladusingh, 2014). These range of tobacco products are available at different

price points and are targeted at populations with different socioeconomic and demographic profiles (John et al., 2010; Lal et al., 2015). India is also having the largest number of SLT consumers in the world (US NCI & WHO, 2016). The reasons for increased use of SLT in India can be attributed to a number of factors like no requirement of combustion, avoidance of secondhand smoke, less visibility, easy availability (Mishra et al., 2005) and affordability (Priya, 2013), perception of smoking as taboo for women and children (Priya & Lando, 2014), and even due to extensive anti-smoking campaigns (Mohan & Lando, 2016) and awareness of harms of smoking (Mishra et al., 2005; Mohan & Lando, 2016). There is a wide variety of tobacco products available and consumed in Mizoram. Table 4.17 shows the different types of tobacco products consumed by the Active Tobacco Consumers among the respondents. Indian branded cigarettes are the most popular type of tobacco product consumed by the students (34.49%) closely followed by Gutkha (31.04%) and Zarda (24.4%). There are also lesser yet substantial users of Zial (17.6%), Burmese Cigarettes (15.82%), Khaini (11.07%) and Tuibur (10.13%).

Exhibit 4.27
Type of Tobacco Products Consumed by Active Tobacco Consumers
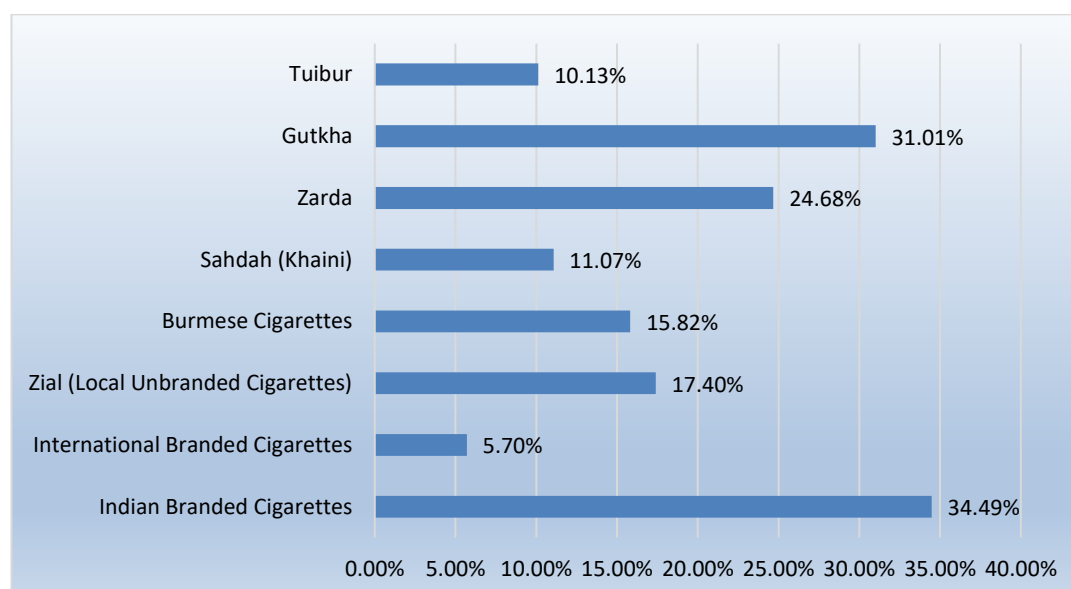
Table 4.17
Gender-wise Consumption of Tobacco Products

Type	Males	Females	Total
Indian Branded Cigarettes	51.3%	13.8%	34.49%
International Branded Cigarettes	8.6%	2.5%	5.7%
Zial (Local Unbranded Cigarettes)	27.4%	5.6%	17.4%
Burmese Cigarettes	28.4%	1.3%	15.82%
Sahdah (Khaini)	5.6%	16.9%	11.07%
Zarda	18.3%	31.9%	24.68%
Gutkha	10.2%	57.5%	31.01%
Tuibur	4.1%	16.9%	10.13%

The gender wise distribution of tobacco products shows that smokers which includes users of Indian Branded Cigarettes, International Branded Cigarettes, Zial (Local Unbranded Cigarettes) and Burmese Cigarettes are higher among male respondents whereas smokeless tobacco users which includes users of Sahdah (Khaini), Zarda, Gutkha and Tuibur are higher among female respondents. These findings corroborates with other findings (GATS 2016-2017; Singh & Ladusingh, 2014), where, there are more smokers among men (54.1%) compared to women (14.3%) and more smokeless tobacco users among women (46%) compared to men (21.3%) in Mizoram (Ministry of Health & Family Welfare, Government of India, 2018).

Table 4.18
Test of Significance of Difference Between Genders & Tobacco Types

Type of Tobacco Products	Mann-Whitney U	Z	Asymp. Sig. (2-tailed)
Indian Branded Cigarettes	9847.000	-7.408	.000
International Branded Cigarettes	14794.000	-2.444	.015
Zial (Local unbranded cigarettes)	12326.500	-5.362	.000
Burmese Cigarettes	11477.000	-6.913	.000
Sahdah (Khaini)	13980.500	-3.435	.001
Zarda	13616.500	-2.973	.003
Gutkha	8298.000	-9.575	.000
Tuibur	13740.500	-4.043	.000
a. Grouping Variable: Gender of the Respondent			

There are also significant associations (Table 4.18) between genders and the type of tobacco products consumed across all the different types of tobacco products consumed by the undergraduate students in Mizoram.

More than half (57.28%) of the active tobacco consumers prefers to purchase tobacco products in single units. There are also substantial tobacco users who prefer to

purchase tobacco products in one full packet at a time. There are very less tobacco consumers who purchases tobacco products in bulk quantity.

Exhibit 4.28
Quantity of Tobacco Products Purchased
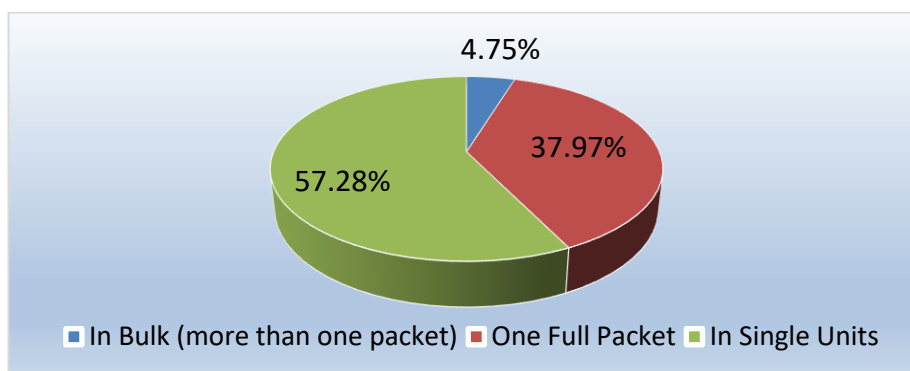
A large percentage of consumers buying in single units may be due to two factors. Firstly, since the tobacco products are available easily, the students might not feel the need to store them for future consumption. Secondly, the option of buying in single units makes the tobacco products much more affordable for the students.

A study by Lal et al., (2015) observed frequent daily consumption of tobacco products by different age groups in India and among 15-17 age group, Mizoram has highest proportion of daily cigarette smokers (7%). The primary data reveals that majority (63.61%) among the 316 Active Tobacco Consumers, consumes tobacco every day. The rest 16.46% of the Active Tobacco Consumers consumes tobacco 3 to 4 days a week and 19.94% of them consume tobacco occasionally.

Exhibit 4.29
Frequency of Tobacco Consumption
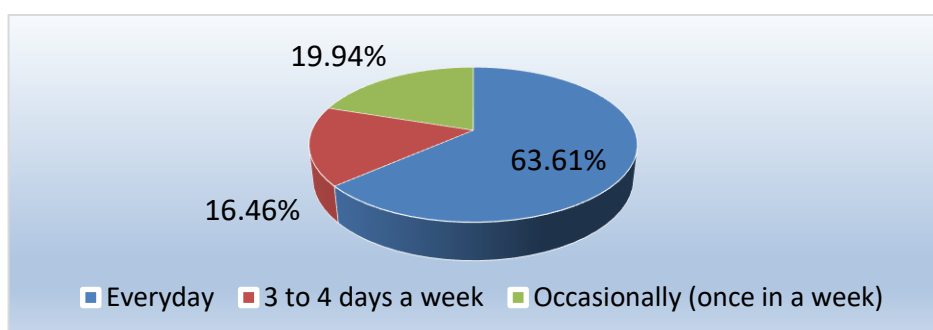
In terms of usage frequency, the tobacco consumers who consume tobacco everyday have been classified as "heavy users", which also corresponds to WHO (1998) definition of "Daily Smokers" and "Daily Users". Based on a subjective interpretation, the tobacco consumers who consume tobacco 3 to 4 days a week has been considered as "moderate users" and occasional tobacco consumers who consumes tobacco once in a week has been considered as "light users". The high percentage of tobacco consumers consuming tobacco everyday shows the extent of tobacco addiction among the tobacco consumers in colleges of Mizoram.

The choice of time and place for consuming tobacco by students reveals some important aspects about the situational environment related to tobacco consumption. Firstly, the particular time and place chosen for consumption may consciously or sub-consciously motivate tobacco consumers towards tobacco consumption. Secondly, the particular time and place may also provide convenience and even approval for tobacco consumption to many tobacco consumers.

Exhibit 4.30
Time of Tobacco Consumption by Active Tobacco Consumers
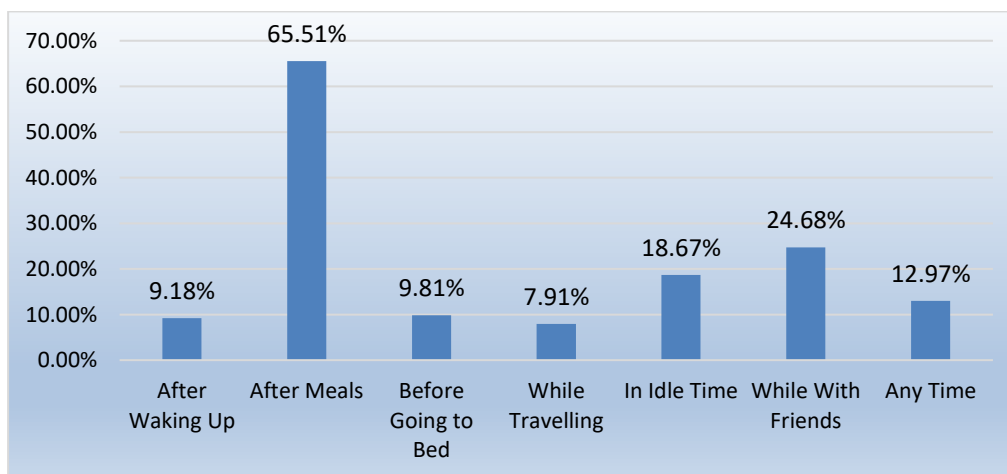
65.51% of the Active Tobacco Consumers consumes tobacco after meals, followed by 24.68% who generally consumes tobacco while they are spending time with their friends and 18.67% consumes tobacco in their idle time. The findings show that there may be some strong psychological impulse which motivates tobacco consumers to consume tobacco after meals. Besides this there may be also tendencies among

tobacco consumers to hang out as friends where they influence each other's to consume tobacco. There may also be tendency of "empathetic smoking" (Nichter et al., 2006) among friends where they try to share and connect with each other during negative times. It may be pointed that "social smoking during adolescence has the potential to lead to life-long addiction" (Stewart and Moreno, 2013). The unoccupied time also forces tobacco consumers to consume tobacco. However, it may be pointed out that 12.97% of the Active Tobacco Consumers consumes tobacco at any time which shows that they may be strongly addicted to tobacco and their mind does not depend on any particular external stimuli to trigger thoughts and desire for tobacco consumption.

The Active Tobacco Consumers were asked about their most preferred place for consuming tobacco. Almost half of the Active Tobacco Consumers, that is, 48.2% of them says that they usually consume tobacco outdoors. 18.35% of the Active Tobacco Consumers says that they usually consume tobacco inside their home or hostel and 7.91% of them reveal that they consume tobacco inside their college campuses. The rest 25.32% of the respondents says that they consume tobacco in all of these places which points at their strong addiction to tobacco.

Exhibit 4.31
Place of Tobacco Consumption
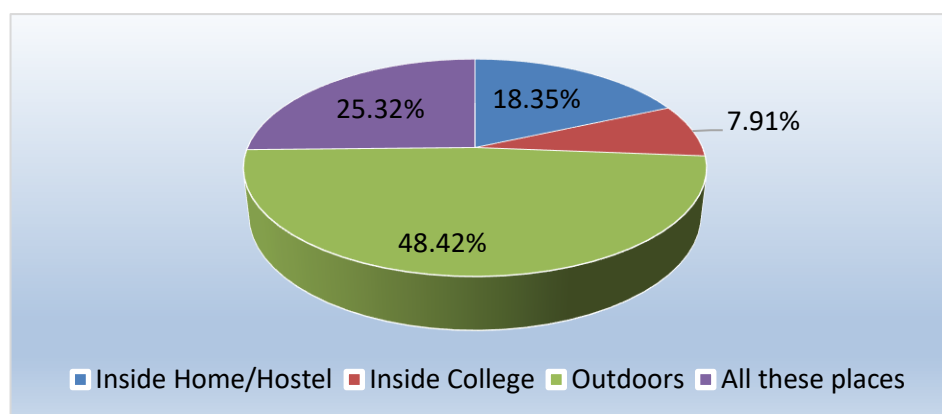
There exists a vast difference in the way outdoor smoking is perceived in different places. For example in U.S., smoking alone outside by college students is not perceived as an acceptable behaviour (Nichter et al., 2006). However in Mizoram,

the high percentage of respondents consuming tobacco outdoors may be because of the fact that outdoor environment may be less restrictive compared to the home, hostel or college campuses. These also points out to the fact that the ban on smoking at outdoor public places may not be strictly enforced by the administration. Also, since a considerable number of students also revealed that they consume tobacco inside their hostel and college campuses points at the failure of "no-tobacco policy" in college campuses in Mizoram.

Tobacco consumption in general and particularly smoking at public places is a major concern for the society, since apart from promoting tobacco or influencing others to consume tobacco, it also extends health hazards for others through indirect and second-hand smoke. It is not unusual to observe people smoking publicly in Mizoram. Therefore the Active Tobacco Consumers in the present study were asked whether if they generally avoid consuming tobacco or smoking at public places.

Exhibit 4.32
Tobacco Consumption at Public Places
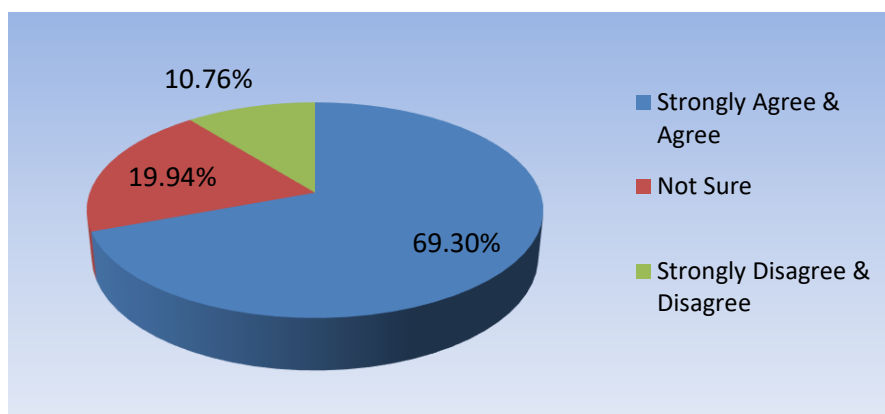
The majority of the Active Tobacco Consumers, that is, 69.3% agrees that they avoid tobacco in public places. However, 10.76% revealed that they do not avoid tobacco consumption or smoking at public places and the rest 19.94% were not sure about the same. Therefore, there are considerable numbers of college students who may consume tobacco or smoke in public places and therefore may expose others to the dangers of second-hand smoke. In Mizoram, No-Tobacco Policy has been implemented in many places and the government has been trying to enforce zero

tobacco use in offices, schools, colleges, hospitals etc. However, it has been generally observed that such rules are often violated by tobacco users.

Exhibit 4.33
Breaking of Rules to Consume Tobacco

"I don't mind breaking rules by buying or consuming tobacco products within prohibited areas"

25.63%
25.00%
49.37%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree
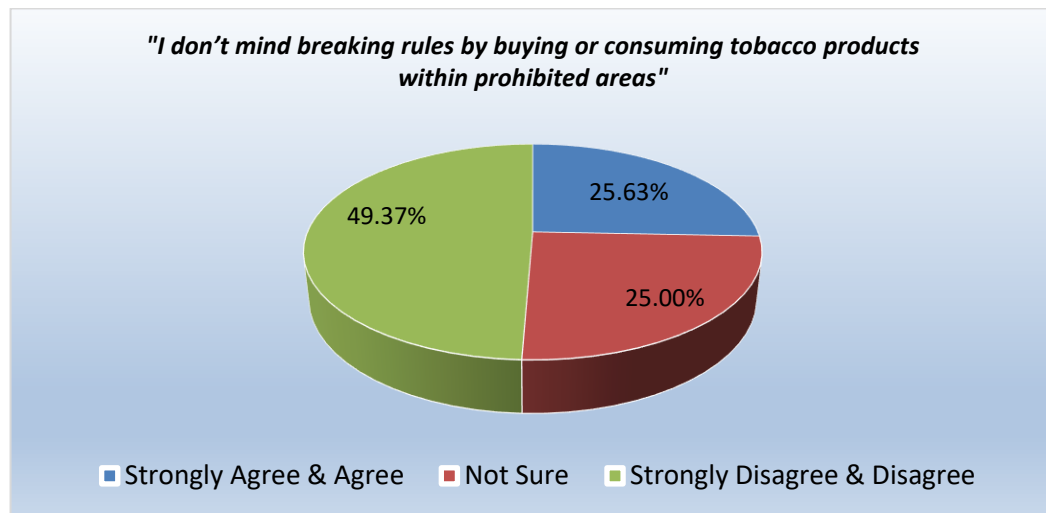
The respondents were asked, whether they mind breaking rules to buy or consume tobacco within prohibited areas. 25.63% of the Active Tobacco Consumers agrees that they do not mind breaking rules regarding such things whereas 49.37% disagrees with the same and the rest 25% were not sure about this. Though, almost half of the Active Tobacco Consumers do not prefer breaking rules but clearly a large number of the tobacco consumers that is 25.63% does not mind breaking the rules and rest 25% of them are not sure about this. Therefore, it may be concluded that there are a large number of Active Tobacco Consumers among college students who are not very concerned of personally breaking rules to consume tobacco or smoke.

A very important aspect of post-purchase decision is the level of brand loyalty expressed by the consumers. According to Jacoby and Chestnut (1978), brand loyalty is defined as "the biased, behavioural response, expressed over time, by some decision-making unit, with respect to one or more alternative brands out of a set of such brands, and is a function of psychological decision-making, evaluative processes." The Active Tobacco Consumers were asked about their brand loyalty regarding consumption of tobacco products. 40.51% of the Active Tobacco

Consumers agrees and 25.32% disagrees that they normally purchase tobacco products of a particular brand. The rest 34.18% of the Active Tobacco Consumers are not sure that whether they normally purchase tobacco products of a particular brand.

Exhibit 4.34
Brand Loyalty of Tobacco Consumers

"I normally buy tobacco products of a particular brand"

25.32%   40.51%

34.18%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree
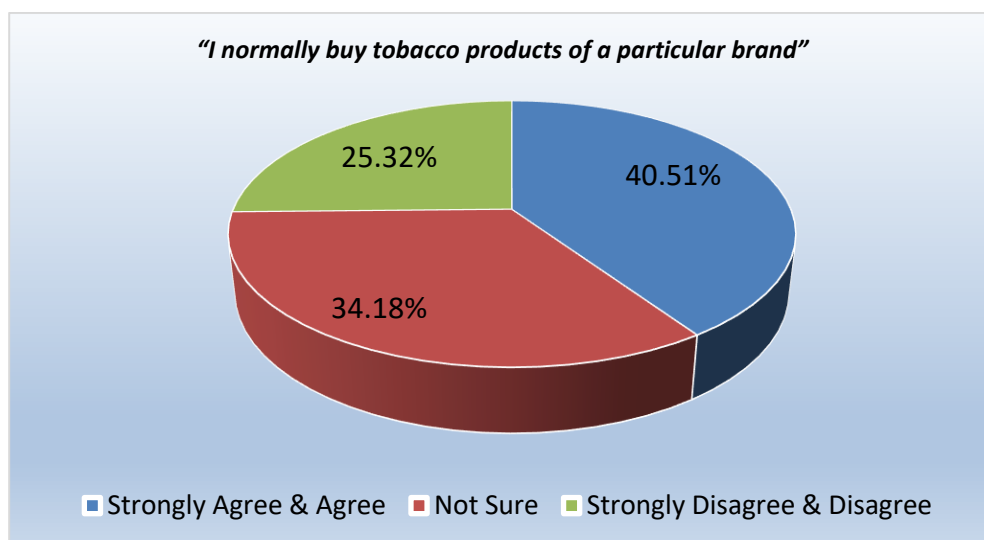
Though it seems that most of the Active Tobacco Consumers (40.51%) are loyal towards a particular brand, there is in fact more percentage of Active Tobacco Consumers (59.5%) who either disagrees or they are not sure whether they normally buy tobacco products of a particular brand. Therefore, the respondents are divided in their opinion regarding their brand loyalty towards any particular tobacco brand.

The factors for selecting and consuming a particular brand of tobacco products may be varied. Therefore to find out the most important factors for consumer's preference of a particular brand, respondents were asked to rank between different factors. The ranks were given weightage for calculating their relative scores. As per the total scores obtained, the most important factor for the Active Tobacco Consumers for choosing a particular brand has been found to be "*Easy Availability*". The other two important factors are "*Flavor and Feel*" and "*Low Price*".

Table 4.19
Factors for Brand Preference among Tobacco Consumers

Factors for Brand Preference	Total Counts			Total Score [(A×3)+(B×2)+(C×1)]
	Rank 1 (A)	Rank 2 (B)	Rank 3 (C)	
Flavor and Feel	107	30	46	427
Brand Value	16	12	21	93
Easy Availability	95	130	50	595
Low Price	60	88	59	415
Popularity	24	32	77	213
Lower Perceived Health Risk	12	18	57	129
Other Reasons	2	6	5	23

Table 4.20
Test of Association between Types of Tobacco and Brand Loyalty

Tobacco Type	Tests	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Indian Branded Cigarettes	Pearson Chi-Square	34.363	4	.000	.000
International Branded Cigarettes	Fisher's Exact Test	5.046			.222
Zial (Local Unbranded Cigarettes)	Pearson Chi-Square	1.118	4	.891	.898
Burmese Cigarettes	Pearson Chi-Square	1.243	4	.871	.873
Sahdah (Khaini)	Pearson Chi-Square	22.178	4	.000	.001
Zarda	Pearson Chi-Square	8.164	4	.086	.084
Gutkha	Pearson Chi-Square	18.024	4	.001	.001
Tuibur	Pearson Chi-Square	10.147	4	.038	.040

There is significant association ($p<.05$) between certain types of tobacco products like Indian Branded Cigarettes, Sahdah (Khaini), Gutkha and Tuibur and brand loyalty among the undergraduate tobacco consumers in Mizoram. On the other hand, no significant association ($p>.05$) has been observed between tobacco products such as International Branded Cigarettes, Zial (Local Unbranded Cigarettes), Burmese Cigarettes and Zarda.

4.4.2 Post-purchase Evaluation by Tobacco Consumer

Post-purchase evaluation by the consumer about the consumed product and its various implications is an important aspect of the post-purchase behaviour. Therefore, it is necessary to understand how the tobacco consumers evaluate various aspects of tobacco and its consumption by themselves. One general assumption about the young people getting motivated to consume tobacco is that they might psychologically form an image about themselves where using tobacco or smoking appears to be enhancing their personality in front of their peers. Therefore, to test this assumption, the respondents were asked whether they consider consuming tobacco or smoking makes them look cool or mature in front of others. 65.51% of the Active Tobacco Consumers does not agree that tobacco consumption makes them look cool or mature in front of others. However, 14.56% of the Active Tobacco Consumers agreed that consuming tobacco or smoking makes them look cool or matured.

Exhibit 4.35
Tobacco Consumer's Self-image regarding Tobacco Consumption
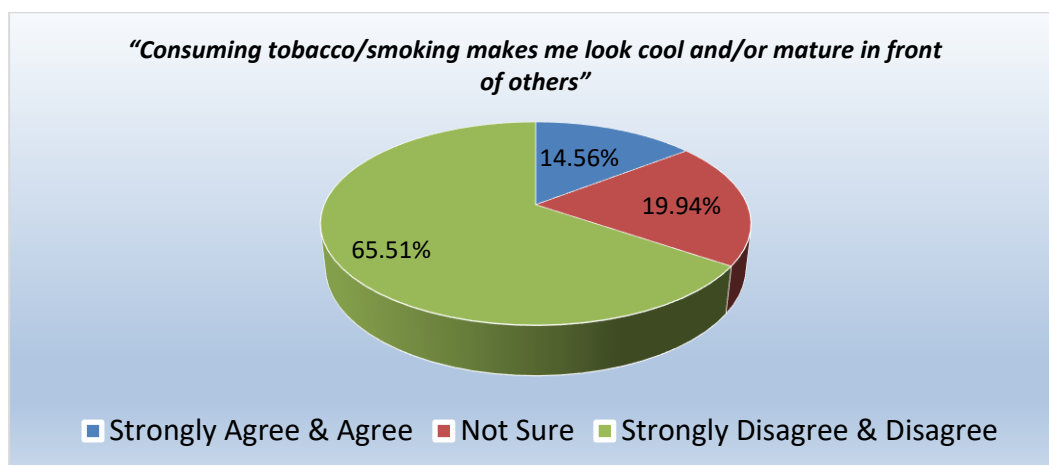
There are certain aspects like perception regarding health problems caused by tobacco, connection between tobacco and cancer, effectiveness of tobacco in relieving stress etc. which may help in understanding how tobacco consumers evaluate their consumption and how it reinforces their future consumption about it. Exploring post-purchase evaluation by tobacco consumers can also reveal how their attitude and behaviour influences others in the society.

Exhibit 4.36
Perception of Health Problems Caused by Tobacco
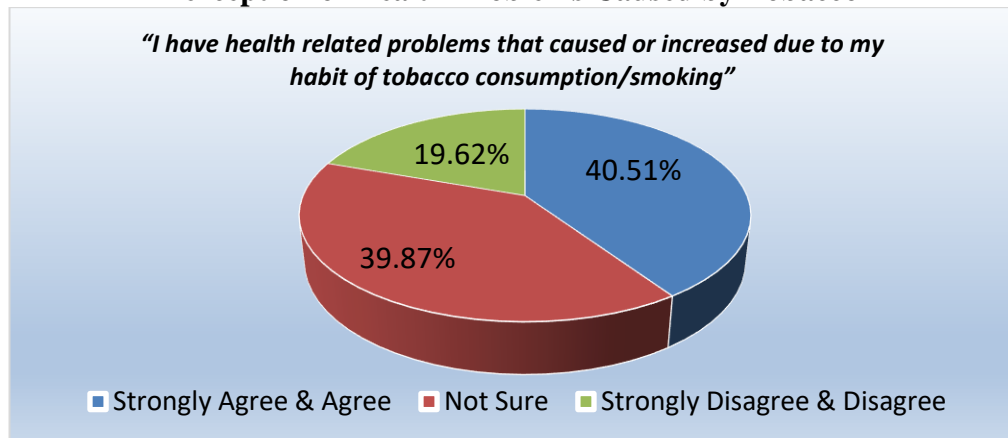
"I have health related problems that caused or increased due to my habit of tobacco consumption/smoking"

- 19.62%
- 40.51%
- 39.87%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree

40.51% of the Active Tobacco Consumers agrees that they have health related problems caused due to tobacco consumption. Only, 19.62% of them disagrees that they have such health problems caused by tobacco and 39.87% are not sure if tobacco consumption has caused them any health related problems. So it appears, a substantial number of the respondents (Active Tobacco Consumers) are actually aware and acknowledge that they have health related problems caused due to tobacco consumption while a large percentage of them either disagree or not sure about such problems.

The positive link between tobacco use and many life threatening diseases is well established through many researches (Reddy & Gupta, 2004). One of the most highlighted diseases caused by tobacco use is cancer (CDC, 2010; USDHHS, 2004; Vineis et al., 2004). According to GATS 2016-2017, there is high awareness about the health consequences of tobacco use in Mizoram, where, 96.7% respondents believed that smoking and use of smokeless tobacco causes serious illness (Ministry of Health & Family Welfare, Government of India, 2018). An earlier survey conducted in eight districts of Mizoram also showed similar health awareness related to tobacco consumption, where 89.60% respondents agreed that smoking was harmful for their health (The Indian Express, May 27, 2010). The Active Tobacco Consumers were also asked about whether they belief that consuming tobacco is likely to increase the chances of them getting cancer.

Exhibit 4.37
Tobacco Consumer's Belief about Tobacco Causing Cancer

"I believe that tobacco consumption would likely to increase the chances of getting cancer"

10.44%   6.65%

82.91%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree
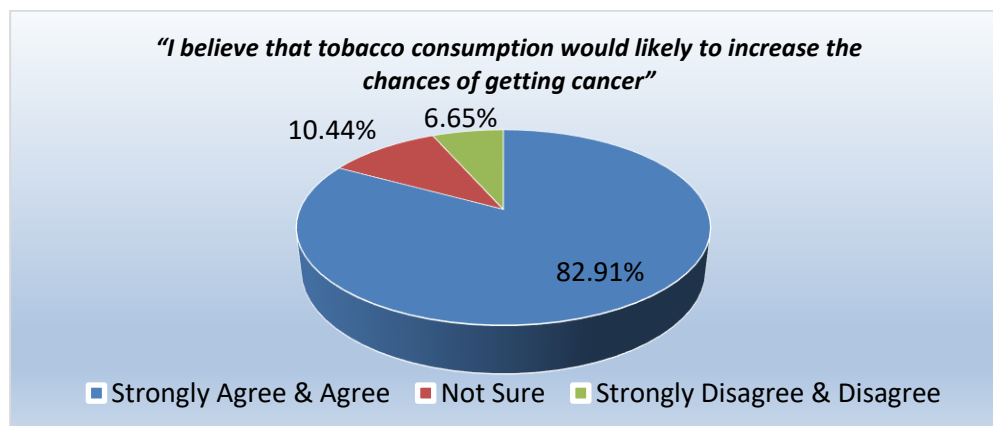
An overwhelming 82.91% of them have expressed that they agrees to the fact that consuming tobacco is likely to increase their chances of getting cancer and only 6.65% disagrees about the same. The rest 10.44% of the Active Tobacco Consumers are not sure about this. Though majority of the tobacco consumers are well aware about the link between tobacco and cancer but they are still consuming tobacco.

Exhibit 4.38
Tobacco Consumer's Belief that Tobacco Kills

"I believe that tobacco/smoking kills"

7.91%   4.43%

87.66%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree
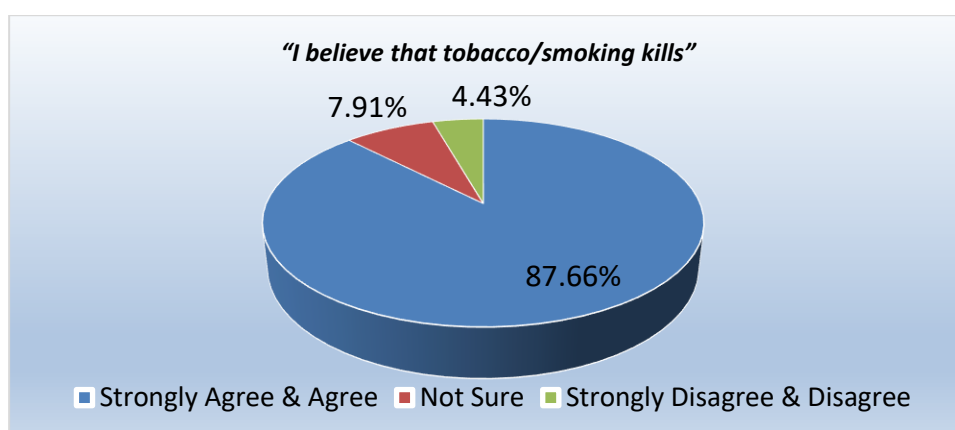
The Active Tobacco Consumers were also asked whether they agree or not that tobacco causes death. 87.66% of them said that they agree and only 4.43% of them disagrees that tobacco kills and the rest 7.91% of them are not sure on this. Therefore, majority of the tobacco consumers do believe that consuming tobacco can cause death but still they are consuming it.

The nicotine contained in tobacco has certain stress-inducing effects which help smokers to feel less tense and anxious (Parrott & Murphy, 2012). Therefore, tobacco consumers have been found to consider tobacco consumption to cope with psychological discomforts like depression and stress (Nair et al., 2015; Nichter et al., 2004; Romero et al., 2014; Vu et al., 2018). Moreover, depression combined with receptivity towards tobacco advertising is a strong factor that may lead to the decision to consume tobacco ("Report: Depression and Tobacco Ads," 2002). So the Active Tobacco Consumers were asked whether they agree that consuming tobacco or smoking relieves stress. 39.56% of them agreed that consuming tobacco relives stress and only 22.47% disagreed with the same. Therefore, a large number of consumers may actually use tobacco as a means to cope with stress.

Exhibit 4.39
Tobacco Consumers Believe that Tobacco Consumption Relieves Stress

"Consuming tobacco/smoking relieves stress"

22.47% 39.56% 37.97%

■ Strongly Agree & Agree ■ Not Sure ■ Strongly Disagree & Disagree
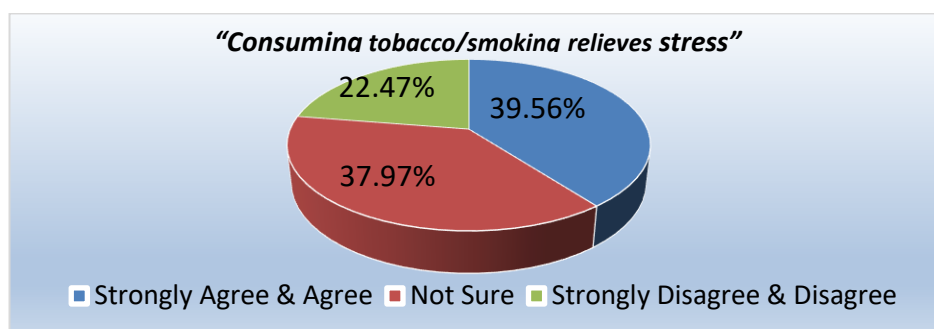
The post-purchase evaluation of the monetary cost of tobacco consumption by the Active Tobacco Consumers is also important. So, they were asked whether or not they consider the monetary cost of consuming tobacco to be high.

Exhibit 4.40
Monetary Cost of Tobacco Consumption

"The monetary cost of consuming tobacco/smoking is very high"

24.68% 6.01% 69.30%

■ Agree ■ Disagree ■ Not Sure
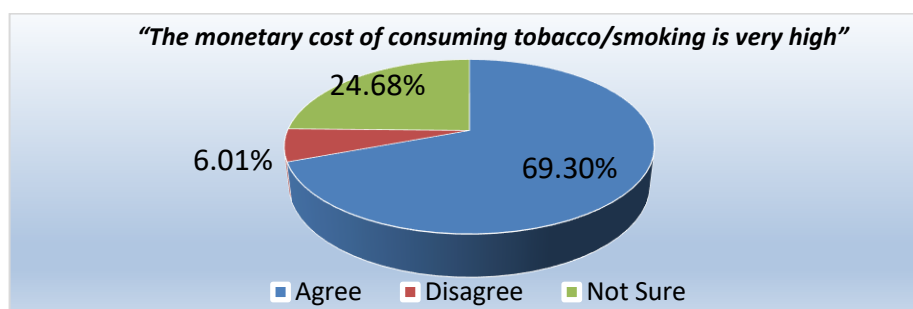
69.3% of the Active Tobacco Consumers agrees and only 6.01% of them disagrees that the monetary cost of consuming tobacco is very high. The rest 24.68% are not sure about the monetary cost of tobacco consumption being high. So, in spite of considering the monetary cost of tobacco consumption to be high, many Active Tobacco Consumers continue to consume it.

Tobacco users may directly or indirectly influence others to consume tobacco. To know whether the tobacco users have any direct influence on others regarding tobacco consumption, they were asked about their opinion regarding their influence on others to cultivate the habit of tobacco consumption.

Exhibit 4.41
Tobacco Consumers Influences on Others
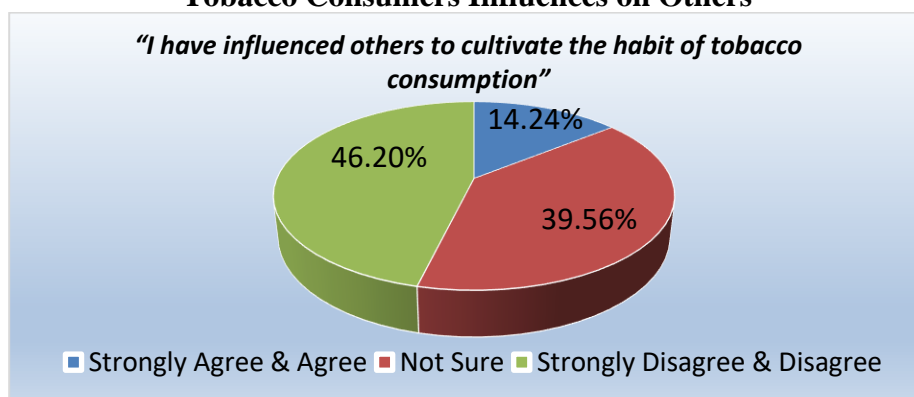
46.2% of the Active Tobacco Consumers have denied of influencing others to consume tobacco. 14.24% of them have accepted that they have influenced others and the rest 39.56% were not sure regarding this. Therefore, it may concluded that 14.24% of the Active Tobacco Consumers have directly influenced others to consume tobacco while 39.56% of Active Tobacco Consumers who are not sure about their influence on others might have indirectly influenced others to consume tobacco. However, besides tobacco consumers influence on others to consume tobacco, there are some tobacco consumers who actually encourages others to quit tobacco. Out of the 316 Active Tobacco consumers, 60.76% agrees that they often encourage others to quit tobacco. Only 10.44% does not encourage others regarding this. The rest 28.8% are not sure about their encouragement to others to quit tobacco.

Exhibit 4.42
Encouraging Others to Quit Tobacco
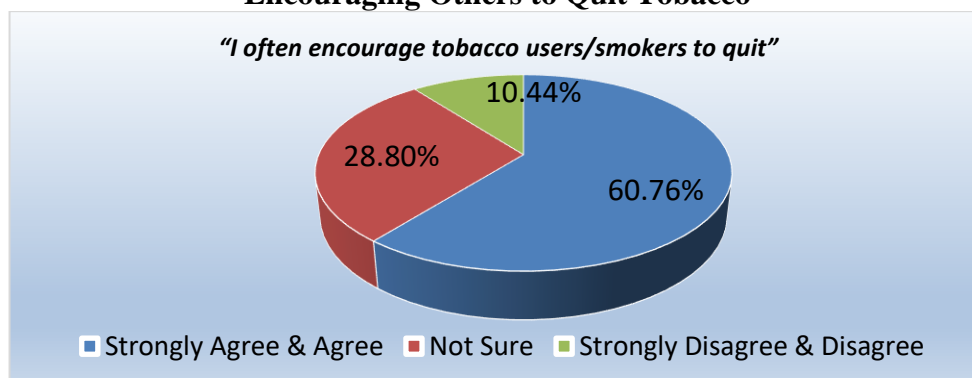
"I often encourage tobacco users/smokers to quit"

10.44%

28.80%

60.76%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree

Therefore, in spite of being regular users of tobacco themselves, many Active Tobacco Consumers actually encourages others to quit tobacco.

Cessation has been recognized as the only practical way to substantially reduce tobacco related deaths and morbidity (Jha, 2009). According to one study in India, around one-fifth of tobacco users intended to quit tobacco (Dhumal et al., 2014). Another survey conducted among 2,500 people above 18 years of age in the eight districts of Mizoram, revealed that 73.1% of the smokers wanted to quit smoking (The Indian Express, May 27, 2010). The Active Tobacco Consumers among the respondents were asked regarding their intentions to quit tobacco. 45.57% of them responded that they want to quit tobacco or smoking in future and 32.28% of them said that they are already trying to quit. 17.09% of the Active Tobacco Consumers said that they tried to quit tobacco in the past but did not succeed. Only, 5.06% of the Active Tobacco Consumers have expressed that they do not want to quit tobacco.

Exhibit 4.43
Intention to Quit Tobacco

5.06%

17.09%

45.57%

32.28%

■ Yes I want to quit tobacco/smoking in future

■ I am already trying to quit tobacco/smoking

■ I tried quitting tobacco/smoking but failed

■ No I don't want to quit tobacco/smoking
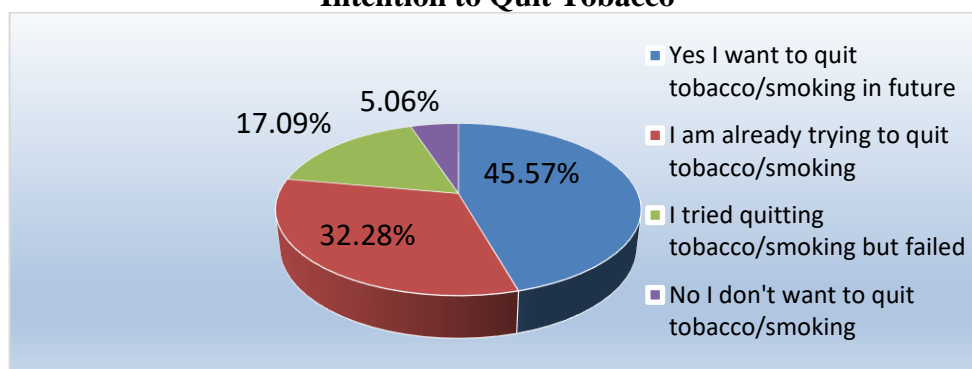
Therefore it seems that most of the Active Tobacco Consumers are either trying or willing to quit tobacco or smoking in future. However, some of them have already tried to quit but have not succeeded in their efforts to do so. Quitting for young people may be difficult as they are generally not interested in seeking help or services to quit (Lantz et al., 2000).

Dhumal et al., (2014) concluded that factors like higher education, doctor's advice and anti-tobacco messages were positively associated with users' intention to quit. Vu et al., (2018) found that interpersonal influences and family responsibilities were major motivations to quit among tobacco users in colleges in Georgia. The Active Tobacco Consumers were asked to choose and rank in an order up to three between the different reasons for their motivation regarding quitting tobacco. The list of reasons for their motivation to quit tobacco was as follows:

- I don't want to die out of cancer or any other disease caused by tobacco use
- I want to set a good and positive example for my family and the future generation
- I am concerned about the rising prices of tobacco products and want to reduce my financial burdens
- It is inconvenient to consume tobacco/smoking in public places
- I have been forced to quit tobacco/smoking by members of my family and friends
- Any other reason

The most preferred reasons for the motivation to quit tobacco among the Active Tobacco Consumers was found through calculations based on the rankings given by the respondents to the reasons and the total score was obtained after adding all the ranks multiplied by their assigned relative values (that is, Rank 1=3, Rank 2=2 and Rank 3=1) for the respective reasons.

Table 4.21
Reasons for Motivation to Quit Tobacco

Reasons	Total Counts			Total Score [(A×3)+(B×2) +(C×1)]
	Rank 1 (A)	Rank 2 (B)	Rank 3 (C)	
I don't want to die out of cancer or any other disease caused by tobacco use	174	44	33	643
I want to set a good and positive example for my family and the future generation	83	112	48	521
I am concerned about the rising prices of tobacco products and want to reduce my financial burdens	24	58	47	235
It is inconvenient to consume tobacco/smoking in public places	12	63	80	242
I have been forced to quit tobacco/smoking by members of my family and friends	17	33	82	199
Any other reason	8	5	26	60

The fear of death caused by cancer or any other tobacco related diseases, with a total score of 643 has been found to be the most common reason for the motivation to quit tobacco by Active Tobacco Consumers. This is followed by the desire to set good example for the family and future generations, with a total score of 521 as the second most common reason for their motivation to quit tobacco. The other two common reasons are the inconvenience of using tobacco in public places (Total Score 242) and the concern for rising prices of tobacco products (Total Score 235). Therefore, it appears that in spite of their addiction to tobacco many college students are still concerned about their health and also like to set positive example for others to follow.

Pictorial health warnings displayed on tobacco packets have been proved to discourage tobacco consumption among existing and prospective tobacco consumers (Mansour & Bakhsh, 2017; Raute et al., 2009; Song et al, 2013). The Active Tobacco Consumers were asked whether if the detail graphic warnings displayed on the packets of tobacco products decreases their desire to consume tobacco or smoke. 38.61% of the Active Tobacco Consumers agrees that the graphic health warning on the packets of tobacco products decreases their desire to consume tobacco or smoke. However, 24.03% of them disagree and the rest 37.03% are not sure about this. Therefore, a large number of Active Tobacco Consumers are still not convinced by the health warnings displayed on the packets.

Exhibit 4.44
Effect of Pictorial Health Warning

"The detail graphic warning on packets of tobacco products decreases my desire to consume tobacco/smoking"

24.37%   38.61%

37.03%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree
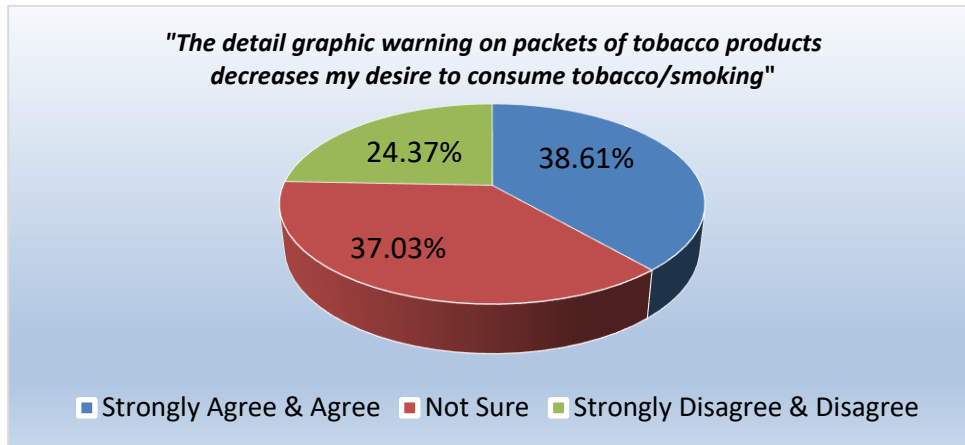
The undergraduate tobacco consumers who continue to consume tobacco may have a perception that they can control their tobacco consumption whenever they want. According Johnson et al., (2004), "most adolescents who experiment with smoking do not set out to become addicted to tobacco; they want to remain "in control" of their tobacco use". Section of young tobacco consumers like nondaily smokers in U.S. has been found to be highly confident of being able to quit smoking any time (Romero et al., 2014). To understand the level of confidence to quit tobacco among Active Tobacco Consumers as respondents, they were asked whether or not they belief that they can successfully quit tobacco or smoking.

Exhibit 4.45
Confidence Level to Quit Tobacco

"I believe that I can successfully quit tobacco/smoking"

4.75%

25.95%

69.30%

■ Strongly Agree & Agree   ■ Not Sure   ■ Strongly Disagree & Disagree
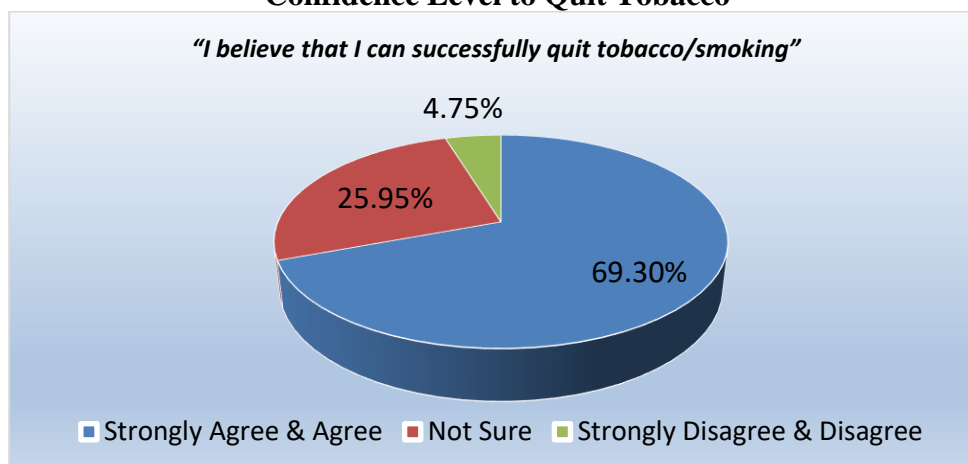
69.3% Active Tobacco Consumers agrees that they believe they can successfully quit tobacco and only 4.75% disagrees about the same. Also, 25.95% of the tobacco consumers are not sure that they can quit tobacco. So, it is evident that majority of the tobacco users are confident that they can quit tobacco. However, global evidence suggests that youths generally underestimate their ability to quit tobacco (Snell & Bailey, 2005) and many prior studies have shown that youth trying to control smoking through cessation have largely failed (Engels et a., 1998; Hamilton et al., 2000; Sussman et al., 1998).

4.5 Conclusion

The knowledge of consumer behavior is extremely important in marketing. Hawkins, Mothersbaugh & Best (2007) pointed that "all marketing decisions are based on assumptions and knowledge of consumer behaviour". Therefore, a deep understanding of consumer behavior is also important for social marketers who use this information to plan and execute social marketing strategies. According to Hasting and Saren (2003), "marketers put a great deal of effort into understanding consumption behaviour, and social marketers apply this understanding to social and health behaviors". To alter the tobacco consumption behavior of undergraduate students, it is important to "understand how their perceptions of control are undermined by tobacco and how external forces influence goals to quit or control tobacco" (Johnson et al., 2004). The undergraduate tobacco consumers among the respondents have been found to be going through a detail process of consumer decision making regarding their tobacco consumption behaviour. During such decision making process the respondents get motivated by various factors such as indirect marketing efforts by the tobacco industry, socio-cultural factors in the environment, individual psychological factors of the respondents and their individual experiences related to tobacco and its consumption. A combination of such factors has been found to determine the purchase, consumption and post-purchase behaviour of the respondents. Some of the major findings from the analysis of primary data were as follows:

1. Tobacco consumption in the family of the respondents act as an early influence for tobacco consumption among the respondents.

2. There is a pro-tobacco mindset among many respondents and substantial tobacco consumers among the respondents consider smoking as fashionable.

3. The attractive design and packaging of tobacco increases the desire for tobacco consumption among the tobacco consumers.

4. Other addictive habits such as alcohol consumption and drug abuse were positively associated with tobacco consumption among the respondents.

5. Female tobacco consumers were more inclined towards smokeless tobacco than male tobacco consumers among the respondents.

6. Consumers of certain type of tobacco products like Indian branded Cigarettes, Sahdah (Khaini), Gutkha and Tuibur have expressed more brand loyalty towards such products than consumers of International Branded Cigarettes, Zial and Burmese Cigarettes.

The respondents were also asked to rank in order up to three according to their preference, from the list of various measures that are suitable to combat tobacco use among students in Mizoram. The most preferred measures by the respondents to combat tobacco use among college students were found through calculations based on the rankings given by the respondents to the various listed measures. The total score was obtained after adding all the ranks multiplied by their assigned relative values (that is, Rank 1=3, Rank 2=2 and Rank 3=1) for the respective measures.

Table 4.22
Students Opinion for Combating Tobacco

Choice of Measures	Total Counts			Total Score [(A×3)+(B×2)+(C×1)]
	Rank 1 (A)	Rank 2 (B)	Rank 3 (C)	
Anti-tobacco campaign in print-media	79	29	30	325
Anti-tobacco campaign in electronic media	36	67	30	272
Anti-tobacco campaign in internet	100	72	57	501
Implementation of punitive measures against tobacco consumption in public places	37	49	39	248
More proactive role and counseling done by parents and other family members	111	83	66	565

More proactive role and counseling done by teachers	24	53	45	223
More proactive role and counseling done by community leaders and the Church	28	47	77	255
More pictorial warnings on public places	19	33	51	174
Raising taxes on tobacco products	46	39	60	276
More proactive role by the NGOs	16	25	39	137
Any other measures	5	1	3	20

The most preferred measure to combat tobacco use as selected by the respondents is "More proactive role and counseling done by parents and other family members" (Total Score = 565), which was closely followed by "Anti-tobacco campaign on internet" (Total Score = 501). The next preferred measure for combating tobacco is "Anti-tobacco campaign in print-media" (Total Score = 325). Other measure such as "Raising taxes on tobacco products" (Total Score =276), "Anti-tobacco campaign in electronic media" (Total Score =272), "More proactive role and counseling done by community leaders and the Church" (Total Score =255) and "Implementation of punitive measures against tobacco consumption in public places" (Total Score =248) were also preferred by the respondents to combat tobacco use in Mizoram.

The findings regarding tobacco consumption by the respondents may be considered as a general representation of the overall undergraduate students' community in Mizoram. Therefore the measures suggested by the respondents for tobacco control along with the deeper understanding of the tobacco consumption behaviour of the undergraduate students explored in this chapter will be very useful for designing an effective and comprehensive social marketing strategy for controlling tobacco consumption in Mizoram.

Chapter 5

Role of Organizations and Social Marketing Strategies for Tobacco Control in Mizoram

5.1 Introduction

Tobacco consumption is a complex problem and requires a comprehensive and long term strategies to control its prevalence in the society. The concept and practices of social marketing can be applied effectively to address such issues in the society. The discipline of social marketing has had a profound and positive impact on various social issues related to the areas of public health, safety, environment, and community involvement (Kotler & Lee, 2008). The civil society with other non-governmental organizations (NGOs) and opinion leaders can act as a catalyst for change (Hu et al, 2013). According to the Article 4: Guiding Principle No.7 of the WHO FCTC "the participation of civil society is essential in achieving the objective of the Convention and its protocols" (WHO, 2003). In Canada, NGOs have played a critical role in advancing tobacco control programs and policy (Robbins, 2010). Novotny and Mamudu (2008), after examining the tobacco control experiences in United States, concluded that the tobacco control activities funded and implemented by government can be most effective when supported by the civil society. Reddy & Gupta (2004) highlighted the role of civil society in advancing the agenda of tobacco control in India and made specific recommendations for them regarding tobacco control initiatives. NGOs like Action Against Tobacco (ACT)-India, Green Motherland, Health Related Information Dissemination Amongst Youth-Students Health Action Network (HRIDAY-SHAN) and Voluntary Health Association of India (VHAI) have made valuable efforts such as health education, advocacy, litigation, research, focused campaigns and countering tobacco industry for tobacco control in India (Reddy & Gupta, 2004). Reddy et al., (2012) has also suggested the integration of tobacco control into health and development agendas by engaging and creating partnerships across civil society groups from diverse fields like tobacco control, development, environment, food security and human rights. Ladusingh et al. (2017) felt that the National Tobacco Control Programme (NTCP) should be urgently extended to the community level with involvement of civil societies in Northeast India. The role of public participation and civil society efforts to reduce tobacco consumption in Mizoram is very important, especially because, Mizoram is blessed with very active, prominent and influential civil society organizations like the YMA,

MHIP, MUP and the Church which qualifies as ideal platform for tobacco control initiatives (Hatzaw, 2014). Therefore, there exists great opportunities for social marketers and policy makers in Mizoram to collaborate with nongovernmental organizations like YMA, MHIP and MUP on issues of public health, as these organizations "plays a predominant role in the socio-cultural, economic and political life of people of Mizoram" (Laldinliana, 2010). The two dedicated organizations that work for tobacco control and creating tobacco related health awareness in Mizoram is the Mizoram State Tobacco Control Society (MSTCS) and the Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC). This chapter discusses the important contributions of such organizations and associations towards tobacco control in the state and also explores and presents the social marketing strategies for controlling tobacco consumption in Mizoram.

5.2 The Mizoram State Tobacco Control Society (MSTCS)

The Mizoram State Tobacco Control Society (MSTCS) is the most prominent organization in Mizoram which is primarily entrusted to implement the Mizoram State Tobacco Control Programme (MSTCP) under the National Tobacco Control Programme across the state. MSTCS was established in 30th May, 2009 with the following aims and objectives (MSTCS, 2018):

1. To undertake all necessary activities towards effective Tobacco Control in the State of Mizoram.
2. To take up necessary initiative/collaboration/activities at State, National or Global level towards effective Tobacco Control.
3. To take up necessary activities towards implementation of National Tobacco Control Programme (NTCP) at State level as per central guidelines.
4. To take necessary activities towards implementation of project called "Advocacy and Mobilization for Smoke Free Mizoram and effective Tobacco Control Implementation in the State", which is being funded by the Bloomberg Global Initiative to Reduce Tobacco Use along with World Lung

Foundation and managed by the International Union against Tuberculosis and Lung Diseases.

5. To work with various Governmental Organizations as well as Non-Governmental Organizations to combat the menace of Tobacco in the State.

6. To take up other necessary works/activities as may be assigned by the Government of Mizoram from time to time.

MSTCS is registered under Mizoram Societies Registration Act, 2005 and is funded by the Bloomberg Initiatives to Reduce Tobacco Use which is being monitored by the UNION South East Asia, New Delh. Presently, Mr Lalrinliana Fanai, Principal Secretary (Health and Family Welfare Department) and Ms Thanhliri Pachuau, Joint Secretary (Health) are the serving Chairman and Vice Chairman respectively for MSTCS. Dr. Jane R. Ralte, who is the State Nodal Officer/Project Officer for 'Smoke Free Mizoram' is also the Member Secretary of MSTCS. Since April 2009, MSTCS has successfully implemented the two years project on 'Advocacy & Mobilization for Smoke Free Mizoram and Effective Tobacco Control Implementation in the State' in all the eight districts of Mizoram. With effect from 1st July 2011, MSTCS has also implemented another two years project funded by Bloomberg Initiative to reduce tobacco use on "Advancing Tobacco Control in Mizoram through Capacity building, Strengthening National Tobacco Control Programme and Effective Enforcement of Tobacco Control Laws" (MSTCS, 2018).

To address the tobacco related health problems of people and provide assistance for quitting tobacco, MSTCS runs various Tobacco Control Cells. These TCCs are equipped with adequate doctors and psychologists to offer Nicotine Replacement Therapy where they provide necessary interventions, treatments and counseling for people to quit tobacco. There are 10 functioning TCCs out of which 9 TCCs are present at all the Health & Family Welfare district hospitals and also at the Cancer Hospital. The MSTCS has a State Tobacco Control Cell (STCC) at the State Referral Hospital in Falkawn and District Tobacco Control Cells (DTCC) at the following locations (MSTCS, 2018):

1. DTCC, Aizawl West District-Room No. C/402, OPD Building, Civil Hospital, Aizawl

2. DTCC, Lunglei District, OPD - 11, Civil Hospital, Lunglei

3. DTCC, Champhai District, Near DMS Office, District Hospital, Champhai

4. DTCC, Saiha District, Ayush Building, Medical Complex, New Saiha

5. DTCC, Aizawl East District

6. DTCC, Serchhip District

7. DTCC, Kolasib District

8. DTCC, Mamit District

9. DTCC, Lawngtlai District

Presently there are 1 District Consultant, 1 Psychologist/Counselor, 1 Social Worker and 1 Data Entry Operator working in each of the 9 DTCCs in the state and 1 State Consultant, 1 Legal Consultant, 1 Programme Assistant and 1 Data Entry Operator at the STCC (STCC Mizoram, 2016). From April 2017 to March 2018, there were 2771 clients who visited the TCCs and the current quit rate of the clients is 24.82%.

The MSTCS also collaborates with various other organization and associations. At present it has the following working partners in Mizoram (MSTCS, 2018):

1. Indian Society on Tobacco & Health (Mizoram Chapter)

2. Mizo Zirlai Pawl (Mizo Student Union)

3. Mizo Hmeichhe Insuihkhawm Pawl (Women's Federation of Mizoram)

4. Mizoram Journalist Association (MJA)

MSTCS has taken up various initiatives to fulfill the objectives of the National Tobacco Control Programme. From April 2014 to June 2016, the MSTCS has carried 485 Anti-Tobacco Awareness Programmes at Educational Institutions, 137 Anti-Tobacco Programmes at Churches and Community platforms, 151 Workshops and Trainings on Tobacco Control and 75 meetings, talk shows and other such activities (Mizoram Pradesh Congress Committee, 2016). The activities undertaken by MSTCS for tobacco control in Mizoram from April 2017 to March 2018 have been

summarized below (Health & Family Welfare Department, Government of Mizoram, 2018):

Table 5.1
Summary of activities undertaken by MSTCS from April 2017 to March 2018

Sl No.	Activity	No of Activity	No of participants
1	Training and Sensitization Workshop	56	3296
2	Anti-Tobacco Awareness Campaigns and Programmes	128	11619
3	Anti-Tobacco Programmes at Educational Institutions	153	12227
4	Others (Important Meetings, Talk show etc.)	128	673
	TOTAL	**465**	**27815**

MSTCS observes the "World No Tobacco Day" every year with various themes related to bring awareness against tobacco related issues. The 'Blue Ribbon Campaign' was launched in 2012 to create awareness on tobacco use and its consequences (Vanglaini, September 12, 2018). On 30th May, 2014, a 'Training on Tobacco Control for Legislator's, Secretaries and Head of Department' was conducted at Conference Hall of Assembly Secretariat Annexe on the occasion of World No Tobacco Day. Similarly, on 31st May 2016 on the occasion of World No Tobacco Day, National Tobacco Control Programme organized a seminar for all Member of Legislative Assembly, Secretaries and Heads of various Departments under the Government of Mizoram (Mizoram Pradesh Congress Committee, 2016). The 2017 World Tobacco Control Programme was observed on the theme 'Tobacco-A threat to development' (World Health Organization, n.d.). The Mizoram State Tobacco Control Society and Indian Society on Tobacco and Health Mizoram jointly organized the 4th Mizoram State Anti-Tobacco Day based on the theme 'Tobacco Free Sports' on 11th September 2017. Many Representatives from all affiliated sports association under Mizoram State Sports Council attended the programme where outstanding performers for excellent compliance to various sections of COTPA, 2003 were felicitated (Health & Family Welfare Department, Government of Mizoram, 2018). In a similar collaboration with Indian Society on Tobacco and Health Mizoram, a 'No Tobacco rally' was organized on 19th September 2017. The event was sponsored through Corporate Social Responsibility for Microfinance and Livelihood and saw enthusiastic participation by representatives and office bearers

from various sports association in Mizoram (Health & Family Welfare Department, Government of Mizoram, 2018). On 21st June, 2017 a pilot project called "HIMNA-MADAT" (Mizoram Against Drugs, Alcohol and Tobacco) was launched by the Chief Minister of Mizoram. The project has been designed for intervention amongst Upper Primary Schools in Aizawl district and will be monitored by the Deputy Commissioner of Aizawl district with other important departments and organization playing active role in its implementation (Health & Family Welfare Department, Government of Mizoram, 2018). On December 2017, the Ruantlang village in Champhai district was declared as a 'Tobacco Free Village' by the Additional Deputy Commissioner of Champhai. This declaration was made after regular and careful Anti-Tobacco Squad Drives checking compliances to all sections of COTPA by Champhai District Anti-Tobacco Squad (Health & Family Welfare Department, Government of Mizoram, 2018). The Thingsul Tlangnuam was the first village in Aizawl to be declared 'smoke-free' in 2013 (Khojol, 2018; Hmar, 2018). On 1st May 2018 the Chief Minister of Mizoram simultaneously launched 'World No Tobacco Month' and 'Tobacco Free Sports' campaign across the State in a function jointly organized by Mizoram State Olympic Association, Indian Society on Tobacco & Health, Mizoram Chapter in association with Mizoram State Tobacco Control Society (The Morung Express, May 2, 2018). MSTCS had also partnered with schools in the past for tobacco control initiatives which were specifically targeted towards the school children. For instance, in 2013, on the occasion of Children's Day they organized a programme on 'save the futures of the children' (MSTCS, 2013). The Mizoram State Anti-Tobacco Day, 2018 was observed at Aijal Club on 11th September where the Transport Minister of Mizoram at that time, Pu John Rotluangliana spoke about the progress achieved due to cooperation between state government and NGOs in reducing tobacco consumption. Pi Lal Riliani, President of Indian Society on Tobacco & Health, Mizoram Chapter, highlighted the negative environmental impacts of tobacco use on the occasion (Zonet Chanchin Thar, September 11, 2018).

The Government of Mizoram, as a result of strong and effective advocacy and sustained pressure through various working partners, raised taxes on tobacco to 20%

which was announced on 31st May, 2014 and was subsequently further raised to 30% through a resolution passed by the Cabinet Meeting held on 19th August 2015 (Mizoram Pradesh Congress Committee, 2016). Elizabeth Hatzaw (2014) has mentioned some important achievements of MSTCS such as inclusion of tobacco education in school curriculum, inclusion of thematic topic on tobacco and health in Church services and adoption of tobacco free community in Thingsul Tlangnuam. She appreciated the initiatives of MSTCS in terms of capacity building, CSO involvements, networking with allied government departments and resources mobilizations.

5.3 The Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC)

The Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC) is the oldest organization that is dedicated to the cause of reducing tobacco consumption and making Mizoram a tobacco free state. The organization is headed by Ms. Lal Riliani who is the founding president of ISTHMC. Since 1989, Ms. Lal Riliani has been working tirelessly to convince and educate the people of Mizoram about the evils of tobacco (Hmar, 2018). Ms. Lal Riliani, the President of ISTHMC and Mr. K. Thanseia, the Secretary of ISTHMC are also the members of the governing body of MSTCS.

The society actively participates and often coordinates with other similar organizations such as the MSTCS in various tobacco control initiatives and programmes in the state. On 31st May, 2002, ISTHMC organized the first ever 'World No Tobacco Day' in Mizoram in collaboration with the Tobacco Society of Mizoram, Department of Health, Government of Mizoram (Hatzaw, 2014). The ISTHMC also known to have partnered with the Government of Mizoram in creating awareness among school children and church interventions during times when the state government did not have separate programme and resources and their tobacco control was only a part of National Cancer Control Programme (NCCP) (Hatzaw, 2014). Every year the ISTHMC actively participates and coordinates with the MSTCS to observe the Mizoram State Anti-Tobacco Day. On 1st May 2018, the

Indian Society on Tobacco & Health, Mizoram Chapter (ISTHMC) jointly organized an event in association with the Mizoram State Olympic Association (MSOA) and Mizoram State Tobacco Control Society (MSTCS) where they kicked off 'World No Tobacco Month' and simultaneously launched 'Tobacco Free Sports' campaign across the State (The Morung Express, May 2, 2018).

According to Dr. Jane Ralte, "The primary objective of the ISTH in Mizoram now is to create awareness and achieve smoke-free homes and smoke-free vehicles" (Hmar, 2018). The Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC) along with the Mizoram State Tobacco Control Society (MSTCS) was jointly awarded the Regional Director Appreciation Award of the 2015 World No Tobacco Day Awards for South East Asia Six Regions by the World Health Organization for their exemplary services and commendable contribution to advocacy and awareness of tobacco to public-private partnership. (The Economic Times, May 29, 2015). ISTHMC President Ms. Lal Riliani had once said that though the awareness campaign on impact of tobacco launched by ISTHMC has produced positive results but has little impact among teenagers and youth in Mizoram (Kangla Online, November 24, 2016)

5.4 The Religious Organizations in Mizoram

Religion often determines or influences people's behaviour, lifestyle choices and consumption habits. For example, Islam commands its followers to only consume *halal* foods, Sikhism prohibits its followers from consuming tobacco and both Islam and Christianity prohibits alcohol. Studies in Malaysia, Thailand and China have shown that Buddhism (Yong et al., 2009) and Islam (Elkalmi et al., 2016; Wang, Koenig & Shohaib, 2015; Yong et al., 2009) had positive influences against smoking. However, the religious views and opinions on tobacco consumption may be varied and at the same time, evolving.

Historically, there were instances when religion took a very strong stance against the use of tobacco. For example, Pope Urban VIII issued a worldwide ban on smoking and ordered excommunication for those who smoke or take snuff in holy places.

However, a century later, this order was repelled by Pope Benedict XIII (Cutler, 2007). On 3rd May, 1999, a meeting on Tobacco and Religion was held at WHO headquarters, in Geneva, Switzerland (WHO, 1999). The participants of the meeting included Geneva-based representatives of major religions and staff members of WHO and the goal of that meeting was to explore new partnerships and strengthening existing ones to facilitate tobacco control activities. The meeting report summarizes the positive views regarding the Tobacco Free Initiative expressed by all major religions such as Bahá'í, Buddhism, Hinduism, Islam, Judaism, Orthodox Christianity and Roman Catholicism. The report specifically says that the "Orthodox Christianity welcomes the Tobacco Free Initiative in the hope that its efforts against tobacco will engage the holistic problem of the need to cure the human person". Further it also presents the view of Roman Catholicism as follows:

> "The Roman Catholic Church has taken an official position on smoking and its harmful effects. His Holiness Pope John Paul II, in his Bull of Indication of the Great Jubilee of the Year 2000, called for all Christians and men and women of good will to abstain from consuming tobacco products for a day with the proviso that the monetary equivalent of one day's smoking be donated to efforts to control the HIV/AIDS epidemic and to assist those affected by this epidemic. The reaffirmation of the idea of menssana, in corporesano (sound mind, sound body) is reflected in the recognition by the Pontifical Council of the harmful effects of tobacco consumption."

According to Ahmed and Peeran (2016), religiosity can be used in faith-based interventions for tobacco use. In one study, a smoking cessation programme was carried out in African-American adults in a rural community in Virginia, USA. The programme was delivered through church coalitions and comprises of one-to-one counseling which emphasized benefits of quitting, self-help materials like 'smoking cessation devotional booklets' and community activities such as 'Gospel Quit Nights'. As part of the study, 648 adults were interviewed pre-intervention and 18 months after the start of intervention. It was observed post-intervention that the quit rate was 9.6% in intervention community compared to 6.2% in comparison community. Also among the church goers, the quit rates were 10.5% in intervention

community compared to 5.8% in comparison community. Similarly among non-church goers, the quit rates were 8.8% in intervention community compared to 6.4% in comparison community. It was concluded that though the differences were not significant but there is a trend towards greater effectiveness in intervention community compared with comparison and among church goers in particular (Schorling et al., 1997). Similarly, another US based study found that non-smokers are more likely to engage in religious activities like prayer, Bible studies and attending church regularly (McFadden et al., 2011). A 2009 study explored the hypotheses linking church attendance to smoking prevalence, cessation, and exposure to environmental tobacco smoke (ETS) and concluded that "public health interventions may profit by seeking to expand cooperation with religious congregations to facilitate efforts to promote healthy lifestyles" (Hofstetter et al., 2010).

The religious organizations mainly the Churches in Mizoram have a significant role on the socio-cultural conduct of the Mizo population (Zomuanthanga, 2008). Religiosity as a factor has been found to influence the behaviour of Mizo consumers (Ralte, 2016). According to Census 2011, 87.1% of the population in Mizoram follows Christianity. Therefore, most Mizos are ardent followers of Christianity and the faith is followed under various denominations. The Presbyterian Church is the major Christian denomination in the state. The various other churches in Mizoram are as follows:

- Baptist Church of Mizoram
- United Pentecostal Church
- The Salvation Army
- The Seventh-day Adventist Church
- Kohhran Thianghlim
- Roman Catholic
- Lairam Jesus Christ Baptist Church (LIKBK)
- The Evangelical Church of Maraland
- Independent Church of India (ICI)

- Evangelical Free Church of India (EFCI)

In general, the church in Mizoram is against alcoholism and opposes the sale of liquor in the state. In the past, the Mizoram Synod, the highest administrative body of the state's largest Church denomination, the Mizoram Presbyterian Church of India, has strongly opposed the lifting of the ban on the sale of alcohol imposed by the Mizoram Liquor Total Prohibition Act of 1995 by the earlier Government (Zotinkhuma, 2018). The Conference of the Synod, also decided that people selling liquor and holding permit for purchase and consumption of alcohol will not be allowed to take active part in church activities (The Northeast Today, 2015). The church in Mizoram organizes gospel camps which includes rehabilitation from alcoholism and asks members to be free from alcoholic drinks. It is generally believed that The Mizoram Liquor Total Prohibition (MLTP) Act was enacted because of much pressure from the Church (Zorammuana, 2010). Majority of the churches in Mizoram though have strictly opposed the consumption of alcohol in the state but most of them are yet to express similar level of opposition for the consumption of tobacco. Though tobacco consumption is a major problem in entire northeast, but most churches were silent for a long time on this issue (PahrüPou, 2017). Most Churches in Mizoram prohibits smoking within their church premises, but it is not uncommon to observe people smoking outside the main church building. However, there are some exceptions such as the Presbyterian Church which had adopted a policy not to recruit probationary officers who are addicted to tobacco and expects its office staff to be free from tobacco use (Zorammuana, 2010). The Seven Day Adventist Church has a general view which prohibits its followers from consuming anything that may be perceived as "unclean" which includes alcohol, drugs, tobacco, meat etc. Denominations like the Presbyterian Church had included the Thematic topic on tobacco and health in the Wednesday Night church service and in the yearly observation of health Sunday like leprosy Sunday, cancer Sunday etc. (Hatzaw, 2014). Since the church provides separate services for children, youth and women, therefore it can be a very good platform for taking tobacco control initiatives (Hatzaw, 2014). It may be pointed that Rev Lalhmuchhuaka, who is the Chairman of Mizoram Kohhran Hruaitute Committee (MKHC) is also a member of the governing

body of MSTCS. The MKHC is the apex body of 16 churches in Mizoram. In May, 2018 a Training of Trainers for Church Leaders on Prevention of Substance Abuse was organized by Project Himna-MADAT (Mizoram Against Drugs, Alcohol & Tobacco) at Administrative Training Institute (Vanglaini, May 29, 2018).

5.5 The Other Prominent Non-Government Organizations in Mizoram

Mizoram has many notable NGOs like YMA, MHIP, MZP etc which are very active and influential in the society. Though primarily these organizations does not deal with specific issues related to tobacco but they have often addressed issues of public health, education, social awareness etc and also occasionally contributed in their respective capacities to the cause of tobacco control in Mizoram. Many of them in the past have participated and cooperated with the Government, MSTCS and ISTHMC in various targeted tobacco control initiatives in Mizoram. Some of these prominent NGOs and associations and their roles have been discussed below.

5.5.1 The Young Mizo Association (YMA)

The Young Mizo Association popularly referred as YMA is the largest voluntary civil organization in Mizoram. Among all the NGOs in Mizoram, "the Young Mizo Association is the oldest, largest and the most powerful social organisation" (Chawngthanmawii, 2014). It is registered under the Societies Registration Act (Act XXI of 1860) Registration No. SR4 of 1977 (Mizoram State National Informatics Centre, n.d.). YMA was established on 15th June 1935 at Aizawl and was called as the Young Lushai Association at that time. The Young Lushai Association became Young Mizo Association on 7th October, 1947 (Young Mizo Association, 2012). In general, anybody can become a member of YMA as long as he/she is aged 14 or above. At present, YMA has 5 sub-headquarters, 47 group YMA, 772 branches and more than 4 lakh members, spread all over Mizoram and also in the states of Assam, Manipur, Meghalaya, Nagaland and Tripura (Young Mizo Association, 2012).

It is largely agreed that the YMA has successfully replaced the traditional system of bachelor's dormitory called the *Zawlbuk* which was an essential and integral part of Mizo society and culture. The esteemed institution of *Zawlbuk* was known for its

strict civic values and dedicated community services. The modern YMA in many ways retains such core values. The YMA has three main mottos as follows (Young Mizo Association, 2012):

1. Good use/ Proper utilization of leisure time.
2. Reverence for a good Christian life.
3. Striving towards a holistic development of the Mizo society.

Since its inception, one of the primary activities of the YMA is to help the poor and the needy in the society. The most common service that YMA members extend to the society with dedication is during the occurrence of death in the community (Mizoram State National Informatics Centre, n.d.). The YMA is also known for promptly helping with rescue and restoration during natural calamities like landslides. YMA also runs Adult Education Centres all over the state of Mizoram and it is being credited for its contributions in bringing up the literacy rate of Mizoram. It has set up the Youth Development and Training Centre (*Zawlbuk Ram*) at Thingsulthliah for the youth and is also running more than 250 Public Libraries all over Mizoram. Since 1974, YMA has taken up the 'Green Mizoram' Project where they carry out state-wide tree plantation programs. YMA also regularly conducts cleanliness drive, campaign on health and sanitation and has constructed numerous public toilets across various towns and villages of Mizoram. For its outstanding contributions to the environmental cause, YMA has been awarded the 'Indira Gandhi Paryavaran Puruskar' in 1993 by the Government of India (Mizoram State National Informatics Centre, n.d.). The YMA works for the conservation of Mizo culture and heritage and organizes mass participation programmes of sports, social and cultural activities. One major achievement of YMA is its participation as a voluntary organization to support and ensure free and fair election during the State Assembly and MP Elections. YMA was awarded the 'Excellence Service Award ' by the Government of Mizoram for the three consecutive year from 1988 to 1990 (Mizoram State National Informatics Centre, n.d.).

The YMA actively campaigns against the evils of drugs and alcohol. It is strongly opposed to the use and sale of Alcohol in the state. "Fight against intoxicants" was

the annual theme for YMA from 2004 to 2008. Under this initiative, Supply Reduction Service (SRS) and Demand Reduction Service (DRS) Squad were set up. In May 2010, the Central YMA had also set up anti-drugs squad called Central Anti-drugs Squads to fight against drugs and drugs peddlers (Zorammuana, 2010). At present the YMA has taken a special programme on HIV/AIDS. As part of this programme, it conducts various awareness campaign, seminars, publication and distribution of brochure and leaflets to educate people about the dreaded disease (Mizoram State National Informatics Centre, n.d.).

Laldinliana (2010) remarked that "due to the proactive role being played by YMA, drug abuse has been on the decline in recent years. However, the state has to go a long way in order to curb the menace of tobacco consumption". It is interesting to note that the YMA during its initial years in the late 1930s, tried to "popularize the Mizo tobacco with a slogan that smoking Mizo Tobacco was much cheaper than cigarettes" (Chawngthanmawii, 2014). This was done as a measure to safeguard Mizo tradition. However, the YMA in recent times has become much aware and concerned about the menace of tobacco in the society and has supported the various initiatives that were taken by the Government in this regard. Mr. Vanlalruata, the General Secretary of CYMA is also a member of the governing body of MSTCS. YMA in partnership with the MSTCS has organized awareness programme on tobacco in five schools on 5th June, 2009 (Zorammuana, 2010). It may be also noted that some Young Mizo Association branches and village council authorities have imposed a ban on selling *gutkha* in their respective areas (WebIndia123, Jun 20, 2010).

5.5.2 Mizo Hmeichhe Insuihkhawm Pawl (MHIP)

Mizo Hmeichhe Insuihkhawm Pawl (MHIP) which literally means, binding the women together, is the largest women organisation in Mizoram with its Headquarter located at Aizawl. It was established on 6th July, 1974 and is registered under Registration No. 5 of 1977, Society Act 1860 (Act XXI of 1960). MHIP has branches (sub-headquarters) in all districts of Mizoram. It has a presence in 16 blocks in the state with 12 joint headquarters and 740 local branches (Hanghal, 2014). The basic

principles of the MHIP are based on Mizo societal tradition of '*Tlawmngaihna*' or philanthropic social work with no expectation of any return benefit. MHIP aims at creating a state of welfare in which every individual is cared for irrespective of Caste or Creed (National Informatics Centre, Mizoram, n.d.). The main activities of MHIP include the followings:

a) Undertaking the cause of women rights and development in Mizoram and reviewing the Mizo Customary Law for protection of rights of Mizo women.

b) Fighting against women atrocities like rape, murder, gender violence, domestic violence etc.

c) Provide family counselling, guidance and support to single mothers, divorcees etc.

d) Provide monetary or material support to the destitute women and children from economically weaker section of the society.

e) Offering leadership, vocational and entrepreneurship training to women for women empowerment.

f) Organizing social interaction and awareness campaigns on education, health, hygiene etc.

Besides taking up issues of women rights and empowerment, MHIP has done remarkable contributions in the field of health awareness in Mizoram. It has worked among Injecting Drug Users, Female Sex Workers and Migrant labours for preventing the spread of HIV/AIDS and organised advocacy meeting on HIV/AIDS among different NGOs, CBOs and Local Church Leaders in Lawngtlai (Indian NGOS, n.d.). Under the sponsorship of the Department of Health, it had launched family planning scheme and distribution of medicines in the rural area and covered 400 villages. The MHIP Falkawn Branch and the State Referral Hospital jointly organized a sensitisation programme on non-communicable diseases and free medical clinic at State Referral Hospital in March, 2015 (Northeast Today, March 16, 2015).

Ms Lalthlamuani, the President of MHIP is also a member of the governing body of MSTCS. The MHIP had participated in Anti-Tobacco Squad drives and Joint

Enforcement with other departments such as Legal Metrology, Food and Drug Administration, Traffic Police, CID (Crime) etc (Health & Family Welfare Department, Government of Mizoram, 2018). MHIP had done a state-wide campaign against *gutkha* where leaders of MHIP branches in Aizawl took an oath to fight the menace and stop the selling of *gutkha* in their respective jurisdictions. The Ex Health Minister of Mizoram, Mr. Lal Thanzara on the occasion of MHIP Day observed on 6th July, 2014 lauded MHIP for its drastic campaign to end consumption of tobacco products like *gutkha* and pointed that the excessive consumption of such products severely affect the health of youths (Hueiyen News Service/Newmai News Network, July 6, 2014). In 2015, MHIP in association with MSTCS had organized seminar on Tobacco Control and Gurkha Product (Vanglaini, July 24, 2015).

5.5.3 Mizoram Journalists Association (MJA)

Mizoram Journalists Association (MJA) is a welfare body for working journalists in Mizoram. It's headquarter is based at Aizawl. The Ex-Chief Minister of Mizoram Mr. Lalthanhawla was the founder president of the association which was set up in the year 1972 (The Telegraph, November 15, 2012). Mr. Zonunsanga Khiangte is the present president of the association. The MJA is being credited for its valuable contributions for the growth and development of journalism in Mizoram. According to Dr. C. Lalmuansangkimi (2015), "The presence and well-organized functioning of Mizoram Journalists Association (MJA) may be attributed with the booming of Print Journalism in Mizoram".

The MJA has partnered with the Department of Health and MSTCS on a number of occasions for health awareness programmes which also included tobacco control programs and awareness campaigns. Mr Vanlalrema Vantawl, a member and the Ex-President of MJA is also a member of the governing body of MSTCS. In December 2015, the MJA in association with the MSTCS and supported by The Union, an international voluntary scientific organisation organized one day Media Workshop on Tobacco Control in Mizoram at the Aizawl Press Club (Eimi Times, December 13, 2015; Northeast Today, December 14, 2015). The objective of the workshop was to sensitize the media regarding the problems arising from growing tobacco

consumption in the state. The Lunglei District Tobacco Control Cell (DTCC) had conducted 'Training on Tobacco Control for MJA and I&PR' on 27th March, 2019 at the I&PR Conference Hall in Lunglei. The program was chaired by Dr. S. R. Ngurchamliana, Medical Superintendent and District Nodal Officer of the National Tobacco Control Programme (NTCP) (Lalremruati, 2019).

5.5.4 Mizo Zirlai Pawl (MZP)

The Mizo Zirlai Pawl (MZP) is the largest student organization and apex students' body in Mizoram. The origin of MZP can be traced back on 27th October, 1935 when Lushai Students Association (LSA) was established in Shillong. On 1st September, 1946 the Lushai Students Association was replaced with Mizo Zirlai Pawl or the MZP as it is known today (Zate, 2017). The organization is registered under as SR No. 35 of 1969–70 under Indian Societies Registration Act. Every year since 2008, the MZP raising day of October 27th is being observed as "*Zirlaite Ni*" (Students' Day) in Mizoram. MZP has 12 headquarters including one each in Tripura and Manipur, 50 sub-headquarters and several branches both inside and outside Mizoram. MZP also has 8 affiliated tribe based students' organisations of Mizoram under its fold. The motto of MZP is 'Ṭanrual hi Chakna' meaning 'Unity is Strength' and its theme is '*Mizo zirlaite kan ram leh hnam tan'* meaning 'Mizo students for our land and society'. The main aims and objectives of MZP are as follows (Zate, 2017):

a) To safeguard the rights and unity of all Mizo students.
b) To prepare Mizo people to become helpful citizens of Zoram.
c) To do its best to unite all Mizo people and create an independent Mizo state out of all the territories historically occupied by Mizo peoples.
d) To prevent and attack corruption in Mizoram.
e) To conserve traditional Mizo values.

MZP is also a part of North East Students' Organisation (NESO), an amalgamation of apex students' bodies of the seven North Eastern states. MZP also publishes a monthly magazine in Mizo language called '*MZP Chanchinbu*'.

The representatives of MZP along with other NGOs attended the first meeting of State Level Coordination Committee (Tobacco Control) held on 29th July, 2014. The main objective of the committee is to strengthen the fight against tobacco and to better ensure enforcement of the different sections under COTPA by government offices in the State. The Chairman of State Level Coordination Committee, L. Tochhong, requested support from the members of the committee, various government departments as well as the present NGOs to put coercive efforts to reduce tobacco consumption in the state (Sinlung, July 29, 2014). On 29th August 2014, MZP jointly organized the Youth MPOWER summit with MSTCS, which was held at the Tourist Lodge, Chaltlang. During the summit, the different MPOWER strategies was discussed and presented by Dr. Jane R Ralte, State Nodal Officer, MSTCS and the various ways to implement MPOWER strategies along with innovative ideas were discussed at the event (Mizoram Pradesh Congress Committee, 2016).

5.6 Implementation of NTCP & COTPA in Mizoram

In India, legislations related to sale of tobacco products can be traced back to 1975, when it was made mandatory to display a statutory health warning on all packages and advertisements of cigarettes as per the Cigarettes (Regulation of Production, Supply and Distribution) Act (Mishra et al, 2012, Reddy & Gupta, 2004; Shimkhada & Peabody, 2003). However, a need for more comprehensive legislation was felt by the Government and the Indian Parliament passed the Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill, 2003 in April 2003 and thus, COTPA became an Act on 18 May 2003 (Mishra et al, 2012). The Act is applicable to all products containing tobacco in any form as detailed in the Schedule to the Act. The Act extends to the whole of India including the state of Jammu and Kashmir. Mishra et al., (2012) summarizes the key provisions of COTPA, 2003 as follows:

- Prohibition of smoking in public places (including indoor workplaces). This has been implemented from 2nd October 2008 in the whole of India.

- Prohibition of advertisement, direct and indirect (point-of-sale advertising is permitted), sponsorship and promotion of tobacco products.

- Prohibition of sales to minors (tobacco products cannot be sold to children less than 18 years of age and cannot be sold within a radius of 100 yards of any educational institutions).

- Regulation of health warning in tobacco products packs. English and one more Indian language to be used for health warnings on tobacco packs. Pictorial health warnings also to be included.

- Regulation and testing of tar and nicotine contents of tobacco products and declaring on tobacco products packages.

Furthermore the Section 4 of COTPA 2003 and subsequent rules notified (The Prohibition of Smoking in Public Places Rules, 2008) prohibition of smoking in public places to protect people from the harm of Second Hand Smoke (SHS) exposure. In short, COTPA regulates the consumption, production, supply and distribution of the tobacco products by imposing restrictions on advertisement, promotion and sponsorship of tobacco products; prohibiting smoking in public places; prohibiting sale to and by minors; and prohibiting sale of tobacco products within a radius of 100 yards of educational institutions, and through mandatory depiction of specified pictorial health warnings on all tobacco product packs. It does not ban tobacco products per se. However, the Production, Sale, Storage and Distribution of food products containing tobacco or nicotine such as *Gutkha* have been prohibited under The Food Safety and Standards (Prohibition and Restrictions on Sales) Regulations, 2011 dated 1st August 2011, notified under the Food Safety and Standards Act, 2006.

The Ministry of Health and Family Welfare, Government of India has launched the National Tobacco Control Programme (NTCP) in the year 2007-08 (Jhanjee, 2011; Kaur & Jain, 2011), with the following objectives:

a) Create awareness about the harmful effects of tobacco consumption and about tobacco control laws.
b) Reduce the production and supply of tobacco products.

c) Ensure effective implementation of the provisions made under COTPA 2003.

d) Help the people quit tobacco use through Tobacco Cessation Centres.

The focus areas of NTCP include the following:

a) Training of health and social workers, NGOs, school teachers, enforcement officers etc.

b) Information, Education and Communication (IEC) activities.

c) School Programmes.

d) Monitoring tobacco control laws.

e) Co-ordination with Panchayati Raj Institutions for village level activities.

f) Setting-up and strengthening of cessation facilities including provision of pharmacological treatment facilities at district level.

Under the NTCP, a National Tobacco Control Cell (NTCC) was formed which is responsible for overall policy formulation, planning, implementation, monitoring and evaluation of the different activities envisaged under the National Tobacco Control Programme (NTCP). The NTCC functions under the direct guidance and supervision of the programme in-charge from the Ministry of Health and Family Welfare i.e. Joint Secretary/Director. The technical assistance is provided by the identified officers in the Directorate General of Health Services i.e. Deputy Director General (DDG)/Chief Medical Officer (CMO). The NTCC is supported by Consultants in specific areas of tobacco control like Policy, National Coordination, Legal, IEC etc.

The Government of Mizoram has implemented the National Tobacco Control Programme in Mizoram as Mizoram State Tobacco Control Programme (MSTCP). To implement the State Tobacco Control Programme, Mizoram State Tobacco Control Society (MSTCS) was established which runs 9 District Tobacco Control Cells (DTCC) and 1 State Tobacco Control Cell (STCC) in the state. The Government of Mizoram has taken many steps in recent past to accelerate the National Tobacco Control Program in Mizoram. Since 2014, 11th September of every year is being observed as the official 'Mizoram State Anti Tobacco Day' and Mizoram became the very first state in the country to have a dedicated day on this

important public health issue (Mizoram Pradesh Congress Committee, 2016). Mizoram is also the only state in India to authorise all ranks of police personnel to enforce Section 4, 6(a) & (b) and it is also the first state to adopt Anti Tobacco Squad (Hmar, 2018). The General Administration Department, Government of Mizoram issued a Notification on 21st April, 2017 regarding prohibition of smoking in public places in government offices and instructed all departments to strictly fine offenders and display 'No smoking Signage' and 'Complaint Board' and to establish 'Tobacco Control Team' in all their respective offices (Health & Family Welfare Department, Government of Mizoram, 2018). To deal with any kind of interference by the tobacco industry including registered or local manufacturers, seller or any person or group intended to act as a representative for the said party, the Government of Mizoram constituted a special committee on 20th May 2016 to implement Article 5.3 of WHO Framework Convention on Tobacco Control. The committee includes representatives from various departments such as Health & Family Welfare, Taxation Department, Trade and Commerce, Law and Judicial, CID (Crime), I&PR and NTCP (Mizoram Pradesh Congress Committee, 2016).

Since Mizoram shares international boundaries with Myanmar and Bangladesh, it has become an easy target market for cheap contraband cigarettes (Hmar, 2018). To strengthen and consolidate various tobacco control laws for controlling and checking the mass influx of illegal tobacco products, a Joint Task Force was constituted on 3rd May, 2016. Accordingly, Joint Squad Drives have been conducted at various districts around Mizoram and as a result 2501 cartons and 722 packets of illegal cigarettes were seized which includes a number of contraband cigarettes such as Valiant, Hummer, Farstar, Winbody etc (Mizoram Pradesh Congress Committee, 2016). The Joint Controller of Legal Metrology also issued an order on 27th July, 2017 instructing all Legal Metrology Inspectors to conduct frequent and vigorous inspection and enforcement on contraband cigarettes in all the districts of Mizoram. Accordingly, a total of 471 times Anti-Tobacco Squad drive on the COTPA, 2003 was conducted in various districts which recorded 494 offenders. Joint Enforcement was also conducted with other departments and organizations such as Legal

Metrology, Food and Drug Administration, Traffic Police, CID (Crime), MHIP etc (Health & Family Welfare Department, Government of Mizoram, 2018).

On 11th September, 2015 the Government of Mizoram issued a notification to completely ban the sale of tobacco products individually, in single sticks, loose or outside its package without pictorial health warning as specified by COTPA, 2003 (Mizoram Pradesh Congress Committee, 2016). The Police Headquarters, Government of Mizoram issued a letter on the 7th August, 2017 to instruct the DIG, Northern and Southern Range to incorporate violations of COTPA as one of the agenda items in monthly crime review at the level of District or Range or State (Health & Family Welfare Department, Government of Mizoram, 2018). The Director General of Police (DGP), Mizoram released "No Smoking" stickers on 18th July, 2017 which were previously approved by the State Transport Authority to be displayed by all public transport vehicles. The Transport Department, Government of Mizoram also issued notification on 18th August, 2017 to instruct all public transport vehicles to comply with The Prohibitions of Smoking in Public Places Rules, 2008 to strictly prohibit smoking and display "No Smoking" sticker etc. As per this Notification, offenders are made punishable with fine which may extend to ₹500/- as per Section 179 (1) of the Motor Vehicle Act, 1988 (Health & Family Welfare Department, Government of Mizoram, 2018). The Mizoram State Tobacco Control Society and Aizawl City Traffic Police also jointly conducted "COTPA Enforcement Week Kick-Off programme cum release of Christmas Card for Drivers" on the 18th December, 2017 where distribution of Christmas-card and enforcement of COTPA was effectively conducted among public transport vehicles throughout the week (Health & Family Welfare Department, Government of Mizoram, 2018). Such Joint Squad Drives by Traffic personnel and Anti Tobacco Squad Members have been also carried out in the past where various vehicles have been checked for violation of various tobacco control laws in various districts of Mizoram. The Aizawl District Anti Tobacco Squad and Food Safety Authority conducted a joint enforcement drive against Hookah which are offered or sold at places like restaurants. The Deputy Commissioner of Aizawl District had passed an order to stop the manufacturing of Tuiburat Lungli River, Salem Veng which is a

residential area. This order was challenged by Mr. Dengvunga and five others. However, there PIL was dismissed by the Gauhati High Court, Mizoram Bench. On December 2017, the Ruantlang village in Champhai district was declared as a 'Tobacco Free Village' by the Additional Deputy Commissioner of Champhai after the Champhai District Anti Tobacco Squad found that there has been compliance to all sections of COTPA in that village.

From April 2014 to June 2016, a total of 353 Anti Tobacco Squad drives have been conducted, a total of 1701 offenders were identified for violation of Cigarettes and Other Tobacco Products Act (COTPA) and 3135 cartons and 1366 packets of foreign cigarettes were seized for violation of Section 7 (Prohibition of Sale of Tobacco Products without Health Warning) of COTPA 2003 (Mizoram Pradesh Congress Committee, 2016). The implementation of State Tobacco Control Program has shown some improvements like the decrease in overall tobacco use prevalence from 67.2% to 58.7% according to the comparison of GATS-1 and GATS-2. The second hand smoke exposure at home also has shown a decline from 96.5% to 84.1% and the second hand smoke exposure at the work place also similarly declined from 64.6% to 44.4%. This shows that people have slightly become more conscious regarding smoking in front of non-smokers and in public. However, according to Ladusingh et al., (2017), COTPA in general, has not been very effective in controlling tobacco use among teens and youths in northeast India. According to Lal et al., (2015), Government of India's effort to reduce sale of tobacco to underage users has had limited effects and needs to be strengthened. Similarly, in case of Mizoram also, in spite of the active role played by Government and other organizations, there has been limited success when it comes to the implementation of COTPA. First of all, from the primary data it has been found that out of all the 500 respondents, 89.8% says that tobacco products are available within the 100 meter radius around their college campuses. This is a violation of Section 6 of Cigarettes and Other Tobacco Products Act (COTPA), 2003, according to which sales of tobacco products within 100 yards of educational institutions (EIs) in India is prohibited. The contraband tobacco products especially cigarettes of Chinese and Myanmar origin which are available in Mizoram is one of the major challenge

regarding proper implementation of COTPA in the state. The initiatives by the Government of Mizoram such as inspections conducted by the Legal Metrology Department have so far offered limited and short time success in this regard. Dr. Jane Ralte had remarked, "strong enforcement of the COTPA has helped us reduce tobacco use among adults from 67.2% in 2009-10 to 58.7% in 2016-17 but the easy availability of foreign cigarettes, mainly those made in China, has made our job tougher. They are priced less and so lower income groups are switching over to the foreign ones as prices of our tobacco products have been increased over the past few years with an aim to reduce tobacco use and check cancer cases" (Karmakar, 2018).

Exhibit 5.1
Public Notification on Tobacco Packaging

Source: Ministry of Health and Family Welfare, Government of India (n.d.)

By and large there is still no visible reduction in the availability of contraband cigarettes that are sourced from Myanmar. Besides availability and low price, the contraband tobacco products extend another challenge in the implementation of COTPA in Mizoram. As per the new Cigarettes and Other Tobacco Products (Packaging and labelling) Second Amendment Rules 2018, it has been made

mandatory for the manufacturers, distributors, retailers and importers of tobacco products to cover 85% of the principal display area of the packaging of tobacco products with pictorial health warning (PHW) (Exhibit: 5.1). According to WHO, the purpose of PHWs is to discourage youths and young adults from starting smoking, to encourage smokers to quit, and to reduce second hand smoke exposure (Mansour & Bakhsh, 2017). The PHW is also very important factor in the context of Mizoram as according to the primary data, 38.61% of the Active Tobacco Consumers agrees that the graphic health warning on the packets of tobacco products decreases their desire to consume tobacco or smoke. It may also be pointed that Thailand for example had pictorial warnings on cigarette packages with WHO's highest rating and it had also the highest percentage of current smokers thinking of quitting because of such health warning on cigarette packages (Song et al., 2013). However, the contraband cigarette packaging available in Mizoram clearly does not have similar pictorial warnings as standard legalized cigarette packaging, especially in terms of explicitness and size of the actual image. Moreover, the textual warning that is displayed on the package is neither standardized nor has sufficient visibility for the target audience (Exhibit 5.2).

Exhibit 5.2
Comparison of Warning Displayed on Indian and Contraband Cigarette Packaging

Dr Jane Ralte points that "Chinese tobacco makers are so smart that they have now started packaging the tobacco products with 80% pictorial health warnings after we started seizing their products under COTPA" (Karmakar, 2018). It may be added that

cigarettes are permitted for import under the Indo-Myanmar trade agreement of 1995. Therefore, the Mizoram State Tobacco Control Cell has requested the central government to withdraw tobacco products from the list of products permitted for import under the Indo-Myanmar trade agreement of 1995 (Karmakar, 2018). There is also a similar problem with the local generic tobacco products such as *Zial*, *Sahda* and *Tuibur* which does not have any graphic warning as mandated by COTPA. All these issues go against the spirit of COTPA, 2003 and definitely make the National Tobacco Control Programme in Mizoram less effective.

5.7 Definition and Concept of Social Marketing

Social marketing is defined as "the applications of marketing strategies and tactics to alter or create behaviour that have a positive effect on the targeted individuals or society as a whole" (Hawkins et al., 2007). In other words "social marketing is the use of marketing concepts in programmes designed to influence the voluntary behaviour of target audiences in order to improve health and society" (Stead et al. 2007). Therefore, the key elements in most definitions of Social marketing is the application of marketing principles and techniques (Andreasen, 1995; French & Blair-Stevens, 2005; Hawkins et al., 2007; Kotler & Lee, 2008; Stead et al. 2007), to influence behaviour of target audience (Andreasen, 1995; Hawkins et al., 2007; Kotler & Lee, 2008; Stead et al. 2007), which aims to benefit the society (Andreasen, 1995, French & Blair-Stevens, 2005; Hawkins et al., 2007; Kotler & Lee, 2008; Stead et al. 2007). The nature of social marketing can be explained by its following characteristics (Kotler & Lee, 2008):

- Focuses on behaviour
- The behaviour change is typically voluntary
- Uses traditional marketing principles and techniques
- Selects and influences a target market
- The primary beneficiary is the society

Another key characteristic of social marketing is that, besides 'downstream' application to individuals and targeted segment from society and the population, it is also applicable 'upstream' to motivate and change the behaviour of professionals, organisations and policymakers (Hastings et al, 2000; Lawther et al, 1997; Stead et al. 2007). The concept of social marketing differs from commercial marketing in three ways. Firstly, social marketers focus on selling 'behaviour' whereas commercial marketers mostly focus on selling goods and services. Secondly, commercial marketers position their products against competing products of other companies while social marketers compete with target audiences existing behaviour and associated benefits. And thirdly, the ultimate goal of social marketing is the welfare of individuals, groups or the society whereas commercial marketing primarily aims for increasing the shareholder's wealth (Kotler & Lee, 2008).

5.8 The Social Marketing Mix

Over the years the gradual exploration by different scholars, and practicing experts, marketing as a subject has been branched out into different domains or specialized areas. One of the most comprehensive and widely recognized models for the design and application of marketing strategy is the "Marketing Mix" model. The concept of a "marketing mix" was first offered by Neil Borden in his 1953 American Marketing Association presidential address and later in a journal article (Borden, 1964; Gordon, 2012). The 4Ps of marketing viz. Product, Price, Promotion and Place was first proposed by Jerome McCarthy (1960) and since then it has been widely acknowledged as the ultimate marketing mix elements for marketing. Different scholars have suggested different marketing mix elements for specialized domains of marketing keeping in mind the uniqueness of that particular domain area. Kotler and Zaltman (1971), credited for coining the term "Social Marketing", tried to elaborate its marketing mix elements. Their effort was to interpret the conventional marketing mix elements from the perspective of social marketing. Since then there have been efforts by others also to adapt the conventional marketing mix elements to social marketing concept. Lee and Dewhirst (2011) had discussed 4Ps based social marketing mix strategy for tobacco control. Andreasen (1994) mentions that the

"strategies designed to effect behavioural change always comprise all four elements of the marketing mix (the four Ps)". In some cases additional "Ps" or elements have also been accommodated to cover other related dimensions. A widely acknowledged addition to the traditional 4Ps in this regard is the inclusion of three more 'Ps', namely – People, Policy and Partnership (Donovan & Henley, 2010).

At the 2011 World Non-Profit and Social Marketing Conference in Dublin, the Director at Strategic Social Marketing, Clive Blair-Stevens and Social Marketing Director of Kindred, UK, Sue Nelson, argued that "the 4Ps are no longer relevant, and have lost practical application as technologies; tools and social media have evolved" (Gordon, 2012). According to Gordon (2012), "the 4Ps marketing mix is outdated for application in contemporary social marketing" and "social marketing requires an expanded marketing mix encompassing the range of concepts and tools used such as promotion, new media, policy, people, advocacy, community & stakeholder engagement, co-creation, upstream efforts, relational thinking, & holistic & strategic thinking". The conventional 4Ps marketing mix model has been criticized for being too simplistic (Gordon, 2012) for application to complex marketing problems in the areas of services, B2B or social marketing and for not being focused on strategic, long-term relational thinking and brand equity (Rafiq & Ahmed, 1995). The application of conventional 4Ps has also been biased towards use of traditional media like television and print and has its own limitations towards emerging platforms like digital social media (Doyle, 2000).

Table 5.2
Commercial Marketing Mix Vs. Social Marketing Mix

Marketing Mix Elements	Commercial Marketing	Social Marketing
Product	A tangible object or intangible service, produce or manufactured and offered to consumers in the marketplace	The behavioural offer made to target adopters and often involves intangibles such as adoption of an idea or behaviour. Tangible product offerings (such as condoms to encourage safe sex) can also be present.
Price	The amount a consumer pays for the product or service, usually an economic cost.	It relates to the costs that the target audience have to pay, and the barriers they have to overcome to adopt the desired behaviour. These costs can be psychological (e.g. loss of de-stressing effect from smoking),

		cultural, social, temporal, practical, physical and financial.
Place	The location in which a product or service is purchased – often referred to as the distribution channel. This includes physical stores as well as virtual outlets.	It is the channel(s) by which behaviour change is promoted and the places in which change is encouraged and supported.
Promotion	The communications used by marketers including advertising, public relations, personal selling and sales promotion.	It is the means by which behaviour change is promoted to the target audience, for example advertising, media relations, direct mail and interpersonal communication.

Source: Gordon (2012)

Gordon (2012) advocated that "social marketers should be encouraged to engage, inspire, debate and propose ideas" which "would facilitate the development of a new, delimiting, and contemporary social marketing mix". In this context he suggested the following draft model of social marketing mix.

Exhibit 5.3
Gordon's Proposed Social Marketing Mix
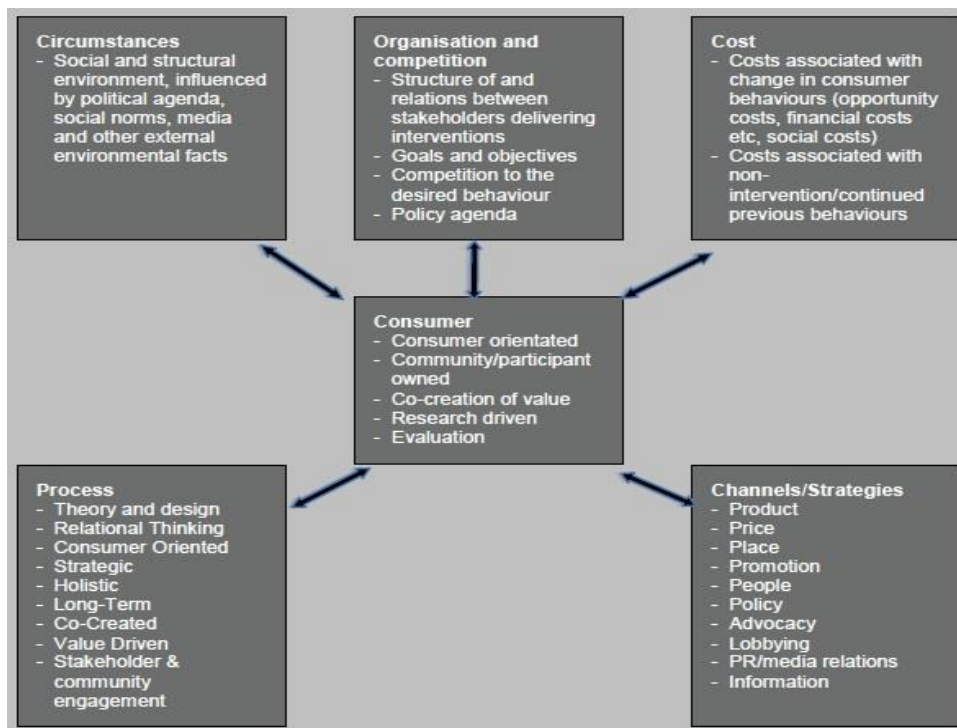
Source: Gordon (2012)

Winett (1995) pointed out certain specific theories which are appropriate for each element of the conventional 4Ps. He suggested Diffusion theory and Stages of Change for Product; Behaviour analysis and Social cognitive theory for Price; Theory of reasoned action, Health belief model, Protection motivation theory, Social

cognitive theory, behaviour analysis for Promotion; and Public health and ecological for Place. However, it was noted that most of the behavioural theories predominantly focus on the promotion element of marketing mix and therefore more attention needs to be given to theoretical models for exploring the other elements of the marketing mix (Lefebvre, 2001; Winett, 1995). Webster (1975) argues that "it is potentially dangerous oversimplification to assume that traditional business marketing practices can be applied without modification in non-business environments". The marketing strategies used by the marketer of general consumer goods or services are largely based on the conventional marketing mix elements. Though social marketing can be elaborated based upon the conventional marketing mix elements, but the conventional marketing mix elements has got limitations in terms of adequately and directly addressing all issues concerning the specific marketing process to be adopted for social marketing. Therefore, there is a need to explore and appropriately redefine the marketing mix elements for social marketing. Based on the distinctiveness of the social marketing concept, the marketing mix for social marketing may be reinterpreted with the following 4Ps as shown in Exhibit 5.4 (Akhtar & Bhattacharjee, 2014):

Exhibit 5.4
The Social Marketing Mix

Source: Akhtar & Bhattacharjee (2014)

The above social marketing mix can be appropriately used for framing a comprehensive social marketing strategy for controlling tobacco consumption in Mizoram. According to this social marketing mix, 'Proposition' could address the actual cause, objective, policy, message and branding for tobacco control. Similarly, 'Perception' could address the cost and benefit for behavioural change, positioning the cause in the minds of the target community and understanding the attitudes and behaviour of the target community. 'Platform' could deal with identification and segmentation of the target community, finding channels, places and intermediaries for communication, adoption and intervention, identifying other organizations for building partnership for the cause, and selecting suitable media platforms for promotion and publicity. Finally, the 'Persuasion' element could deal with the designing and execution of advertisement, sales promotion (incentivizing the behavioural change) and value addition, publicity, endorsements and application of behavioural change models.

5.9 Persuasion, Attitude and Behavioural Change in Social Marketing

Social marketing campaigns are largely focused on persuasion for behavioural change. There are a number of relevant models that can be used for social marketing initiatives. Some of these important models are mostly related to communication, persuasion, attitude and behaviour change. As for most social marketing communications, the primary objective is to achieve attitudinal and behavioural change (Donovan and Rossiter, 1996) and the primary product of social marketers is information (Young, 1989). Donovan and Henley (2010) have mentioned the elaboration-likelihood model (ELM) (Petty & Cacioppo, 1983, 1986) and Chaiken's (1987) heuristic model as important cognitive processing models for persuasion. They have also mentioned the Rossiter-Percy model (Rossiter & Percy, 1997) and the FCB (Foote, Cone and Belding) planning model (Vaughn, 1980, 1986) as important models from consumer behaviour advertising perspective. The models of attitude and behaviour change are generally known as 'knowledge-attitude-behaviour' change (KAB) model or 'social cognition' models (Godin, 1994; Connor & Norman, 2005; Donovan & Henley, 2010) and are very useful in developing

campaign strategies in social marketing. In this regard, Donovan & Henley (2010) has mentioned models like the Health Belief Model (HBM), Roger's (1975) Protection Motivation Theory (PMT), Bandura's (1977) Social Learning Theory (SLT), Fishbein and Ajzen's (1975) Theory of Reasoned Action (TRA), Bagozzi and Warshaw's (1990) Theory of Trying (TT), the concept of Cognitive Dissonance, Triandis' (1977) Theory of Interpersonal Behaviour (TIB), Diffusion Theory (Rogers, 1995) and Prochaska and DiClemente's (1984, 1986) Stages of Change model. These models are briefly explained below:

Elaboration-Likelihood Model: This cognitive processing model for persuasion was developed by Richard E. Petty and John T. Cacioppo (Petty & Cacioppo, 1983). According to the ELM, there are two routes to persuasion, the central route and the peripheral route. The central route involves extensive elaboration and judgment by the receiver of the issue-relevant argument in the message. In the peripheral route the receiver does not engage in such elaboration but is persuaded by some other factor(s) like personal interest in the source or the accompanying music in the message which are all peripheral to the argument in the message (Donovan & Henley, 2010). The central route processing occurs when the issue has high personal relevance to the receiver. In such case the receiver is highly involved, pays close attention and personally cares about the issue in the message and thus is persuaded by his own personal interest in the issue. On the other hand, the peripheral route processing will occur when the receiver of the message is persuaded little or not by the actual issue behind the message but more by decision heuristics. According to Donovan and Henley (2010), "Indigenous people with little knowledge of Western concepts of disease prevention by vaccination are more likely to be persuaded to vaccinate by the peripheral route than by scientific arguments". Therefore, in the context of tobacco control in Mizoram, ELM may be applied to frame specific and effective message content for the target community.

Heuristic-Systematic Model: The heuristic model of persuasion was proposed by Shelly Chaiken and it attempts to explain how people receives and processes persuasive messages. According to this model, people process persuasive messages

either heuristically or systematically. The heuristic processing of information involves the use of simplified rules or heuristics to make conclusion about the message. These simplified judgment rules are called knowledge structures which are learned and stored in memory. The heuristic processing is governed by three conditions namely availability, accessibility and applicability. 'Availability' refers to the presence of knowledge structure in the memory, 'accessibility' suggests the ability to retrieve knowledge structure from memory and 'applicability' signifies the relevance of knowledge structure to the judgmental task (Chen et al, 1999). Therefore, when people do not perceive issues to have much personal importance or believe that their judgment on the issue is not going to impact them significantly they are more likely to go through heuristic processing. In contrast, when people perceive the issue to be personally important and their judgment on the issue has the potential to significantly impact them, they are more likely to go through systematic processing. Therefore, systematic processing depends on comprehensive and analytic, cognitive processing of judgment-relevant information (Chen et al, 1999). Systematic processing gives greater emphasis on source reliability and message content to determine message validity and may have stronger impact on persuasion (Chaiken, 1980). Both heuristic and systematic processing may occur independently or simultaneously. It has also been suggested that the attitudes developed or changed in an individual through only heuristic processing will likely to be less stable and less predictive of subsequent behaviour than attitudes developed or changed by applying systematic processing (Chaiken, 1980). This model may be used while designing anti-tobacco campaigns in Mizoram where greater emphasis is given towards systematic processing of the campaign message by the target audiences.

Rossiter-Percy Motivational Model: Donovan and Henley (2010) points out that "the Rossiter-Percy model offers specific practical guidelines for developing and executing social marketing messages because of its emphasis on identifying the appropriate motivations for the target groups as the basis for attitude – and subsequent behaviour – change". The model (Exhibit 5.5) categorizes consumer decision making based on two dimensions: the level of involvement and the nature of motivations regarding the decision. Involvement is the perceived financial, functional

or social risk in making wrong decision and it can be either high or low. Similarly the nature of motivation for consumer decision-making can be positive or negative. In case of positive motivation, the consumer aims to achieve a positive experience or enhanced positive emotional state whereas, negative motivations causes the consumer to put efforts to solve current problem or avoid future problems.

Exhibit 5.5
Rossiter-Percy Motivational Model

	Type of Motivation	
Type of Decision	**Positive**	**Negative**
Low Involvement		
High Involvement		

Source: Donovan & Henley (2010). p.139

The tobacco consumption behaviour of people in Mizoram may be explained by this model where people have low perceived risk about consuming tobacco and thus low involvement in their decision to consume tobacco. At the same time, their addictive behaviour or choice to continue consume tobacco is likely to be a result of a positive motivation to have temporary feel good experience. Therefore, to counter this way of decision making by tobacco consumers, the social marketing message should result in high involvement and negative motivation among the target audience.

FCB Grid Model: The Foote, Cone and Belding Model, also known as FCB Grid was developed by Richard Vaughn in 1980. The model classifies the level of consumer involvement under two categories as 'high' and 'low'. The model assesses the thinking and feeling pattern of the consumers. The model also suggests that over a period of time, the consumers tend to think emotionally from being rationally and their interests and behaviour shifts from high involvement to low involvement or from low involvement to high involvement. The first quadrant which is called 'informative', signifies high involvement and deep thinking shown by the consumers in their decision making process. High investment products like property or

insurance may fall under this category. The second quadrant called 'affective', signifies high involvement of the consumers triggered by feelings and emotions during decision making. Examples of such purchases may include beauty products, special gifts, holiday packages etc. The third quadrant called 'habitual', signifies low involvement and low amount of thinking by the consumers and their consumption decision is based on regular necessity or habit. Purchases like regular groceries may fall under this category. The fourth quadrant is called 'satisfaction' and it signifies the consumer decision making regarding consumption which involves low amount of thinking and low feeling by the consumers. It usually includes impulse purchases or purchases made due to momentary peer pressure.

Exhibit 5.6
Foote, Cone and Belding Model

	THINKING	FEELING
HIGH INVOLVEMENT	1 Informative (Learn, Feel, Do)	2 Affective (Feel, Learn, Do)
LOW INVOLVEMENT	3 Habitual (Do, Learn, Feel)	4 Satisfaction (Do, Feel, Learn)

The consumer decision making for tobacco consumption in Mizoram can also be explained using this model. Since, such decision making by consumers is characterized by low involvement; therefore it may fall either under the habitual or the satisfaction quadrant.

The Health Belief Model: Health belief model (HBM) is one of the most widely used theories among public health practitioners to understand and explain why people do not participate in programs to prevent or detect diseases (Lefebvre, 2001) highlights the significance of perception in social marketing projects. It is perhaps the first behavioural model in health education (Donovan & Henley, 2010) developed by US Public Health Service workers in the 1950s to explain the participation and non-participation in screening programmes for tuberculosis

(Becker, 1974; Maiman & Becker, 1974; Rosenstock, 1974**). The core components of HBM include the following:

- *Perceived Susceptibility:* The subjective perception of risk of developing a particular health condition.
- *Perceived Severity:* The feelings about the seriousness of the consequences of developing a specific health problem.
- *Perceived Benefits:* The beliefs about the effectiveness of various actions that might reduce susceptibility and severity.
- *Perceived Barriers:* The potential negative aspects of taking specific actions and *cues to action* (bodily or environmental events that trigger action).

Exhibit 5.7
The Health Belief Model
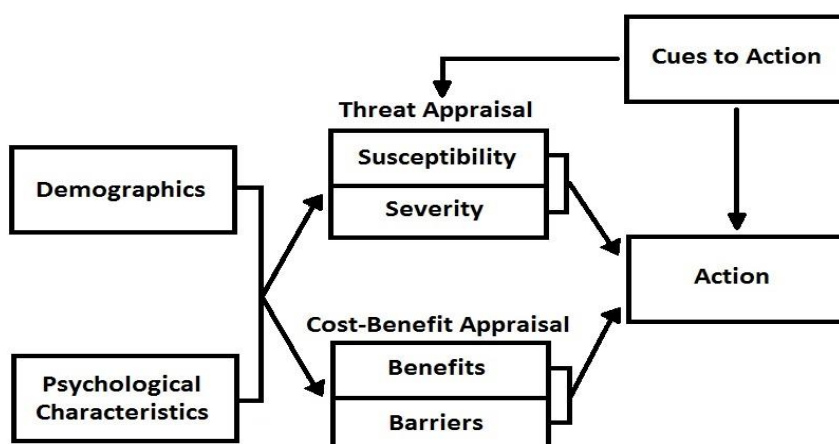
Source: Donovan & Henley's (2010) Adaptation of Abraham & Sheeran (2005), p.126

This model may be applied to encourage tobacco consumers in Mizoram to participate in quit interventions by understanding how they perceives the health risks associated with tobacco and the costs and benefits of quitting it.

Protection Motivation Theory: The Protection motivation Theory (PMT) was proposed by Rogers (1975) as a model which explains the motivational effects of 'threat' communications (Donovan & Henley, 2010) and assumes that people are motivated to protect themselves from physical, social and psychological threats (Rogers, 1983). According to PMT, when people are confronted with a threat, they

undertake two kinds of appraisals, threat appraisal and coping appraisal. A threat appraised by an individual is based on two factors, the severity of threat if it occurs and the perceived likelihood of its occurring if recommended behaviour is not adopted by the individual. Together these two factors determine the individual's perceived 'vulnerability'. The coping appraisal on the other hand is related to the individual's assessment of the recommended behaviour based on again two factors, the perceived effectiveness of the proposed behaviour in avoiding or reducing the occurrence of the threat and the individual's self-perceived ability to perform the proposed behaviour (Donovan & Henley, 2010).

Exhibit 5.8
Protection Motivation Theory
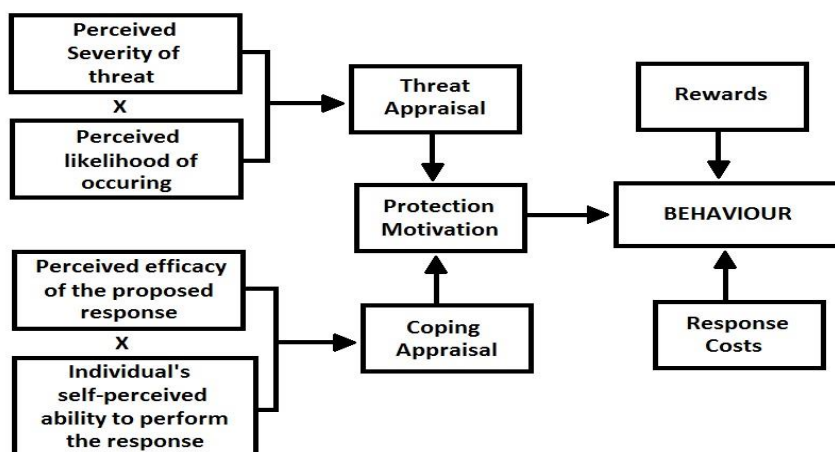
Source: Donovan & Henley (2010), p. 129

The 'response cost' resists individuals to adopt the desired behaviour and 'rewards' achieved from undesirable behaviour reinforces the existing behaviour. The PMT has been applied in different health related areas in the past. The same can also be applied to understand how people perceives health related threat caused by tobacco consumption and also to understand their intentions to quit or continue tobacco consumption.

Social Learning Theory: The Social Learning Theory was proposed by Albert Bandura (1977) which signifies observation, imitation, modelling and experience as important source for learning. Social learning theory suggests that individual learning is strengthened by social reinforcement of learned behaviour. Bandura (1986) has

included the concept of self-efficacy and expanded the Social Learning Theory to a comprehensive 'social cognitive model' (Donovan & Henley, 2010). According to this model there are certain meditational processes which happen during observation of a behaviour and prior to its imitation (or not imitation). According to Bandura, there are four meditational processes as follows:

- **Attention:** It refers to the extent to which an individual is exposed or notices a particular behaviour. In other words, not all behaviours are noticeable by every individual.

- **Retention:** It is the ability to remember a particular behaviour. Therefore, it signifies the role of memory which stores information related to the behaviour.

- **Reproduction:** It refers to the individual's physical and mental abilities and skills to recall and repeat the stored behaviour from the memory.

- **Motivation:** This refers to the willingness to perform the behaviour. In this regard, the individual's perception and assigned importance to the positive or negative reinforcement is the determining factor for the likelihood of imitating the observer.

The Social Learning Theory can explain the role of socio-cultural influences for tobacco consumption in Mizoram. The theory can also suggest the extent of peer pressure, influences from family and role models in developing pro-tobacco mindset among the younger generation.

Theory of Reasoned Action: The Theory of Reasoned Action (TRA) is one of the most developed and widely used model in social psychology and consumer decision-making (Donovan & Henley, 2010). The theory (Fishbein & Ajzen, 1975) proposes that a particular behaviour is an outcome of one's intentions to perform that behaviour. Intentions are formed and strengthened by 'attitude toward the behaviour' and 'subjective norm' regarding that behaviour. The attitude toward a particular behaviour in an individual is a function of the 'beliefs about the behavioural consequences' of the behaviour, weighted by the evaluation of each consequence by the individual. The subjective norm on the other hand is a function of the 'beliefs

about others with respect to performing the behaviour', weighted by the 'motivation to comply with others' by the individual.

Exhibit 5.9
Theory of Reasoned Action
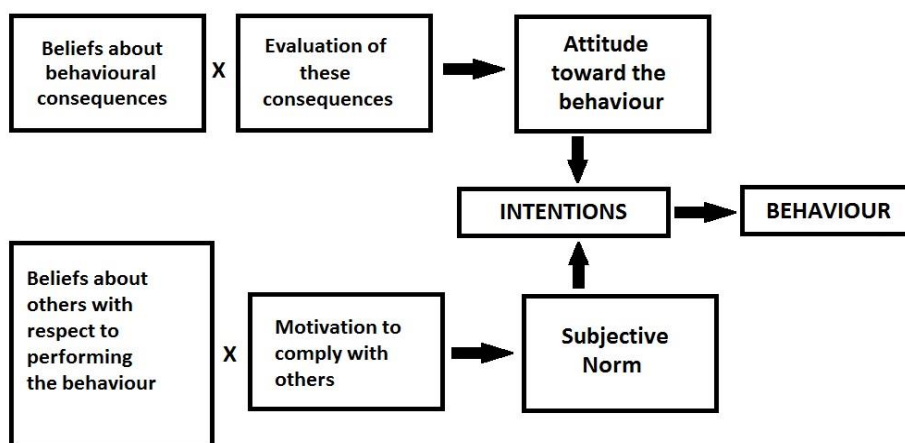
Source: Donovan & Henley (2010), p. 131

The Theory of Reasoned Action can be applied in the context of social marketing for tobacco consumption in Mizoram to understand how people hold (their own and of others) particular beliefs regarding consumption and non-consumption of tobacco, how they view its respective consequences (positively, negatively or neutrally) and the level of their motivation to conform with other's behaviour in the society. The model can therefore be applied to predict people's intentions and prospective behaviour regarding tobacco consumption. The Theory of Reasoned Action has been extended into another model called the 'Theory of Planned Behaviour' (Ajzen, 1988) with the additional inclusion of perceived behavioural control, which represents the individuals perception of the recommended behaviour as easy or difficult to perform (Donovan & Henley, 2010).

Theory of Trying: According to Donovan & Henley (2010), the Theory of Trying is directly applicable to most health promotion and social marketing issues as it focuses "on goals rather than on reasoned behaviour choices in specific situations and it is far more realistic as it focuses on trying to achieve the goals rather than actual attainment of the goals. The Theory of Trying (TT) as proposed by Bagozzzi and Warshaw (1990) suggests that 'trying' a particular behaviour is determined by the

'intention to try', which is again determined by the 'attitude toward trying' by the individual. The 'attitude towards trying' a behaviour is a function that involves the following three factors:

- Attitude towards succeeding and the perceived likelihood of success
- Attitude towards failing and the perceived likelihood of failure
- Attitude towards the actual process of trying

The individual's 'intention to try is therefore determined by the overall attitude towards trying, the frequency of past attempts of trying and the prevailing social norms toward trying. Finally, the actual or present 'trying' is determined by the individual's overall intention to try and the time since his or her last efforts of trying.

Exhibit 5.10
Theory of Trying
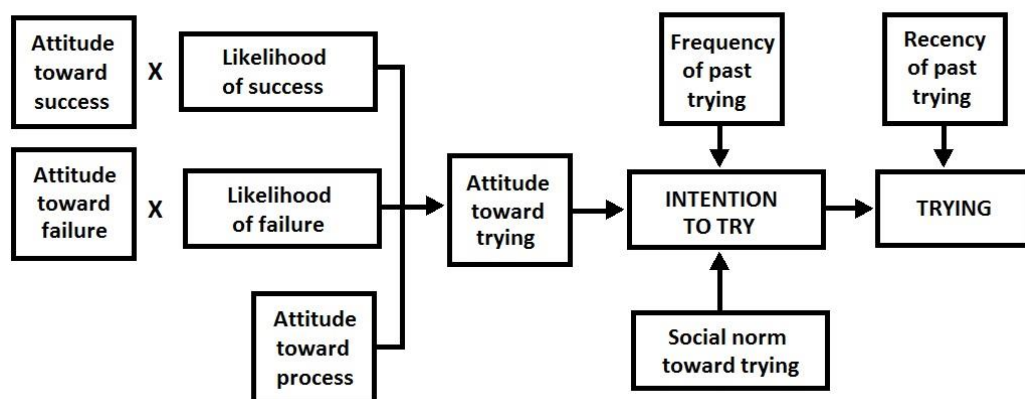
Source: Donovan & Henley's (2010) Adaptation of Bagozzi & Warshaw (1990), p.135

This theory may be applied in the context of tobacco control in Mizoram, especially to effectively design social marketing campaigns to make people quit tobacco based on their existing attitude and intentions regarding quitting tobacco.

Cognitive Dissonance: The concept of cognitive dissonance is based on the assumption that people experience psychological discomfort when there is inconsistency within their set of beliefs or inconsistency between their beliefs and actions (Festinger, 1957). When people experience such inconsistencies, they try to minimize the psychological discomfort by adopting any of the following ways:

- Changing existing set of beliefs to make it consistent with the existing actions
- Developing new set of beliefs to over-power dissonant belief and approve the existing actions
- Changing actions to make it consistent with existing set of beliefs

In social marketing, many campaigns uses the underlying concept of cognitive dissonance, where cognitive dissonance is created in the minds of the target community using strategic communication and a proposed behaviour is promoted as a means to eliminate that dissonance. According to Donovan and Henley (2010), cognitive dissonance "is often implied in the strategy of many campaigns and is useful to complement the more comprehensive attitude-behaviour change models". The anti-tobacco campaigns in Mizoram may be designed in such a way that the target audience feels cognitive dissonance whenever they consume tobacco and the non-consumption behaviour is thus promoted as a means to eliminate that dissonance.

Theory of Interpersonal Behaviour: The Theory of Interpersonal Behaviour (TIB) was proposed by Triandis (1977) and is distinct from other models because of the concepts of the influence of habit and personal normative beliefs in it (Donovan & Henely, 2010). According to Triantis (1977), the likelihood of a particular behaviour is a function of the extent to which the behaviour has become habitual, the conditions that facilitates or discourages the behaviour and the intentions of carrying out the behaviour. Also, the intention to carry out the behaviour is influenced by the following factors:

- The individual's expected emotional response in performing the behaviour.
- The cognitive evaluation of the positive and negative consequences of performing the behaviour.
- The perceived appropriateness of the behaviour by the individual based on prevailing social norms.
- The felt obligation by the individual to perform the behaviour based on his or her personal normative beliefs.

Exhibit 5.11
Theory of Interpersonal Behaviour
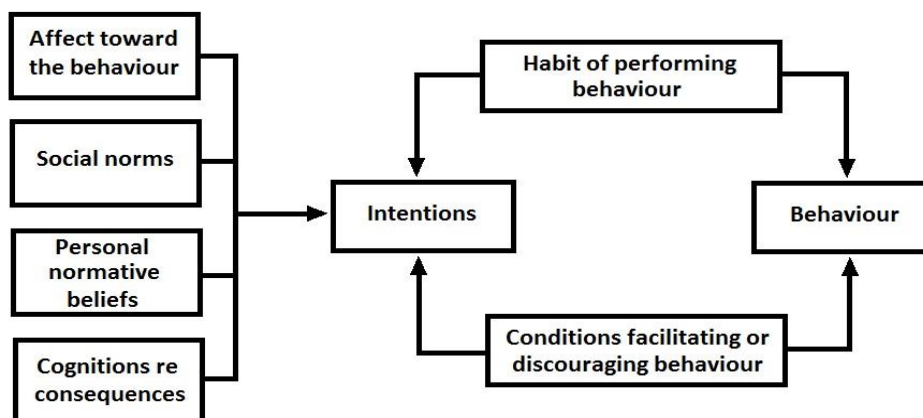
Source: Donovan & Henley (2010), p. 137

This model can also be applied to explain the tobacco consumption behaviour of the tobacco consumers in Mizoram by highlighting the personal beliefs, values, social norms, feelings etc in forming consumption intention and subsequent consumption behaviour of tobacco consumers. The model can further explore the various encouraging factors that positively reinforce tobacco consumption and make it a habitual behaviour among youths.

Diffusion Theory: The concept of diffusion theory was first published in a book titled *Diffusion of Innovations* in 1962 by Everett Rogers and since has been applied to commercial marketing situations like adoption of new product, however its application to public health in developed countries is a relatively new development (Donovan & Henley, 2010). The theory explains how innovations are communicated and subsequently adopted in varying rate over a varying period of time by members of a social system. Lefebvre (2001) mentions about the Diffusion of Innovations model and its application to social marketing reviewed by Kotler and Eduardo (1989), where they identified five adopter segments namely Innovator, Early adopter, Early Majority, Late majority and Laggard. Later, Piotrow et al., (1997) developed a theoretical framework called "steps to behaviour change" (SBC) which they mentioned as "an adaptation of diffusion of innovation theory and the input/output persuasion model, enriched by social marketing experience and flexible enough to use other theories within each of the steps, or stages, as appropriate". The five major

stages mentioned by them are *knowledge, approval, intention, practice,* and *advocacy*. These stages may be applied for promoting anti-tobacco behaviour among the youths in Mizoram.

Stages of Change Model: The Stages of Change model has been suggested as a segmentation base in health promotion and social marketing (Donovan & Owen, 1994; Egger et al., 1993). Lefebvre (2001) points out that the Transactional Model of Health Behaviour Change, also known as "stages of change" has become one of the most frequently used models in social marketing programs. This model has been largely derived from Prochaska's clinical work related to cigarette and drug addiction (Prochaska & DiClemente, 1984, 1986). This model identifies six specific stages of change, namely: Pre-contemplation, Contemplation, Preparation, Action, Maintenance and Termination. The basic assumption according to the stages of change is that people at different stages have different set of attitudes, beliefs and motivations. Therefore, the model suggests the appropriate types of intervention for moving people through the specific stages of change.

Table 5.3
Campaign Objectives and Relative Influence of Mass Media by Stages of Change

Prochaska Stages	Communication Objectives	Behavioural Objectives	Mass Media Influence
Precontemplation	Raise awareness of issue, personal relevance	Seek further information	High
Contemplation	Increase personal relevance, build response efficacy	Form an intention to try	Moderate-high
Preparation	Build self-efficacy, reinforce reasons for trial	Trial	Moderate
Action	Reinforce reasons for adoption, maintain motivational and efficacy support	Adoption	Low
Maintenance	Maintain reasons for adoption	Maintain new behaviour	Low

Source: Donovan & Owen (1994)

Table 5.3 lists the various campaign objectives and relative influence of mass media by stages of change. According to Donovan and Henley (2010), "the stages-of-change approach appears most appropriate for addictive and habitual health-related behaviours, those health behaviours where there is long period of adoption and where

people see considerable barriers or disbenefits of adoption of the desired behaviour". In 2007-2008, the Department of Health in England as part of Tobacco Control National Strategy used the Prochaska's Stages of Change Model to inform the targeting of campaigns and the nature and timing of content marketing strategy to reduce smoking prevalence among routine and manual (R&M) workers (The NSMC, 2016). Similarly, the stages of change model can be applied in the context of tobacco control in Mizoram where the target market may be segmented based on the suggested stages and the social marketing campaign may be designed accordingly.

5.10 Social Marketing Strategies for Tobacco Control in Mizoram

The US Surgeon General's 2000 Report proposed five approaches namely educational, clinical, regulatory, economic, and comprehensive to reduce tobacco consumption and its associated implications (Novotny & Mamudu, 2008). The first and most comprehensive organized global strategic effort to combat tobacco prevalence has been initiated by the World Health Organization (WHO). The first global health treaty on tobacco control was negotiated under the auspices of the World Health Organization which is known as the WHO Framework Convention on Tobacco Control (WHO FCTC). It was adopted by the 192 member states of WHO in May, 2003 and it came to enforcement since 27th February, 2005. The WHO FCTC requires its members "to implement comprehensive measures, covering both the demand for and supply of tobacco products, as well as counteracting the tobacco industry and promoting international cooperation for global action" (WHO, 2009). On 5th February, 2004 India officially became a party to the Convention and has exercised full efforts to implement all provisions of this international treaty. The WHO FCTC commits its member countries to the following measures (WHO, 2009):

1. Ban or restrict tobacco advertising, promotion and sponsorship.
2. Place large, graphic health warnings on cigarette packs and prohibit the use of false and misleading terms such as "light" and "low-tar".
3. Implement measures to protect non-smokers from second-hand smoke.
4. Increase the price of tobacco products, particularly through taxation, to discourage tobacco use.

5. Eliminate the illicit trade of tobacco products.

6. Regulate the content of tobacco products and require public disclosure of ingredients.

7. Provide cessation assistance and treatment for tobacco dependence.

8. Prevent sales of tobacco products to minors.

9. Protect tobacco control policies from commercial and other vested interests of the tobacco industry.

10. Promote economically viable alternatives to tobacco growing and trade in tobacco products.

11. Co-operate internationally including through transfer of knowledge and technology between the Parties.

According to Reddy et al., (2010), the WHO FCTC "provides the foundation and normative structure for controlling tobacco use globally". Novotny and Mamudu (2008) have termed the WHO FCTC as "an evidence-based treaty that establishes the "baseline" for the developing and sustaining tobacco control programs at the national level". In order to help the member countries meet their commitments to the WHO FCTC, and its' guidelines, a technical assistance package was developed by WHO called MPOWER. The MPOWER is "a package of six tools to support demand reduction policies that when implemented are proven to drive down tobacco use and save lives" (WHO, 2009). The six demand reduction policies under the MPOWER package include the following (Charoenca et al., 2018; McKay, 2015; WHO, 2009):

- M: Monitor tobacco use and prevention policies.
- P: Protect people from tobacco smoke
- O: Offer help to quit tobacco use.
- W: Warn about the dangers of tobacco use.
- E: Enforce bans on tobacco advertising
- R: Raise taxes on tobacco

According to Novotny and Mamudu (2008), "the science of tobacco control strongly supports a multi-component comprehensive programme that integrates various programmatic and policy interventions to influence social and health systems". The

WHO FCTC not only necessitate the member countries to implement various tobacco control measures but also it provides a larger policy framework and broad guidelines under which issue-specific social marketing programs may be designed. In 2016, India hosted the seventh session of the Conference of the Parties (COP7) to WHO FCTC (Business Standard, November 12, 2016). In spite of being committed to the WHO FCTC, India has been slow in adopting the WHO FCTC Protocol (Barik et al., 2016), which, to some extent has resulted in delayed action and state-specific measures. Therefore, tobacco control in Mizoram would require a comprehensive yet specific social marketing strategy to be included in the MSTCP within the boundaries of a broad framework like the WHO FCTC and the NTCP. There is also a need to address some of the challenges in the existing NTCP. According to McKay (2015), "India's national tobacco control strategies have included legal challenges by the tobacco industry, use of surrogate advertising methods and violations of some advertising regulations". Therefore, the NTCP and MSTCP needs to be further adjusted and strengthened with customised social marketing efforts for comprehensive tobacco control in Mizoram.

From a broader perspective, Reddy and Gupta (2004) have suggested that tobacco control in India needs action to reduce demand and supply forces through education, legislation, regulation, enforcement, taxation and other fiscal measures, economic alternatives, support for cessation and community mobilization (Exhibit 5.12)

Exhibit 5.12
Actions to Reduce Demand & Supply for Tobacco Control
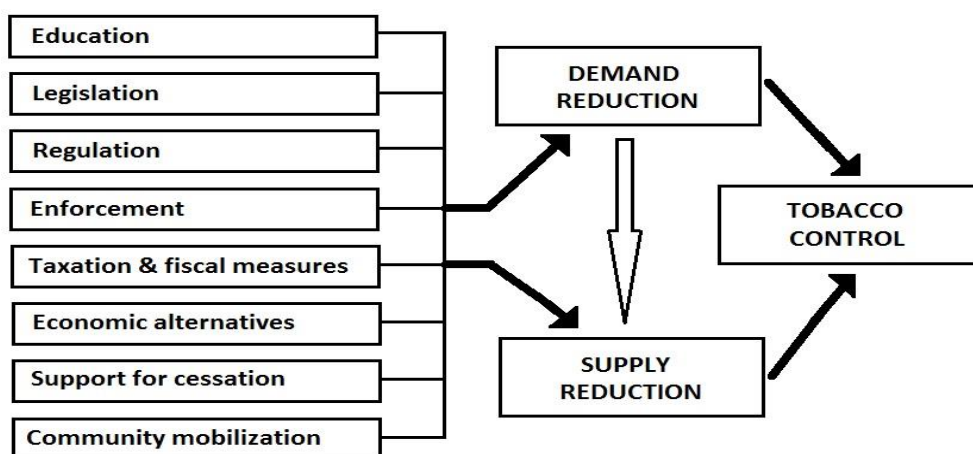
Source: Reddy & Gupta, 2005. p.17

Mishra et al., (2005) advocated the use of a multicomponent approach that positively targets the social, environmental, and intrapersonal factors that influence experimentation and maintenance of tobacco use among youth. For these purpose they suggested the use of Project MYTRI's (Mobilizing Youth for Tobacco Initiatives in India) Intervention Model (Exhibit 5.13).

Exhibit 5.13
Project MYTRI's Intervention Model
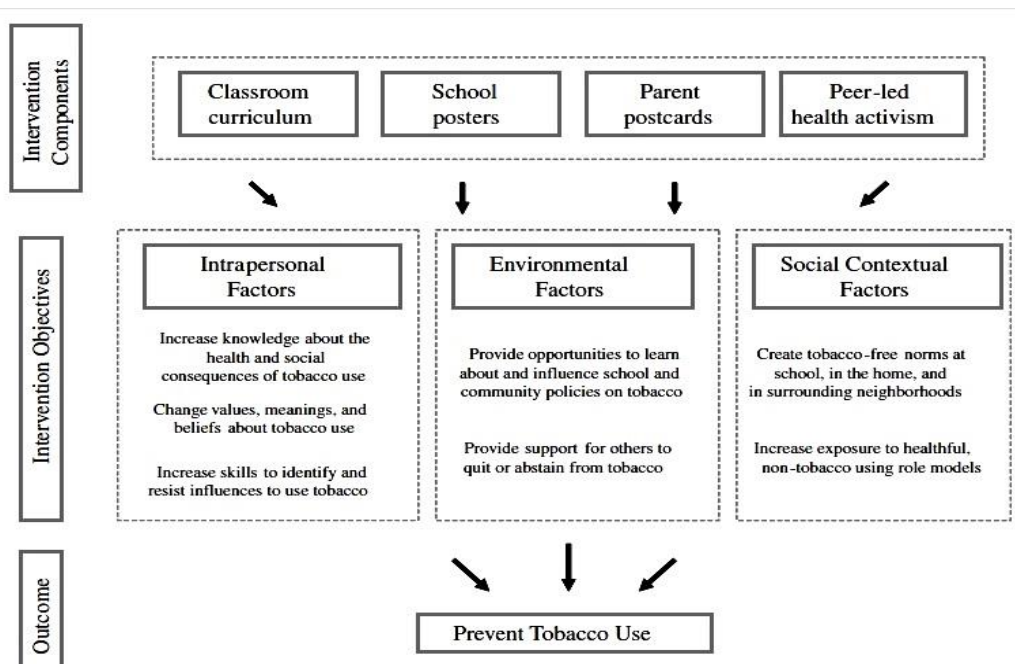
Source: Mishra et al., (2005), p. 365

In 2003, the Ontario Tobacco Research Unit in Ontario province of Canada developed a set of science-based logic models for guiding tobacco control activities and the development of the Smoke-Free Ontario Strategy. These logic models (Exhibit 5.14 to 5.17) used three goals for evidence-based strategies and activities to lead desired tobacco control outcomes. The Smoke-Free Ontario Strategy is integrated, dynamic and outcome-oriented approach towards tobacco control which was developed by studying internationally accepted "best practices" in tobacco control and was largely based on the Best Practices for Comprehensive Tobacco Control Programs published by the U.S. Centers for Disease Control and Prevention (CDC) (Robbins, 2010).

Exhibit 5.14
Smoke-Free Ontario System Logic Model
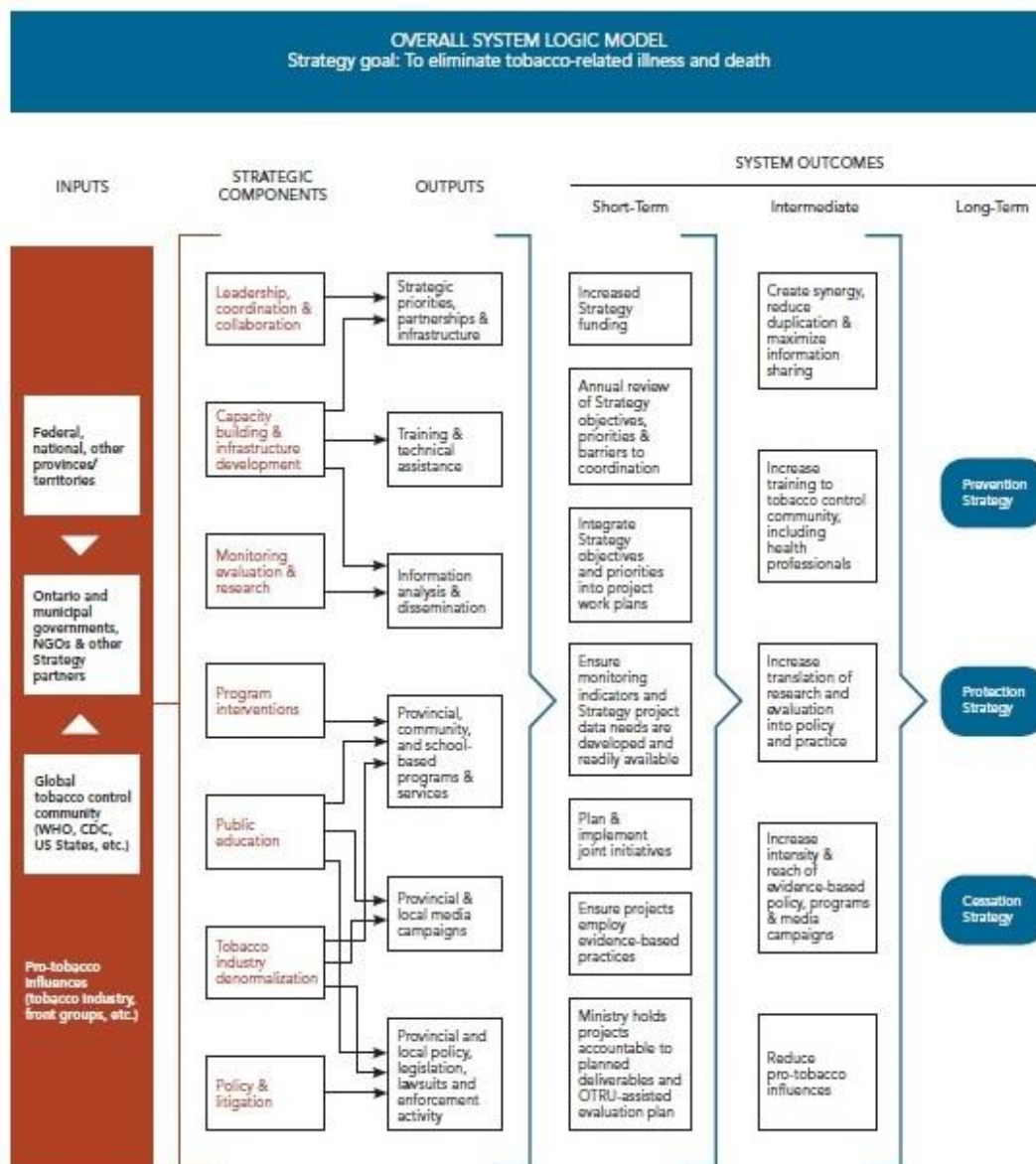
Source: Robbins (2010), p.15

Exhibit 5.15
Smoke-Free Ontario Prevention Logic Model
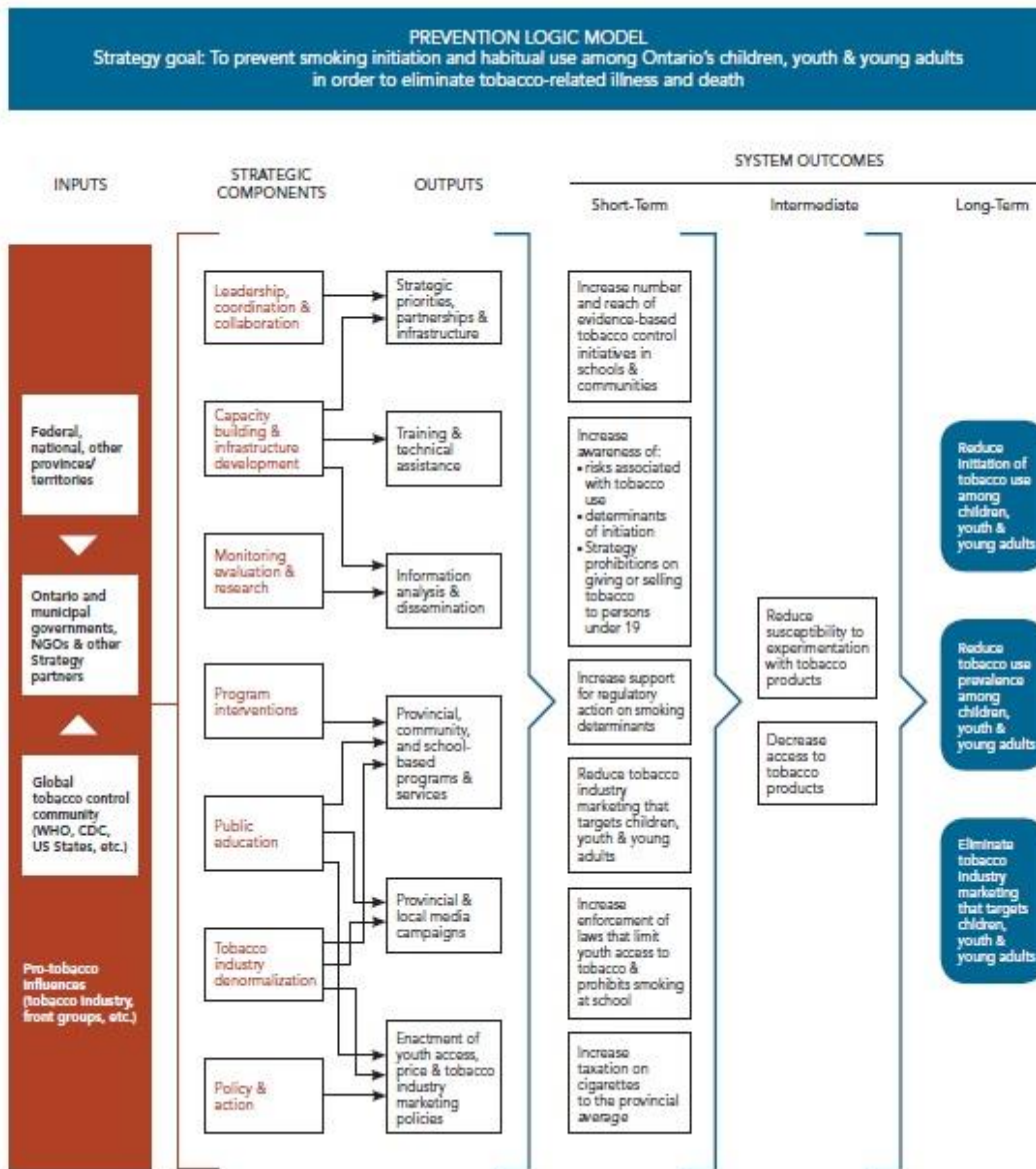
Source: Robbins (2010), p.16

Exhibit 5.16
Smoke-Free Ontario Cessation Logic Model
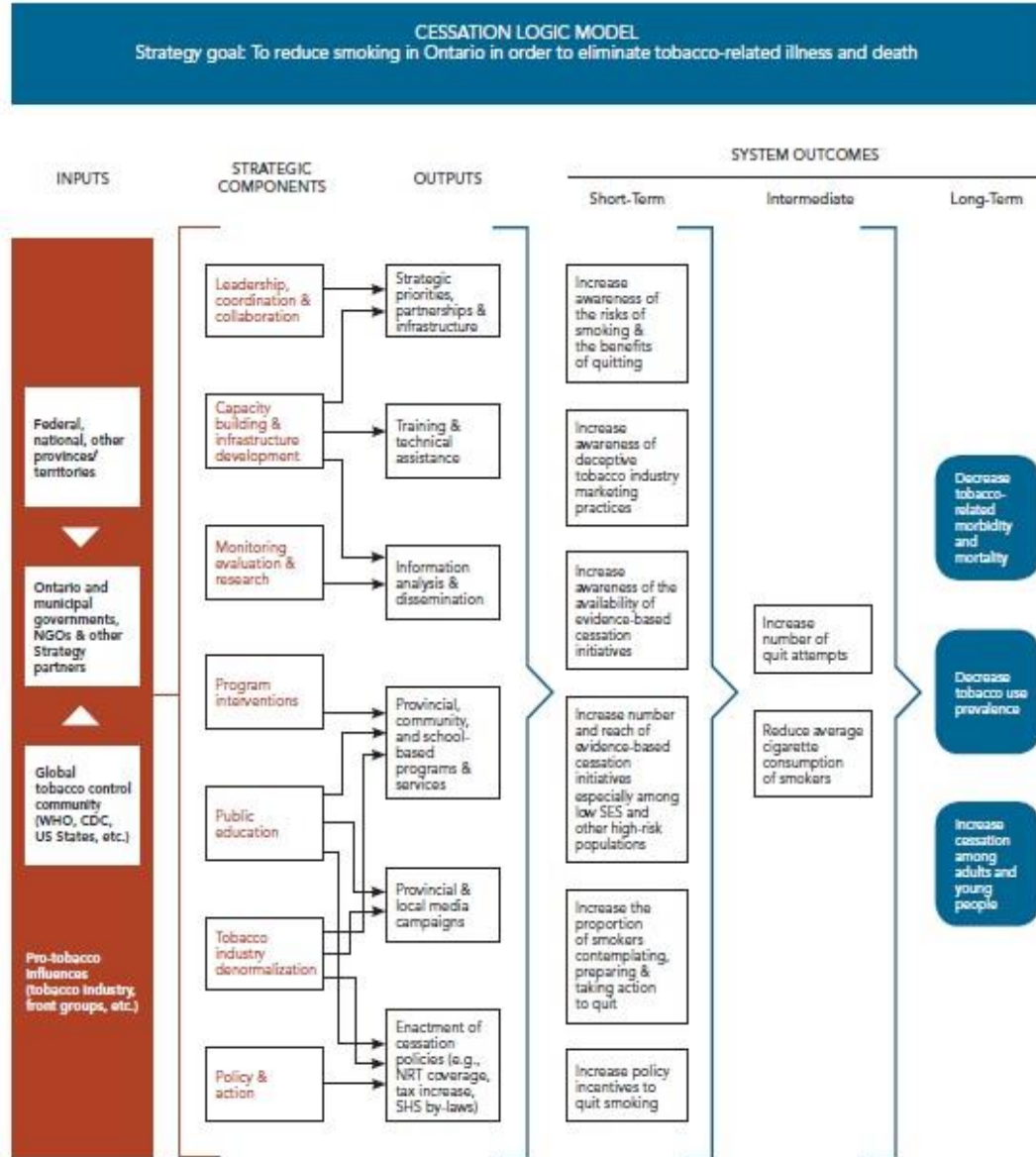
Source: Robbins (2010, p.17)

Exhibit 5.17
Smoke-Free Ontario Protection Logic Model
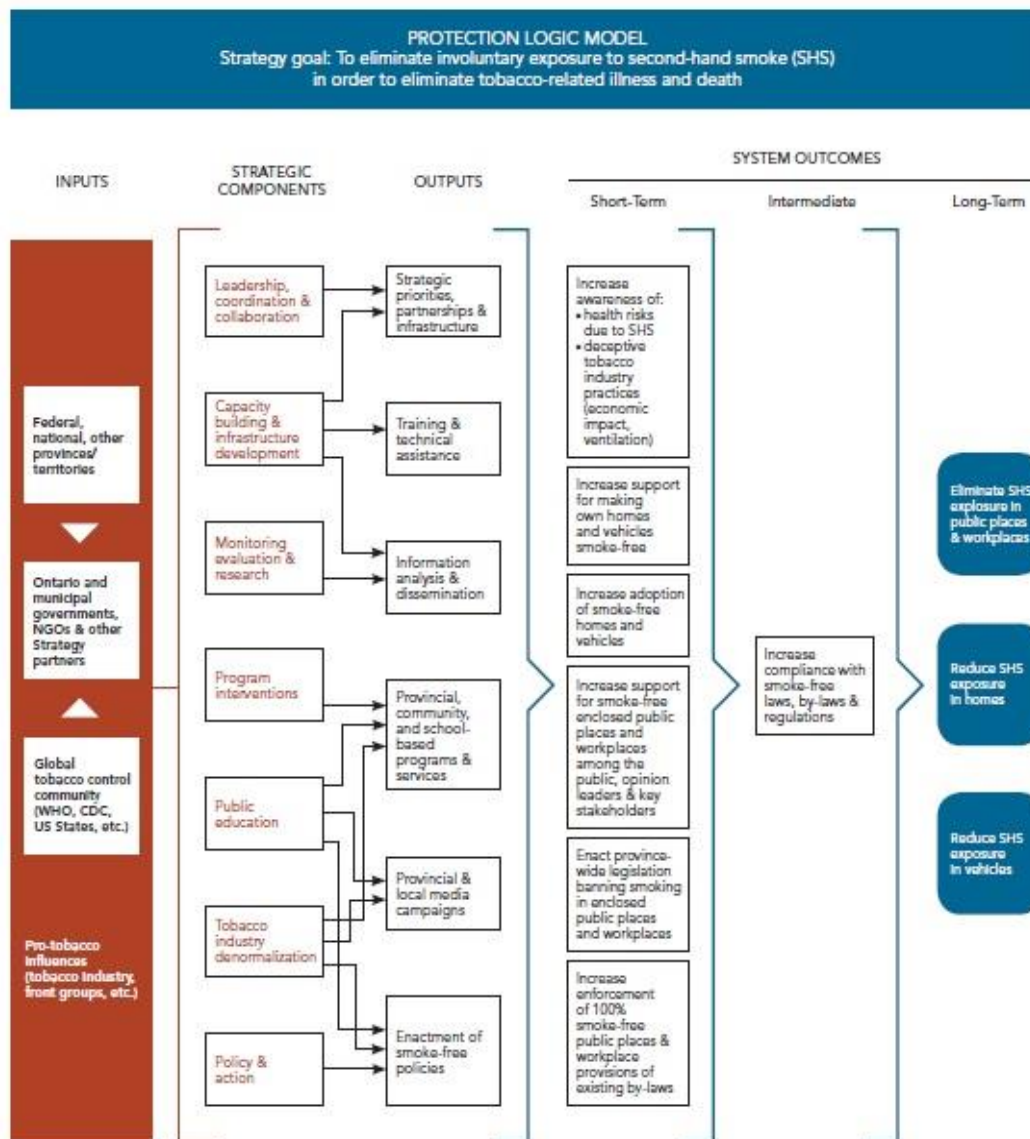
Source: Robbins (2010, p.18)

Social marketing can be regarded as a promising intervention approach which is effective across a range of behaviours and target groups, in different settings (Stead et al., 2007). Various social marketing tools and techniques can be effectively used to control tobacco consumption. Since the serious problem of tobacco consumption is linked to consumer choices, therefore it can be both aggravated and reduced through marketing and consumer behaviour (Hawkins et al., 2007). A social marketing strategic framework must begin with a social marketing mix plan. To develop a

comprehensive social marketing strategy for tobacco control in Mizoram, all the marketing mix elements should be adequately explored and addressed. In this regard, the proposed social marketing model (Akhtar & Bhattacharjee, 2014) discussed earlier in this chapter may be applied. Moreover, under each element of this marketing mix, specific models related to persuasion, attitude and behavioural change in social marketing may be applied to achieve desired tobacco control outcomes. Theories such as the 'Elaboration-Likelihhod Model' (Petty & Cacioppo, 1983), 'Heuristic-Systematic Model' (Chaiken, 1980, 1987), 'Rossiter-Percy Model' and the 'Foote Cone and Belding Model' may be applied to understand consumption decision and for effective communication strategy for the target community in Mizoram. Other models like the 'Health Belief Model', 'Theory of Trying' (Bagozzi & Warshaw, 1990) and 'Protection Motivation Theory' (Rogers, 1975) may be used to understand the perception regarding tobacco's health related consequences among tobacco consumers and frame motivational interventions for them to quit tobacco. To understand the role of socio-cultural influences, personal beliefs and values in determining choice of tobacco consumption among tobacco consumers in Mizoram, concepts like the 'Social Learning Theory' (Bandurs, 1986), 'Theory of Reasoned Action' (Fishbein & Ajzen, 1975) and theory of 'Interpersonal Behaviour' (Triandis, 1977) may be useful. In order to facilitate a step by step social change in Mizoram where people are motivated to discard pro-tobacco lifestyle, theories and concepts such as the 'Diffusion Theory', 'Steps to Behaviour Change' (Piotrow et al., 1997) and 'Stages of Change Model' (Prochaska & DiClemente, 1984, 1986) will be of particular importance. In addition to these there exist other models and concepts which may also be explored to determine their applicability in tobacco control in Mizoram. Hastings and Saren (2003) has stressed that the application of concepts like Exchange Theory and Relationship Marketing in social marketing context can benefit the discipline. Donovan & Henley (2010) has advocated "a pragmatic, electrical approach, selecting concepts from each of the models depending on which are more or less applicable to the behaviour in question". Therefore it may be concluded that though there is no single model or framework which addresses all the relevant issues of social marketing for health in general and tobacco consumption in

particular but a combination of theories and approaches will certainly go a long way in making social marketing more effective for tobacco control in Mizoram.

Chapter 6

Summary of Findings and Suggestions

6.1 Introduction

This chapter compiles, summarizes and presents the findings of all the previous chapters, answers the research questions set as per the research objectives and makes conclusions and suggestions based on the overall findings. The purpose of this entire study has been specified in the first chapter through the following research objectives:

1. To study the socioeconomic background of tobacco consumers among undergraduate students in Mizoram.
2. To study the decision-making process and tobacco consumption habits among the undergraduate students.
3. To identify the factors affecting the consumption behaviour in respect of tobacco products among the undergraduate students.
4. To study the social marketing practices undertaken by different organizations in Mizoram for prevention and control of tobacco consumption.
5. To suggest an appropriate strategic social marketing framework for the prevention and control of tobacco consumption in Mizoram.

Therefore this chapter attempts to fulfill the research objectives, as it progresses to summarize, conclude, discuss the research questions and make suggestions based on the findings of the research.

6.2 Chapter wise Findings

This entire research study has been structured, written and presented in the form of following six chapters:

- Chapter 1: Introduction
- Chapter 2: Review of literature
- Chapter 3: Socio-Economic Profiling of Undergraduate Students according to their Tobacco Consumption Status
- Chapter 4: Behaviour of Undergraduate Students regarding Tobacco Consumption

- Chapter 5: Role of Organizations and Social Marketing Strategies for Tobacco Control in Mizoram

- Chapter 6: Summary of Findings and Suggestions

The following sections will summarize and discuss the findings from the previous five chapters.

6.2.1 Findings from Chapter 1

The "Chapter 1: Introduction" sets the foundation for the present research study with introductory notes on various topics and discussion of various concepts relevant to the concerned areas of this research. It also covers various aspects of the research design, scope and significance of the study. The chapter begins with an overview of tobacco and its consumption which discusses the concept of tobacco and tobacco products as defined by COTPA, 2003 and FDA and further discusses the scientific nature and addictive properties of tobacco. The section further highlights the menace of tobacco consumption globally and nationally using statistical data from the WHO and GATS 2016-2017 reports.

The next section presents the historical background of tobacco consumption. Tobacco has been cultivated and used since 600 BC by Native Americans, introduced in Europe in the early 15th century and later became a popular commodity for trade and also used as a cash-crop. The commercial production of tobacco in the form of cigarettes, cigars and snuff started from 18th century onwards. American companies like Philip Morris became hugely successful with aggressive marketing and promotion strategies. The harmful effects of tobacco was realized much later in 1912 when connection between smoking and lung cancer was first reported and in 1947, Lorillard chemist admits that there is enough evidence that smoking can cause cancer. It was only in 1996 that researchers find conclusive evidence that tobacco damages a cancer-suppressor gene. Consequently, from 1990 onwards there has been increased concern and organized efforts by governments of various countries and international agencies to counter tobacco consumption. Tobacco was bought in India by the Portuguese through the cost of Goa in the 16th century. In Mizoram tobacco

has been consumed traditionally and is linked with the practice to ward off mosquitoes and insects during agricultural activities in the fields. Use of tobacco was also practiced by Mizos for various healing purposes (Hatzaw, 2014). The introduction of foreign cigarettes and cigars in Mizoram happened during the colonial times and became popular thereafter. However, through the advent of television and movies during the latter half of 20th century, tobacco consumption especially cigarette smoking became distinctive part of a popular culture in Mizoram. In recent times e-cigarettes or products categorized under electronic nicotine delivery systems (ENDS) are becoming increasingly available in the market. Though the e-cigarettes and ENDS are often promoted and perceived as safer alternative to traditional smoking but they are at the same risk of contracting lung diseases and cancer as conventional cigarette users (Yadav, 2019). Recently the Government of India has proposed to ban e-cigarettes and ENDS (Yadav, 2019).

The next section discusses the pattern of tobacco consumption in India using secondary information from India GSPS (Global School Personnel Survey) 2006, India GYTS (Global Youth Tobacco Survey) 2006 and Global Adult Tobacco Survey (GATS). Some important points from GATS 2 were highlighted as follows:

- 28.6% of all adults in India consume tobacco in any form. Out of that, 42.4% are men and 14.2% are women.

- Currently 10.7% of all adults in India smoke tobacco out of which 19.0% are men and 2.0% are women.

- 21.4% of all adults in India currently use smokeless tobacco out of which 29.6% are men and 12.8% are women.

- There are 55.4% of current smokers and 49.6% of current smokeless tobacco users who are planning or thinking of quitting.

- There are 48.8% of current smokers and 31.7% of current smokeless tobacco users who were advised by health care provider to quit.

- There are 38.7% and 30.2% of adults who were exposed to second hand smoke at home and at their work place respectively.

- There are 19.2% and 18.3% of adults who noticed smoking tobacco and smokeless tobacco advertisement.

- There are 68.0% and 59.3% of adults who noticed anti-smoking and anti-smokeless tobacco information on television or radio respectively.

- There are 92.4% and 95.6% of adults who believed that smoking or use of smokeless tobacco causes serious illness.

The next section discusses tobacco consumption in Northeast India which is known to have very high prevalence of tobacco consumption. Some important facts about tobacco consumption in Northeast India according to GATS 2009-2010 and 2016-2017 reports are as follows:

- Tripura leads in tobacco consumption in India with 64.5 % of its population using various types of tobacco products (Dutt, 2018). Tripura also has the highest prevalence of smokeless tobacco users (48.5%) and Mizoram has the highest number of smokers (34.4%) (Dutt, 2018).

- Current tobacco use among all age groups in Manipur, Tripura and Assam recorded 55.1%, 64.5% and 48.2% respectively (Dutt, 2018).

- Sikkim registered a decline from 41.6% to 17.9% which is lower than the national average. Though Sikkim, Mizoram and Meghalaya achieved remarkable progress in tobacco control, Arunachal Pradesh and Manipur achieved no major progress (The Morung Express, November 27, 2017).

- In India northeast have the highest tobacco consumers in all forms in the 15 to 17 years age group. Mizoram tops with 27% of its population in this age group are tobacco users, which came down from the earlier record of 35.4% reported in the GATS 1. This is in sharp contrast with Sikkim which has now zero users of tobacco in this age group which earlier stood at 11.6% during GATS 1. Among all north-eastern states only Arunachal Pradesh registered an increase in tobacco users from 14.3% in GATS 1 to 25.1% in GATS 2. (Times of India, November 25, 2017).

The section 1.5 discusses tobacco consumption in Mizoram. Over the years Mizoram has done well in areas of public health, like for example ranking second among all states according to "Health States, Progressive India" report of NITI Aayog and the World Bank Group in 2018 (Planning & Programme Implementation Department, Government of Mizoram, 2018). However, there remains some challenges like low accessibility of healthcare services for people from remote places (Chakraborty, 2017), high incidences of Cancer, HIV, AIDS, alcoholism and drug abuse. In fact, Mizoram has the highest number of recorded cancer cases in the country (Karmakar, 2018). Such high cases of cancer may be due to genetic or environmental factors like life style and food habits, especially tobacco and alcohol (Tonsing et al., 2018). Mizoram has the second highest prevalence of tobacco users at 58.7%, which is more than double the national average of 28.6 per cent in the country (Ministry of Health and Family Welfare, 2017; Khojol, 2018; The Morung Express, May 2, 2018). There is extreme prevalence of both smoke (Cigarette and *Zial* or local cigar) and smokeless tobacco (namely, *Tuibur* or liquid tobacco*, Sahdah, Khaini, Zarda, Gutkha* etc.) in Mizoram. Given below are some important facts about tobacco consumption in Mizoram according to GATS 2 India Report 2016-2017.

- There has been a significant decline in tobacco prevalence from 67.2% (GATS-1) to 58.7% (GATS-2) but is still more than double of the national average at 28.6% (The Morung Express, May 2, 2018; The Morung Express, November 27, 2017; Khojol, 2018; Health & Family Welfare Department, Government of Mizoram, 2018). The prevalence of smoking and smokeless tobacco usage has decreased by 5.3% and 7.2% respectively (Ministry of Health & Family Welfare, Government of India, 2018).

- 25.1% of the tobacco users in Mizoram use only smoke tobacco, 24.3% uses only smokeless tobacco and 9.2% consumes both smoke and smokeless tobacco.

- Out of the 34.4% adult smokers in Mizoram, 54% were males and 14.3% were females. Similarly for smokeless tobacco users, 52.4% were males and 21.3% were females (The Morung Express, November 27, 2017; Ministry of Health & Family Welfare, Government of India, 2018).

- Though the percentage of tobacco users in the age group of 15 to 17 has come down to 27% (GATS 2) from 35.4% (GATS 1), but is still above the national average of 4.4% (Times of India, November 25, 2017).

- 64.9% of men, 52.4% of women and 58.7% of all adults in Mizoram either smoke tobacco and/or use smokeless tobacco. 54.1% of men, 14.3% of women and 34.4% of all adults currently smoke tobacco. 21.3% of men, 46.0% of women and 33.5% of all adults currently use smokeless tobacco (Ministry of Health & Family Welfare, Government of India, 2018).

- Age of initiation of tobacco use was 17.4 years in GATS 1 which has increased to 17.8 years in GATS 2 (Ministry of Health & Family Welfare, Government of India, 2018).

- The percentage of people exposed to second hand smoke at home, work place and public places has reduced from 96.5% to 84.1%, 64.6% to 44.4% and 27.3% to 18.2%, respectively (Ministry of Health & Family Welfare, Government of India, 2018).

- The monthly expenditure by current cigarette smokers on cigarettes has come down to ₹712.6 in GATS 2 from ₹1201.5 in GATS 1, while monthly expenditure by current bidi smokers on bidis has increased to ₹256.1 in GATS 2 from ₹189.8 in GATS 1 (Ministry of Health & Family Welfare, Government of India, 2018).

- 51.8% of smokers and 37.5% of smokeless tobacco users were advised by a health care provider to quit (Ministry of Health & Family Welfare, Government of India, 2018).

- 17.2% of cigarette smokers and 26.0% of smokeless tobacco users thought of quitting because of warning label (Ministry of Health & Family Welfare, Government of India, 2018).

- The most commonly used tobacco products in Mizoram are cigarette and tobacco for oral applications. 29.1% of the adults smoke cigarette and 21.6 percent use tobacco for oral application (Ministry of Health & Family Welfare, Government of India, 2018).

The section 1.6 examines the tobacco control in Mizoram. The MSTCS has taken many initiatives for tobacco control in Mizoram. The society has implemented the

projects *"Advocacy and mobilization for smoke free Mizoram and effective tobacco control implementation in the State"* and *"Advancing tobacco control in Mizoram through capacity Building, strengthening National Tobacco Control Programme and Effective enforcement of tobacco control laws"*. The Society also looks after the National Tobacco Control Programme under the Ministry of Health and Family Welfare, Government of India and Tobacco Cessation Clinic funded by WHO (Mizoram State Tobacco Control Society, n.d.).The society has so far successfully undertaken activities like training and sensitization workshops, anti-tobacco awareness campaigns and programmes, anti-tobacco club and spot-the-smoker activities, meetings, talk shows etc. According to MSTC, pro-tobacco mindset and societal acceptance of tobacco, low awareness, tobacco users among health professionals and enforcement officials, and low priority given to tobacco control by most departments are highlighted as the major challenges and problems in enforcing COTPA in Mizoram.

Section 1.7 explores the concept of consumer behaviour in the context of tobacco consumption. Consumer behaviour is defined as "the decision process and physical activity individuals engage in when evaluating, acquiring, using, or disposing of goods and services" (Loudon & Bitta, 2002). The consumer decision making in consumer behaviour has been explained with the three stage model of consumer decision making: the input, process and output stage (Schiffman & Kanuk (2007). The consumption psychology, attitude and behaviour of tobacco users need to be studied in a systematic manner to device effective social marketing strategies for tobacco control.

Section 1.8 discusses the concept and evolution of social marketing. According to Andreasen (1994), "Social Marketing is the adaptation of commercial technologies to influence the voluntary behaviour of target audiences to improve their personal welfare and that of the society of which they are a part." The ideas about social marketing has evolved from the earlier works of Weibe (1952) and McGinnis (1969) and later conceptualized and the term Social marketing was coined by Philip Kotler and Gerald Zaltman (1971). However, the concept of social marketing dates back to

the historic times and has been used in religious missions. Similarly, the collective works by artists, writers, philosophers and scientists roughly during the 15th - 17th century renaissance of Europe was also early forms of social marketing and so was the social reforms started in India during the 19th century. The concept of social marketing became more organized and directed to specific social causes when countries started social campaigns like family planning, health campaigns, environmental conservation programs etc. By 1980s the World Bank, WHO and Centre for Disease Control and Prevention started using the term social marketing and promote greater interest in the area (Kotler et al, 2002).

Section 1.9 discusses the scope and significance of the study. It points out how Drug Abuse, Alcoholism, HIV and high tobacco consumption with early tobacco initiation has affected wellbeing of the younger generation in Mizoram. The problem and prevalence of tobacco in Mizoram is complex due to many underlying factors. This study, though primarily addresses the areas of social marketing and consumer behaviour in marketing discipline, has in its view a wider scope and objectives which adopts a cross-disciplinary approach. The outcome of this study will enrich our understanding of social marketing from intellectual and academic point of view and provide valuable inputs for the social marketers and policy makers to formulate strategies and policies for designing successful social marketing campaigns.

Section 1.10 presents the research design which addresses various aspects of the research and research methodology like statement of the problem, research objectives, research questions, data collection, sampling, analysis, presentation etc. In spite of the collective efforts by various organizations, tobacco consumption continues to be a major problem in Mizoram. Therefore for effective social marketing, the social marketers need to investigate the underlying causes and motives behind tobacco consumption. Due to uniqueness of lifestyle, psychology, socio-economic and cultural factors, the social marketing strategies which are effective elsewhere may not be equally effective in the context of Mizoram. The aim of the study is to explore the tobacco consumption behaviour of the undergraduate students in Mizoram, understand the role of various organizations in controlling

tobacco consumption in Mizoram and suggest a comprehensive social marketing strategy for prevention and control of tobacco consumption, especially among the student community in Mizoram. The primary data for this study has been collected through questionnaire which was distributed to the target respondents from a sample size of 500 undergraduate students studying in Pachhunga University College, Aizawl and Government Saiha College, Saiha. The section 1.11 and 1.12 discussed the limitations of the present study and suggested areas for further research.

6.2.2 Findings from Chapter 2

The Chapter 2 provides an extensive review of more than 120 literatures related to various important studies that were carried out across the world in areas of tobacco consumption, its prevalence, causes and consequences and policies and strategies to control it. Though the collected literatures have been reviewed, grouped and discussed under eight broad sections, but the findings and scope of many such literatures goes beyond any particular sections and there may have been overlapping of contexts between the grouped sections. The reviewed literatures have been presented and discussed in paragraph wise format with a chronological order for the purpose of documenting the gradual exploration and continuous developments happening in the area. The chapter is divided into ten sections as follows:

2.1 Introduction: This section introduces the selection, nature, extent and context of literatures that have been reviewed and highlights the importance of such reviews for the course and progress of this research work.

2.2 Global Tobacco Consumption: This section presents the review of literatures that were carried out by individuals, groups and organizations across the world in the area of tobacco consumption and tobacco consumption behaviour. Some of these were done exclusively for particular country or its selected regions and others were done for selected group of countries and are comparative in nature. This section primarily discusses the prevalence and patterns of tobacco consumption studied and explored across the globe. In total, 13 literatures were reviewed in this section.

2.3 Tobacco Consumption in India: This section reviewed the various studies available on tobacco consumption in India which includes national surveys and studies conducted by individual or team of researchers. It has been found that the nationally representative household surveys on tobacco consumption in India are only available since 1995-1996. Tobacco focused surveys in India were conducted after the development of Global Tobacco Surveillance System (GTSS). GTSS was jointly developed by the WHO, the U.S. Centre for Disease Control and Prevention (CDC), and the Canadian Public Health Association (CPHA) to assist the member states of WHO in establishing continuous tobacco-control surveillance and monitoring. The GTSS includes collection of data through the Global Youth Tobacco Survey (GYTS), Global School Personnel Survey (GSPS), Global Health Professional Survey (GHPS), and Global Adult Tobacco Survey (GATS). The section extensively reviewed such national surveys on tobacco consumption, in addition to various other relevant literatures related to prevalence and pattern of tobacco consumption in different parts of India. In total, 24 literatures were reviewed in this section.

2.4 Tobacco Consumption in Northeast India: This section presents reviews of available literatures which deals with tobacco consumption in north-eastern part of India which as a region is having highest prevalence of tobacco use (Dutt, 2018). The 3 literatures that were reviewed in this section were related to the diverse aspects of tobacco consumption, besides its prevalence and nature, in Northeast India.

2.5 Tobacco Consumption in Mizoram: This section reviewed the available literatures on tobacco consumption in Mizoram which are limited in numbers. Some studies have covered the prevalence and pattern of tobacco consumption in Mizoram as part of their overall study on north-eastern states or part of the pan India surveys. Few important literatures reviewed in this regards were the doctoral studies carried out in recent past and were related to various psycho-social aspects of tobacco consumption in Mizoram. In total, 6 literatures were reviewed in this section.

2.6 Factors Contributing Tobacco Consumption: One of the most important aspects of tobacco consumption studied over the years is the exploration of various factors

that lead to the initiation, use and addiction to tobacco. Numerous research studies from across the world have attempted to determine these factors which includes environmental factors such as socio-economic conditions, cultural dimensions, demographic factors, pro-tobacco advertisement as well as individual factors related to personality, behaviour, gender, income, family etc. This section reviewed 14 such relevant literatures.

2.7 Implications of Tobacco Consumption: There are multiple implications of tobacco consumption which particularly becomes the basis of arguments for and against the tobacco industry and the need for tobacco control. Over the years, research studies have explored issues such as the health related consequences of tobacco consumption, cost of tobacco consumption, and socio-economic implications of tobacco industry. This section presented the review of 15 such literatures which brings out both the negative and positive implications of tobacco consumption.

2.8 Control of Tobacco Consumption Globally: This section reviewed the various available literatures that evaluates the existing or past tobacco control measure and strategies adopted in different countries from across the globe and also included literatures that made specific future recommendation for prevention and control of tobacco consumption for specific countries or from a global perspective. A total of 39 literatures were reviewed in this section.

2.9 Control of Tobacco Consumption in India: This section presented the review of various available literatures that discussed, explored and evaluated tobacco control policies, legislations and measure in India and also includes reviews of literatures that have made important recommendations for future tobacco control in India. A total of 21 literatures were reviewed in this section.

2.10 Identifying the Research Gap: This section begins by highlighting some of the research gaps and suggested areas of research identified by various researchers. It was observed that in India, most studies were carried out from the perspective of psychology, social work, health care and medical science discipline and may not be sufficient to address certain core issues related to tobacco consumption from the

social marketing perspective. It was also concluded that college students may be considered a vulnerable age group for tobacco consumption due to various reasons which were duly mentioned in the section. Overall, there exist research gaps where tobacco consumption behaviour in Mizoram, particularly among the specific age group of undergraduate students remained mostly uncovered and the social marketing aspects for controlling such consumption behaviour remained an even more unexplored territory.

6.2.3 Findings from Chapter 3

This chapter explored the socio-economic factors of the respondent undergraduate students from the select colleges. The socio-economic factors has been discussed separately for the overall sample respondents, Active Tobacco Consumers, Non Tobacco Consumers and Past Tobacco Consumers. The important findings about the demographic composition of the sample were as follows:

- 64.6 % respondents were from Pachhunga University College and 35.4 % were from Government Saiha College.

- Out of the 500 students, 71.6% were pursuing BA, 21% were pursuing BCom and 7.4% were pursuing BSc courses.

- Gender wise, 49.8% of the sample respondents were females and 50.2% were males.

- 70.6% of the sample respondents were aged between 18 and 21 and the average age of the respondents were 20.52 years.

- 65.8% of the sample respondents were having 4 to 6 members in their families followed by 22% of the respondents having 7 to 10 members in their families.

- In terms of relationship status, 77.8% of the sample respondents were "Singles" followed by 8.2% who were "in an open relationship", followed by 7% who were "in a committed relationship".

- Most of the sample respondent's (69.8%) average monthly house hold income ranges from ₹5,0001 to ₹30,000. Out of that 30.2% of the sample respondent's average monthly house hold income is between ₹10,0001 to ₹20,000.

- Majority (43.4%) of the sample respondent's primary family occupation is service followed by business (26%) and farming (22.4%).

- Out of all respondents, 63.2% were currently Active Tobacco Consumers, 28.6% were Non Tobacco Consumers and only 8.2% were Past Tobacco Consumers.

The important findings about the socio-economic profile of Active Tobacco Consumers are as follows:

- Majority of the active tobacco consumers (63.6%) consumes tobacco daily followed by 19.9% who consumes it occasionally, followed by 16.5% who consumes it 3 to 4 days a week.

- Out of all the Active Tobacco Consumers, 61.08% were from Pachhunga University College and remaining 38.92% were from Government Saiha College. Within the respective colleges, 59.75% and 69.49% respondents were active tobacco consumers in Pachhunga University College and Government Saiha College respectively. Therefore the percentage of Active Tobacco Consumers among the respondents is more at Government Saiha College compared to Pachhunga University College.

- Out of all the Active Tobacco Consumers, 76.55% were studying BA, 16.77% were studying BCom and the rest 6.65% were studying BSc.

- 88.6% of all Active Tobacco Consumers were aged between 18 to 23 years. The average age of the Active Tobacco Consumers was 20.71 years.

- Gender wise, 54.1% of the Active Tobacco Consumers were males and 45.9% of the Active Tobacco Consumers were females.

- 65.19% of the Active Tobacco Consumers were having 4 to 6 members in their families, followed by 23.42% who have 7 to 10 members and only 6.33% of them having 4 or less members in their families.

- In terms of relationship status, 75.3% of the Active Tobacco Consumers were single, 9.2% were in an open relationship whereas 7.6% were in a committed relationship.

- More than half (51.27%) of the Active Tobacco Consumer's average monthly household income is somewhere between ₹10,000 to ₹30,000.

- 44.6% of the Active Tobacco Consumer's primary family occupation is service followed by business (28.2%), followed by farming (20.3%).

- Most of the Active Tobacco Consumers (80.1%) spends ₹30 or less for consuming tobacco on a daily basis.

- 59.5% of the Active Tobacco Consumers are found to be financially dependent, followed by 22.2% who are partially financially dependent on their families and only 18.4% are financially independent.

- 40.5% of the Active Tobacco Consumers either strongly agrees or agrees that they have tobacco related health problems. However, 39.9% are also not sure of any tobacco related health problems.

- Majority of the Active Tobacco Consumes (83.5%) have members in the family who consumes tobacco.

- Spending time with families, friends and surfing the internet are some of the most popular activities performed by Active Tobacco Consumers.

- The average age of initiation of tobacco for Active Tobacco Consumers is 15.89 years.

The important findings about the socio-economic profile of Non Tobacco Consumers are as follows:

- 71.33% of the Non Tobacco Consumers were from Pachhunga University College and 28.67% were from Government Saiha College. In Pachhunga University College, 31.58% of the total respondents were Non-Tobacco Consumers and in Government Saiha College, 23.16% were Non-Tobacco Consumers. Therefore the percentage of Non Tobacco Consumers is more at Pachhunga University College compared to Government Saiha College.

- 59.44% of the Non Tobacco Consumers among the respondents were studying BA, followed by 31.47% studying BCom, followed by 9.09% studying BSc.

- The average age of the Non-Tobacco Consumers is 20.2 years.

- 37.8% of all Non-Tobacco Consumers among the respondents were males and remaining 62.2% were females.

- 62.94% Non-Tobacco Consumers among the respondents have 4 to 6 members in their family.

- 83.2% of the Non-Tobacco Consumers among the respondents were single.

- More than half (53.15%) of the Non-Tobacco Consumer's average monthly household income is between ₹10,000 to ₹30,000. 27.27% of Non-Tobacco Consumers belongs to families with income below ₹10,000 a month.

- 44.1% of Non-Tobacco Consumers have service as their primary family occupation, followed by 25.2% having farming followed by 21.7% having business.

- 68.5% of the Non-Tobacco Consumers were financially dependent on their families.

- 72.7% of the Non-Tobacco Consumers have members in their family who consumes tobacco.

- Most of the Non-Tobacco Consumers spends substantial time with family, friends and surfing the internet.

The important findings about the socio-economic profile of Past Tobacco Consumers are as follows:

- Out of the total Past Tobacco Consumers, 68.3% were from Pachhunga University College and the rest 31.7% were from Government Saiha College. 8.67% of the respondents in Pachhunga University College and 7.34% in Government Saiha College were Past Tobacco Consumers.

- 75.61% of the total Past Tobacco Consumers were studying BA followed by 17.1% studying BCom and remaining 7.32% studying BSc.

- The average age for the Past Tobacco Consumers is 20.24 years.

- 63.4% of the Past Tobacco Consumers were were males and the rest 36.6% were females.

- 80.49% of the Past Tobacco Consumers were having 4 to 6 members in their family.

- 78% of the Past Tobacco Consumers were single.

- 80.49% of the Past Tobacco Consumers were having an average monthly family income of ₹30,000 or less.

- 31.7% Past Tobacco Consumers were having service as their primary family occupation followed by 29.3% whose primary family occupation is farming and 24.4% whose primary family occupation is business.

- 70.7% of the Past Tobacco Consumers used to spend less than ₹10 daily to consume tobacco.

- 58.5% of the Past Tobacco Consumers were financially dependent, followed by 22% who were partially financially dependent on their families and only 19.5% were financially independent.

- Majority (39%) of the Past Tobacco Consumers either strongly agreed or agreed that they have had tobacco related health problems.

- 80.5% of Past Tobacco Consumers have members in the family who consumes tobacco.

- Most of the Past Tobacco Consumers spends substantial amount of time with family, friends and surfing the internet.

- The average age of initiation of tobacco by the Past Tobacco Consumers is 13.73 years.

The important findings from the comparison of socio-economic profiles between Active, Non and Past Tobacco Consumers are as follows:

- Saiha Government College have much more Active Tobacco Consumers (69.49%) than Pachhunga University College (59.75%).

- Active Tobacco Consumers are highest (67.59%) among respondents studying BA, followed by BSc (56.76%) and BCom (50.48%). Non-Tobacco Consumers are highest among BCom (42.86%), followed by BSc (35.14%) and BA (23.74%) respondents. Past Tobacco Consumers are highest among BA (8.66%), followed by BSc (8.11%) and BCom (6.67%) respondents.

- The average age of Active Tobacco Consumers (20.71 years) were slightly higher compared to Past Tobacco Consumers (20.24 years) and Non Tobacco Consumers (20.2 years).

- 54.11% Active Tobacco Consumers were males and 45.89% were females. 62.24% Non Tobacco Consumers were females and 37.76% were males. Therefore, tobacco consumption is more prevalent among males.

- The percentage of Past Tobacco Consumers who belongs to medium sized families of 4 to 6 members is comparatively higher (80.49%) then the percentage of Non-Tobacco Consumers (62.94%) and Active Tobacco Consumers (65.19%) who belongs to similar sized families.

- In terms of relationship status, most of them were single and the percentage of singles is highest (83.22%) among Non Tobacco Consumers. However, the percentage of undergraduate students in an open relationship is highest (9.18%) among Active Tobacco Consumers and the percentage of undergraduate students in a complicated relationship is highest (7.32%) among the Past Tobacco Consumers.

- The Past Tobacco Consumers have the highest percentage of students who have less than ₹10,000 as their average monthly family income and also they have less percentage of students having monthly household income of ₹10,001 to ₹20,000, ₹20,001 to ₹30,000 and more than ₹40,000 compared to Non and Active Tobacco Consumers. Therefore economic constraints may be a factor for quitting among the Past Tobacco Consumers and higher income or affordability may be a factor for many Active Tobacco Consumers to continue tobacco consumption.

- Service is the most common family occupation across respondents. However, business is the second most common family occupation only for Active Tobacco Consumers whereas farming is the second most common primary family occupation for both Non and Past Tobacco Consumers. Also, there are very less respondents whose family's primary occupation includes pension and other sources.

- 80.06% of the Active Tobacco Consumers and 92.68% of the Past Tobacco Consumers used to spend ₹30 or less daily on tobacco. 70.73% of the Past Tobacco Consumers used to spend less than ₹10 daily on tobacco.

- The percentage of financially dependent students is more among Non Tobacco Consumers (68.53%) than Active Tobacco Consumers (59.49%) and Past

Tobacco Consumers (58.54%). Whereas, financially independent students are also more among both Active (18.35%) and Past Tobacco Consumers (19.51%) compared to Non Tobacco Consumers (17.48%). This indicates that, students who are financially independent or partially dependent are more inclined towards tobacco consumption.

- Most of the Active and Past Tobacco Consumers agree that they have health problems caused due to tobacco. However, the percentage of Past Tobacco Consumers (26.83%) is slightly more compared to Active Tobacco Consumers (19.62%) who either strongly disagrees or disagrees that they have tobacco related health problems.

- There are more Active Tobacco Consumers (83.54%) than Non Tobacco Consumers (72.73%) and Past Tobacco Consumers (80.49%) having members in the family who consumes tobacco. Therefore, tobacco consumption by family members seems to have an influence on students who consumes or consumed tobacco in the past.

- Most of the respondents spend considerable amount of time with their families and friends and moderate amount of time in watching television daily. Listening to music is popular among most respondents and majority of the respondents spends lengthy hours daily in surfing internet.

- The percentage of respondents, who does not spend any time daily on their studies is unusually high among the Past Tobacco Consumers (12.2%), followed by Active Tobacco Consumers (5.7%) and Non Tobacco Consumers (3.5%). The percentage of respondents who spends more than 5 hours daily in their studies is highest among Non Tobacco Consumers (2.8%). The percentage of respondents who does not spend any time on reading is highest among Past Tobacco Consumers (12.2%), followed by Active (10.76%) and Non Tobacco Consumers (4.2%). So, it may be assumed that Non Tobacco Consumers spends more time on their studies compared to Active and Past Tobacco Consumers.

- 55.8% of the respondents do not spend any time daily in playing indoor games and 43.6% of the respondents does not spend any time on a daily basis for going out or travelling.

- The percentage of respondents who spends 30 minutes to 4 hours daily on cooking and other household works is highest among the Non Tobacco Consumers (66.43%), followed by Active (57.59%) and Past Tobacco Consumers (56.1%).

- 46.9% of all respondents spend 30 minutes to 2 hours daily on religious activities. The percentage of respondents who does not spends any time on religious activities is highest among the Past Tobacco Consumers (14.63%), followed by Active (12.97%) and Non Tobacco Consumers (8.39%). The percentage of respondents who spends more than 5 hours daily on religious activities is highest among the Non Tobacco Consumers (3.5%) followed by Active (1.27%) and totally absent among the Past Tobacco Consumers. Therefore, Non Tobacco Consumers among the respondents are slightly more inclined towards spending time in religious activities than Active and Past Tobacco Consumers.

- The average age of initiation to tobacco is 15.64 years, 15.89 years and 13.73 years for the total 357 tobacco consumers (Active and Past), Active Tobacco Consumers and Past Tobacco Consumers, respectively. Due to early age of initiation, it is necessary to start educating students regarding harmful effects of tobacco in schools and strictly control tobacco consumption at the school level.

6.2.4 Findings from Chapter 4

The chapter titled "Behaviour of Undergraduate Students regarding Tobacco Consumption" explores the consumption pattern and behaviour of the undergraduate tobacco consumers studying in the select colleges based on primary data. Consumer Behaviour is broadly defined as "the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society" (Hawkins et al., 2007, p. 6). The chapter explores the consumption behaviour of undergraduate students using the Schiffman and Kanuk (2007) model of consumer decision making.

Section 4.2 discusses the various external influences for tobacco consumption which include marketing efforts of tobacco industry and sociocultural influences for tobacco consumption. In spite of much regulation from the government on marketing of tobacco products in India, companies invest huge money in promotion, distribution and sales. The marketing efforts of tobacco companies in Mizoram are rely heavily on passive and subliminal marketing techniques such as point-of-sales displays, attractive packaging, extensive and targeted distribution strategies, and indirectly promoting tobacco consumption culture using platforms like movies, internet, social media etc. Due to the blanket ban on tobacco advertising in India, companies now often resort to surrogate advertising (Business Wire, March 20, 2019). Exposures to tobacco through movies and tobacco-branded merchandise make adolescents more receptive to tobacco advertising and more likely to try tobacco (Arora et al., 2012; Mohan & Lando, 2016; WHO, 2003). There were also instances of tobacco companies going to the extent of violating norms to market their products in India. The aggressive marketing strategies of the tobacco industry are one of the most important factors leading to initiation of tobacco use among children and teenagers (Chadda and Sengupta, 2002). According to Gupta (2006), the taxes for tobacco products in India are low and not collected effectively for all tobacco products except cigarettes making them easily affordable for even school children. It has been observed that after the implementation of GST, there has been a reduction in the amount of tax collection and very little increase in the final retail price of various tobacco products in India (John, Dauchy & Goodchild, 2019).

The sociocultural environment includes family, friends, social class, culture, sub culture, values etc. According to Mohan et al., (2018), "tobacco use is deeply ingrained as a cultural practice". The Mizo society in general is characterized by closely knit families with shared family values. A test of association between family size and tobacco user category revealed that family sizes are not a determining factor for consumption of tobacco. The major occupational choices for the families in Mizoram broadly include service, business and farming. A test of association between family occupation and tobacco user category suggests that occupation may not be regarded as a determining factor for tobacco consumption. A test of

association between family income and tobacco user category reveals that there is no significant association between family income and tobacco user category. There is also non-significant association between tobacco user category and respondent's status of financial dependency. A test of significance also shows that the relationship status of the undergraduate students is not a determining factor for their choice of tobacco consumption. However, there is a significant association between tobacco consumption in family and tobacco user category which suggests that tobacco consumption in the family does have an influence on undergraduate student's choice for tobacco consumption. It has also been found that friends were the most common influence for tobacco consumption among the respondents. The respondents were also exposed to easy availability of tobacco products as 89.8% said that tobacco products are available within the 100 meter radius around their college campuses. There is also association between the perception regarding increase of taxes on tobacco products and tobacco user category. Consumption of tobacco can be related with other addictive habits like alcohol and drugs. There is also a significant association between the other addictive habits and tobacco user category. It has been found that the Past Tobacco Consumers (82.93%) have the strongest objection followed by Non Tobacco Consumers (66.43%) and Active Tobacco Consumers (41.46%) on the matter of tobacco consumption by their partners. There is also a significant association between the perception regarding younger generation's tobacco consumption and tobacco user category. Therefore, the students in general and particularly the Non and Past Tobacco Consumers are more concern about their partners and the younger generations wellbeing. There is a significant association between consideration of smoking as fashionable and tobacco user category which suggests smoking is not considered fashionable more by Non-Tobacco Consumers than Active and Past Tobacco Consumers. The fact that 17.2% respondents agreed that it is unfriendly to refuse when other offers them tobacco shows certain amount of peer pressure. The majority of the Active Tobacco Consumers (41.77%) agrees and an overwhelming majority of the Non-Tobacco Consumers disagrees that Consuming tobacco/smoking is an easy way to socialize with others. Majority of the respondents also agreed that tobacco consumption is generally disapproved by people in public places though more than a quarter of the respondents are not quite

sure about this. There is no significant association between exposure to various types of anti-tobacco messages and media campaigns and tobacco user category except for the exposure to health warnings on packets of cigarettes and other tobacco products. Therefore, TV and movies are the best platform where respondents are mostly exposed to anti-tobacco campaigns and messages. 86% of the respondents agreed that using tobacco is likely to increase their chances of getting cancer and 89% of the respondents agree that tobacco or smoking kills. Therefore, majority of the respondents seems to be aware about the adverse effects of tobacco on their health.

Section 4.3 discusses the consumer decision making regarding tobacco consumption. There are various factors or impulses that motivate tobacco consumers to consume tobacco. The most common factor for consumption motivation among tobacco consumers has been found to be "the conscious thought of personal possession of tobacco products", closely followed by "the physical sight of others consuming tobacco/smoking". A test of association between increased consumption desire due to attractive tobacco packaging and tobacco user category shows significant association. It may be concluded that there exists a large number of young Active Tobacco Consumers who are attracted by the packaging and branding of tobacco products. Most of the Active Consumers finds Tobacco "Addictive" (60.76%). However, Non and Active Tobacco Consumers have a very different perception when they think about the word Tobacco. A test of association between perception of tobacco cost and tobacco user category reveals that perception regarding the cost of tobacco consumption is somewhat different for the consumers, non-consumers and past-consumers of tobacco. There is a sharp contrast between Active and Non-Tobacco Consumers in their attitude regarding tobacco consumption being a matter of personal choice. Most of the respondents do not agree that consuming tobacco makes them look cool and mature. However, this attitude is stronger among Non-Tobacco Consumers (83.22%) compared to the Active Tobacco Consumers (65.51%). Therefore, the need recognition for tobacco consumption is affected by various motivating factors like conscious thought of tobacco possession, sight of others consuming tobacco, sight of tobacco products displayed in shops, tobacco use depicted in movies or TV shows and attractive packaging. Tobacco consumption in

the family, the perception of tobacco as addictive and pleasurable by many tobacco consumers and the strong pro-tobacco attitude by the undergraduate tobacco consumers also determines their realization of need, pre-purchase search and evaluation of alternative tobacco products. Easy availability, flavour and feel and low price are important factors considered by the undergraduate tobacco consumers while evaluating the alternatives. The experience from these evaluations further strengthens the psychological field consisting motivation, perception, learning, personality and attitude.

The section 4.4 discusses the post-decision behaviour of the respondents regarding tobacco consumption. The average age of tobacco initiation among the Active Tobacco Consumers is 15.89 years. 80.06% of the Active Tobacco Consumers spend ₹30 or less on daily basis for purchasing tobacco. However, due to the availability of cheap contraband cigarettes, consumers in Mizoram are able to purchase a whole pack of 20 cigarettes within ₹30. The gender wise distribution of tobacco products clearly shows that smokers are higher among male respondents whereas smokeless tobacco users are higher among female respondents. There are also significant associations between genders and the type of tobacco products consumed across all the different types of tobacco products. More than half (57.28%) of the Active Tobacco Consumers prefers to purchase tobacco products in single units which are both easily available and affordable. Majority (63.61%) of the Active Tobacco Consumers consumes tobacco every day which shows that the extent of tobacco addiction is very high. The choice of time and place for consuming tobacco may consciously or sub-consciously motivate, provide convenience and even approval for tobacco consumption to tobacco consumers. 65.51% of the Active Tobacco Consumers consume tobacco after meals, followed by 24.68% who generally consumes while they are spending time with their friends and 18.67% consumes tobacco in their idle time. There may be strong psychological impulse which motivates tobacco consumers to consume tobacco after meals, tendencies where they influence each other to consume tobacco while hanging out as friends and also unoccupied time forces tobacco consumers to consume tobacco. Almost half (48.2%) of the Active Tobacco Consumers usually consume tobacco outdoors which reflects

that the ban on smoking at outdoor public places have not been strictly enforced by the administration. The considerable number of respondents consuming tobacco inside their hostel and college campuses also points at the failure of "no-tobacco policy" in college campuses in Mizoram. Though, the majority (69.3%) of the Active Tobacco Consumers agreed that they avoid tobacco in public places, but still many college students may consume tobacco in public places and expose others to the dangers of second-hand smoke. Besides this, 25.63% of the Active Tobacco Consumers agreed that they do not mind breaking rules by smoking in prohibited areas which shows lack of concern by many college students. Overall, the respondents have less brand loyalty towards any particular tobacco brand and the most important factors for the Active Tobacco Consumers for choosing a particular brand is "*Easy Availability*", followed by "*Flavor and Feel*" and "*Low Price*". However, there is significant association between certain types of tobacco products and brand loyalty among the respondents. 65.51% of the Active Tobacco Consumers do not agree that tobacco consumption makes them look cool or mature in front of others. 40.51% of the Active Tobacco Consumers agree and 39.87% of them are not sure that they have health related problems caused due to tobacco. Therefore, a substantial number of the Active Tobacco Consumers are actually aware and acknowledge that they have health related problems caused due to tobacco consumption while still, a large percentage of them either disagree or not sure about such problems. 82.91% of the respondents agree that consuming tobacco is likely to increase their chances of getting cancer and 87.66% of them agree that consuming tobacco can kill them. There are also a large number of consumers who may use tobacco as a means to cope with personal stress. It is interesting to note that in spite of majority of the tobacco consumers considering the monetary cost of tobacco consumption to be high, continue to consume tobacco. 46.2% of the Active Tobacco Consumers disagree, 14.24% agrees and 39.56% were not sure that they have influenced others to consume tobacco. However, 60.76% of the respondents agree, 10.44% disagrees and the rest 28.8% were not sure that they often encourage others to quit tobacco. Therefore, in spite of being regular users of tobacco, many Active Tobacco Consumers actually encourages others to quit tobacco. 45.57% of the respondents responded expressed that they want to quit tobacco or smoking in future,

32.28% are already trying to quit, 17.09% of them tried to quit in the past but did not succeed, and only 5.06% do not want to quit tobacco. The fear of death caused by cancer or any other tobacco related diseases were the most common reasons for the motivation to quit followed by the desire to set good example for the family and future generations. 38.61% of the respondents agree, 24.03% disagree and 37.03% are not sure that the graphic health warning on the packets of tobacco products decreases their desire to consume tobacco or smoke. Therefore, a large number of Active Tobacco Consumers are still not convinced by the health warnings displayed on the packets. 69.3% of the respondents agree, 4.75% disagrees and 25.95% of them were not sure that they can successfully quit tobacco.

To alter the tobacco consumption behaviour of undergraduate students, it is important to "understand how their perceptions of control are undermined by tobacco and how external forces influence goals to quit or control tobacco" (Johnson et al., 2004). The undergraduate tobacco consumers have been found to be going through a detail process of consumer decision making regarding their tobacco consumption behaviour. During such decision making process the respondents get motivated by various factors such as indirect marketing efforts by the tobacco industry, socio-cultural factors in the environment, individual psychological factors of the respondents and their individual experiences related to tobacco and its consumption. A combination of such factors determines the purchase, consumption and post-purchase behaviour. Some of the major findings from the analysis of primary data were as follows:

1. Tobacco consumption in the family of the respondents act as an early influence for tobacco consumption among the respondents.
2. There is a pro-tobacco mindset among many respondents and substantial tobacco consumers consider smoking as fashionable.
3. The attractive design and packaging of tobacco substantially increases the desire for tobacco consumption.
4. Other addictive habits such as alcohol consumption and drug abuse were positively associated with tobacco consumption.

5. Female tobacco consumers were more inclined towards smokeless tobacco than male tobacco consumers.

6. Consumers of certain type of tobacco products like Indian branded Cigarettes, Sahdah (Khaini), Gukha and Tuibur have expressed more brand loyalty towards such products than consumers of International Branded Cigarettes, Zial and Burmese Cigarettes.

The most preferred measure to combat tobacco use as suggested by the respondents is "More proactive role and counseling did by parents and other family members", followed by "Anti-tobacco campaign in internet". The measures suggested by the respondents for tobacco control along with the deeper understanding of the tobacco consumption behaviour of the undergraduate students explored in this chapter will be very useful for designing an effective and comprehensive social marketing strategy for controlling tobacco consumption in Mizoram.

6.2.5 Findings from Chapter 5

This Chapter titled "Role of Organizations and Social Marketing Strategies for Tobacco Control in Mizoram" discusses the important contributions of various governmental and non-governmental organizations and associations towards tobacco control in Mizoram and also explores and presents the social marketing strategies for controlling tobacco consumption.

The section 5.2 examines the role of Mizoram State Tobacco Control Society (MSTCS), which is the most prominent organization entrusted to implement the Mizoram State Tobacco Control Programme (MSTCP) under the National Tobacco Control Programme across the state. MSTCS has successfully implemented projects like "Advocacy & Mobilization for Smoke Free Mizoram and Effective Tobacco Control Implementation in the State" and "Advancing Tobacco Control in Mizoram through Capacity building, Strengthening National Tobacco Control Programme and Effective Enforcement of Tobacco Control Laws". MSTCS runs various Tobacco Control Cells which offers services like Nicotine Replacement Therapy where they provide necessary interventions, treatments and counseling for people to quit.

MSTCS also collaborates with various organization and associations like Indian Society on Tobacco & Health (Mizoram Chapter), MZP, MHIP etc. for tobacco control initiatives. MSTCS observes the "World No Tobacco Day" every year with various themes related to bring awareness against tobacco related issues. MSTCS has carried out many activities like anti-tobacco awareness programmes at educational institutions, anti-tobacco programmes at Churches and community platforms, trainings and sensitization workshops, meetings, talk shows and many such other activities in the recent past. The important achievements of MSTCS include inclusion of tobacco education in school curriculum, inclusion of thematic topic on tobacco and health in Church services and adoption of tobacco free community in Thingsul Tlangnuam (Hatzaw, 2014).

The section 5.3 discusses the role of the Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC), which is the oldest organization dedicated to the cause of reducing tobacco consumption in Mizoram. Since 1989, Ms. Lal Riliani, the president of ISTHMC has been working tirelessly to convince and educate people about the evils of tobacco (Hmar, 2018).The society actively participates and often coordinates with other similar organizations such as the MSTCS in various tobacco control initiatives and programmes in the state like observing the Mizoram State Anti-Tobacco Day, creating awareness among school children and church interventions, starting 'Tobacco Free Sports' campaign etc. In 2015, ISTHMC along with MSTCS was jointly awarded the Regional Director Appreciation Award by the WHO. The primary objective of ISTHMC in recent times is to achieve smoke-free homes and smoke-free vehicles in Mizoram.

Section 5.4 talks about the roles of various religious organizations in controlling tobacco consumption in Mizoram. 87.1% of the population in Mizoram follows Christianity, which has a strong influence on people's conducts and lifestyles. The religious views and opinions on tobacco consumption is varied and evolving. On 3rd May, 1999, a meeting on Tobacco and Religion was held at WHO headquarters (WHO, 1999), which summarized the positive views regarding the Tobacco Free Initiative expressed by all major religions. A smoking cessation programme

delivered through church coalitions in African-American adults in in Virginia, USA found higher quit rates among intervention community and church goers (Schorling et al., 1997). Another study concluded that "public health interventions may profit by seeking to expand cooperation with religious congregations to facilitate efforts to promote healthy lifestyles" (Hofstetter et al., 2010). Though the churches in Mizoram are against alcoholism and were instrumental in pressurizing the Government to enact the MLTP Act, they are yet to express similar opposition for tobacco consumption. There is however some exceptions like the Presbyterian Church as a policy decided not to recruit probationary officers who are addicted to tobacco (Zorammuana, 2010). The Church has also included the thematic topic on tobacco and health in the Wednesday Night church service and in the yearly observation of health Sunday (Hatzaw, 2014). The Seven Day Adventist Church has a general view which prohibits its followers from consuming anything "unclean" such as alcohol, drugs, tobacco, meat etc.

Section 5.5 discusses the roles of other prominent NGOs regarding tobacco control in Mizoram, namely, the YMA, MHIP, MJA and MZP. The YMA has been referred as the oldest, largest and the most powerful social organization in Mizoram (Chawngthanmawii, 2014). The YMA actively campaigns against the evils of drugs and alcohol and has recently taken a special programme on HIV/AIDS. Though YMA was initially somewhat indifferent to the cause of tobacco control in Mizoram but in recent times it has become more concerned, has supported the various initiatives taken by the government and partnered with the MSTCS. One such step was imposing a ban on selling of *Gutkha* in the respective areas covered by the YMA branches in Mizoram. The MHIP is the largest women organisation in Mizoram which primarily works on issues of women rights and empowerment. MHIP has done some remarkable contributions in the field of health awareness which covered Injecting Drug Users, Female Sex Workers and Migrant labours for preventing HIV/AIDS. The MHIP had participated in Anti-Tobacco Squad drives and Joint Enforcement with other departments and also done a state-wide campaign against *Gutkha* where leaders of its branches in Aizawl took an oath to fight the menace and stop the selling of *Gutkha* in their respective jurisdictions. The MJA is a welfare

body for working journalists in Mizoram which has partnered with the Department of Health and MSTCS on a number of occasions for health awareness programmes. It has organized one day Media Workshop on Tobacco Control in Mizoram and participated in the 'Training on Tobacco Control for MJA and I&PR' conducted by the Lunglei DTCC. The MZP is the largest student organization and apex students' body in Mizoram which along with other NGOs attended the first meeting of State Level Coordination Committee (Tobacco Control). It also jointly organized the Youth MPOWER summit with MSTCS.

The section 5.6 examines the implementation of NTCP and COTPA in Mizoram. COTPA regulates the consumption, production, supply and distribution of the tobacco products by imposing restrictions on advertisement, promotion and sponsorship of tobacco products; prohibiting smoking in public places; prohibiting sale to and by minors; and prohibiting sale of tobacco products within a radius of 100 yards of educational institutions, and through mandatory depiction of specified pictorial health warnings on all tobacco product packs. The objectives of NTCP are as follows:

- Create awareness about the harmful effects of tobacco consumption and about tobacco control laws
- Reduce the production and supply of tobacco products
- Ensure effective implementation of the provisions made under COTPA 2003
- Help the people quit tobacco use through Tobacco Cessation Centers

The Government of Mizoram has implemented the NTCP in Mizoram as Mizoram State Tobacco Control Programme (MSTCP). Under the programme, MSTCS was established which runs 9 District Tobacco Control Cells (DTCC) and 1 State Tobacco Control Cell (STCC) in the state. Since 2014, 11th September every year is being observed as the official 'Mizoram State Anti-Tobacco Day' and Mizoram is the first state in India to do so. The Government of Mizoram constituted a special committee on 20th May 2016 to implement Article 5.3 of WHO FCTC. Following are some of the important steps taken by Government of Mizoram to implement COTPA in the state:

- Mizoram is the only state in India to authorise all ranks of police personnel to enforce Section 4, 6 (a) & (b) and is also the first state to adopt Anti Tobacco Squad (Hmar, 2018).

- Prohibition of smoking in public places in government offices and public transport.

- Forming Joint Task Force for controlling and checking mass influx of illegal tobacco products in Mizoram and enforcement on contraband cigarettes in all the districts of Mizoram.

- Notification to completely ban the sale of tobacco products individually, in single sticks, loose or outside its package without pictorial health warning.

The Ruantlang village in Champhai district was declared as a 'Tobacco Free Village' due to compliance to all sections of COTPA. The implementation of State Tobacco Control Program has shown some improvements like the decrease in overall tobacco use prevalence from 67.2% to 58.7%, decline in the second hand smoke exposure at home from 96.5% to 84.1% and the decline in second hand smoke exposure at the work place from 64.6% to 44.4% as per GATS-1 and GATS-2 comparisons. However, there has been limited success to the total implementation of COTPA in Mizoram. Firstly, from the primary data it has been found that tobacco products are still available within the 100 yard radius around college campuses violating the Section 6 of COTPA, 2003. Secondly, the free availability of contraband cigarettes of Chinese and Myanmar origin in Mizoram makes the various provisions of COTPA, 2003 to be ineffective. Besides being available at cheap prices which make them viable alternative against Indian brands, the contraband cigarettes packaging does not have proper graphic warnings as mandated by Cigarettes and Other Tobacco Products (Packaging and labelling) Second Amendment Rules 2018. The local unbranded tobacco products such as *Zial, Sahda* and *Tuibur* also do not have similar graphic warnings. These are the challenges that have made the NTCP in Mizoram less effective.

The section 5.7 looks into the definition and concept of social marketing which is defined as "the applications of marketing strategies and tactics to alter or create

behaviour that have a positive effect on the targeted individuals or society as a whole" (Hawkins et al., 2007). The concept of social marketing differs from commercial marketing in three ways. Firstly, social marketers focus on selling 'behaviour' whereas commercial marketers mostly focus on selling goods and services. Secondly, commercial marketers position their products against competing products of other companies while social marketers compete with target audiences existing behaviour and associated benefits. And thirdly, the ultimate goal of social marketing is the welfare of individuals, groups or the society whereas commercial marketing primarily aims for increasing the shareholder's wealth (Kotler & Lee, 2008).

Section 5.8 explores the concept of social marketing mix. As stressed by Andreasen (1994), the social marketing mix strategy may be either be based the conventional marketing mix which includes the 4Ps of Product, Price, Place and Promotion or may include additional Ps like People, Policy and Partnership (Donovan & Henley, 2010). Gordon (2012) advocated that "social marketers should be encouraged to engage, inspire, debate and propose ideas" which "would facilitate the development of a new, delimiting, and contemporary social marketing mix". Therefore based on the distinctiveness of the social marketing concept, the marketing mix for social marketing may be reinterpreted in the form new 4Ps which consists of Proposition, Perception, Platform and Persuasion (Akhtar & Bhattacharjee, 2014) and can be used for framing a comprehensive social marketing strategy for controlling tobacco consumption in Mizoram.

Section 5.9 discusses the importance of persuasion, attitude and behavioural change in social marketing. In this regard, the application of following models related to communication, persuasion, attitude and behaviour change in the context of tobacco control in Mizoram has been discussed:

- Elaboration-Likelihood Model (Petty & Cacioppo, 1983, 1986): ELM may be applied to frame specific and effective message content for the target community in Mizoram.

- Heuristic-Systematic Model (Chaiken, 1987): This model may be used while designing anti-tobacco campaigns in Mizoram where greater emphasis is given towards systematic processing of the campaign message by the target audiences.

- Rossiter-Percy Motivational Model (Rossiter & Percy, 1997): Tobacco consumption behaviour in Mizoram may be explained by this model where people have low perceived risk about consuming tobacco and thus low involvement in their decision to consume tobacco. At the same time, their addictive behaviour or choice to continue consume tobacco is likely to be a result of a positive motivation to have temporary feel good experience. Therefore, to counter this way of decision making by tobacco consumers, the social marketing message should result in high involvement and negative motivation among the target audience.

- FCB Grid Model (Vaughn, 1980, 1986): The consumer decision making for tobacco consumption in Mizoram can also be explained using this model as such decision making is characterized by low involvement which may fall either under the habitual or the satisfaction quadrant of the model.

- Health Belief Model: This model may be applied to encourage tobacco consumers in Mizoram to participate in quit interventions by understanding how they perceives the health risks associated with tobacco and the costs and benefits of quitting it.

- Protection Motivation Theory (Rogers, 1975): This theory may be applied to understand how people perceives health related threat caused by tobacco consumption and also to understand their intentions to quit or continue tobacco consumption.

- Social Learning Theory (Bandura, 1977): This theory can explain the role of socio-cultural influences for tobacco consumption in Mizoram and also suggest the extent of peer pressure, influences from family and role models in developing pro-tobacco mindset among the younger generation.

- Theory of Reasoned Action (Fishbein & Ajzen, 1975): This theory can be applied to understand how people hold particular beliefs regarding consumption and non-consumption of tobacco, how they view its respective consequences and the level

of their motivation to conform with other's behaviour in the society. The model can therefore be applied to predict people's intentions and prospective behaviour regarding tobacco consumption.

- Theory of Trying (Bagozzzi & Warshaw, 1990): This theory may be applied to effectively design social marketing campaigns to make people quit tobacco based on their existing attitude and intentions regarding quitting tobacco.

- Cognitive Dissonance (Festinger, 1957): The anti-tobacco campaigns in Mizoram may be designed in such a way that the target audience feels cognitive dissonance whenever they consume tobacco and the non-consumption behaviour is thus promoted as a means to eliminate that dissonance.

- Theory of Interpersonal Behaviour (Triandis, 1977): This model can be used to highlight the personal beliefs, values, social norms, feelings etc in forming consumption intention and subsequent consumption behaviour of tobacco consumers in Mizoram. The model can further explore the various encouraging factors that positively reinforce tobacco consumption and makes it habit forming behaviour among the youths.

- Diffusion Theory (Rogers, 1995): The steps to behaviour change (SBC) framework which is an adaptation of diffusion of innovation theory and the input/output persuasion model may be applied for promoting anti-tobacco behaviour among the youths in Mizoram.

- Stages of Change Model (Prochaska & DiClemente, 1984, 1986): This model can be applied in the context of tobacco control in Mizoram where the target market may be segmented based on the suggested stages and the social marketing campaign may be designed accordingly.

Section 5.10 explores the social marketing strategies for tobacco control in Mizoram. The WHO FCTC is the first global health treaty on tobacco control which requires its members "to implement comprehensive measures, covering both the demand for and supply of tobacco products, as well as counteracting the tobacco industry and promoting international cooperation for global action" (WHO, 2009). The six demand reduction policies under the MPOWER package (WHO, 2009) developed by WHO includes monitoring tobacco use and prevention policies, protecting people

from tobacco smoke, offering help to quit tobacco use, warning about the dangers of tobacco use, enforcing bans on tobacco advertising and raising taxes on tobacco. Tobacco control in Mizoram would require a comprehensive yet specific social marketing strategy within a broad framework like the WHO FCTC. A social marketing strategic framework for tobacco control in Mizoram must begin with a social marketing mix plan for which the proposed social marketing model (Akhtar & Bhattacharjee, 2014) may be applied. Then under each element of marketing mix, the models discussed earlier in section 5.8 may be applied to achieve desired tobacco control strategies. The 'Elaboration-Likelihood Model', 'Heuristic-Systematic Model', 'Rossiter-Percy Model' and the 'FCB Model' may be applied to understand consumption decision and for effective communication strategy. Other models like the 'Health Belief Model', 'Theory of Trying' and 'Protection Motivation Theory' may be considered to understand the perception regarding tobacco's health related consequences among tobacco consumers and frame motivational interventions for them to quit. The 'Social Learning Theory', 'Theory of Reasoned Action' and theory of 'Interpersonal Behaviour' may be useful to understand socio-cultural influences, personal beliefs and values in determining choice of tobacco consumption and the 'Diffusion Theory', 'Steps to Behavior Change' and 'Stages of Change Model' can be used to bring social change by motivating people to discard the pro-tobacco lifestyle. Therefore a combination of theories and approaches is necessary for making social marketing efforts and strategies to be more effective for tobacco control in Mizoram.

6.3 Discussion on the Research Questions

Following research questions as specified in the introductory chapter were set at the very beginning of this research work:

1. What are the prevalence, pattern and habits regarding tobacco consumption by undergraduate students in Mizoram?
2. What is the decision-making process adopted for consuming tobacco products by undergraduate tobacco consumers in Mizoram?

3. How socio-economic backgrounds, cultural and psychological factors influence attitudes and behaviour towards tobacco consumption by undergraduate students in Mizoram?

4. What is the role of different organisations regarding prevention and control of tobacco consumption in Mizoram?

5. How can we improve the social marketing efforts and strategies and have a comprehensive and integrated approach for prevention and control of tobacco consumption in Mizoram?

The above mentioned research questions embodies the purpose of this entire research. The discussion to these important research questions also represent the interpretations of relevant findings from the research and attempts to fulfill the research objectives. Each of these research questions have been addressed individually and discussed as follows:

6.3.1 Question 1: What are the prevalence, pattern and habits regarding tobacco consumption by undergraduate students in Mizoram?

According to Mathur et al., (2014) the "patterns and trends in tobacco use among young people are important to document as these findings would aid the development of targeted prevention and intervention programs for these subpopulations, specifically". The representative sample drawn for the primary research consisting of 500 undergraduate students provides important indications regarding the overall prevalence, pattern and habits of tobacco consumption by undergraduate students in Mizoram. According to the primary data, out of all respondents, 63.2% were Active Tobacco Consumers, 28.6% were Non Tobacco Consumers and only 8.2% were Past Tobacco Consumers. Therefore, the overall prevalence of tobacco consumption among the undergraduate respondents is 63.2%, which is higher than the 58.7% rate of prevalence recorded during the GATS 2016-2017 (Ministry of Health & family Welfare, Government of India, 2018). In terms of gender, 54.1% of the Active Tobacco Consumers among the respondents were males and the rest 45.9% were females which shows that tobacco prevalence among undergraduate respondents is much higher among males than females. The higher

tobacco prevalence among males has also been recorded during GATS 2016-2017, where out of all adults, 64.9% men and 52.4% women were found to be tobacco users in Mizoram (Ministry of Health & family Welfare, Government of India, 2018). It has also been found from the primary data that the percentage of Active Tobacco Consumers in Government Saiha College (69.49%) is much higher in comparison to Pachhunga University College (59.75%). This gives the indication of higher tobacco prevalence by undergraduate students in Saiha compared to Aizawl. These two districts may be compared and contrasted based on several parameters such as population, per capita income, remoteness from the state capital etc. Therefore, any link between such factors and tobacco prevalence by the undergraduate students of these two districts needs further exploration. The average age of initiation of tobacco by the Active Tobacco Consumers among the undergraduate respondents has been found to be 15.89 years which is much lower in comparison to the 17.8 years recorded during the GATS 2016-2017 (Ministry of Health & family Welfare, Government of India, 2018). The various factors due to which the undergraduate students are drawn towards tobacco consumption at an early age needs to be explored further.

The overall pattern and habits of tobacco consumption by undergraduate students in Mizoram may be understood by exploring factors like type of tobacco products consumed, frequency of tobacco use, quantity of tobacco purchased, daily expenditure on tobacco, time and place of consumption etc. There is wide range of tobacco products which are available in Mizoram such as Cigarettes, Gutkha, Tuibur, Zarda etc. Most of these tobacco products are easily available to the students even near their college campuses. According to the primary data, Indian branded cigarettes are the most popular type of tobacco product consumed by the respondents (34.49%), which is closely followed by Gutkha (31.01%) and Zarda (24.68%). There were also lesser yet substantial users of Zial (17.4%), Burmese Cigarettes (15.82%), Khaini (11.07%) and Tuibur (10.13%) among the respondents. In terms of frequency of tobacco use, the primary data revealed that majority (63.6%) of the Active Tobacco Consumers among the respondents were daily users, 19.9% of them are occasional users and 16.5% were light users (using 3 to 4 times a week) of tobacco. So it may be

assumed that most undergraduate tobacco users in Mizoram are heavy users who consume tobacco every day. Due to the addictive nature of tobacco, the remaining medium and light tobacco users among the undergraduate students may also have a high potential of becoming heavy tobacco users in future. Regarding the quantity of tobacco purchased at a time by the undergraduate students, it has been found that more than half (57.28%) of the respondents among Active Tobacco Consumers prefers to purchase tobacco products in single units. The remaining 37.97% prefers to purchase tobacco products in one full packet and only 4.75% purchases tobacco in bulk quantities. Regarding the daily expenditure on tobacco by undergraduate students, it has been found that 80.06% of the Active Tobacco Consumers spend ₹30 or less, followed by 13.61% of consumers spending ₹31 to ₹50 and only a small section of consumers (6.33%) were found to be spending more than ₹50 daily on tobacco products. Though, in general the higher expenditure on tobacco reflects higher usage by the respondents but the amount of daily expenditure on tobacco is also dependent on the type and brand of tobacco products being purchased by them. The choice of time and place for consuming tobacco by the undergraduate students reveals some important aspects about the situational environment like motivational impulses and kind of convenience related to tobacco consumption. 65.51% of the Active Tobacco Consumers among the respondents consumes tobacco after meals, followed by 24.68% who generally consumes tobacco while they are spending time with their friends and 18.67% consumes tobacco in their idle time. The findings from the primary data shows that there may be strong psychological impulses which motivates tobacco consumers to consume tobacco during times such as post-meal cravings, motivations (or peer pressure) from friends and lack of engagement in meaningful tasks or hobbies. Regarding the place of tobacco consumption, almost half (48.2%) of the respondents among the Active Tobacco Consumers usually consume tobacco outdoors. The remaining 18.35% of them consume tobacco inside their home or hostel and 7.91% of them consume tobacco inside their college campuses. Also, 25.32% of the respondents say that they consume tobacco in all of these places which points at their high addiction to tobacco. The high percentage of students consuming tobacco outdoors may be because of the fact that outdoor environment is less restrictive compared to home, hostel or college campuses which

further points out to the fact that the ban on smoking at public places may not have been strictly enforced at many places. Though, it has also been found that 69.3% respondents among the Active Tobacco Consumers generally avoids tobacco consumption in public places but at the same time there are 10.76% respondents who does not avoid tobacco consumption or smoking at public places and the rest 19.94% were not sure about tobacco consumption at public places. In fact, there were less than half of the respondents (49.37%) who disagreed that they do not mind breaking rules regarding public smoking whereas the rest 25.63% agreed and 25% were not sure about such things. Therefore, overall, there are considerable numbers of college students who may consume tobacco or smoke in public places. The brand loyalty among the undergraduate Active Tobacco Consumers is divided as 40.51% of the respondents agreed, 25.32% disagreed and the rest 34.18% were not sure that they normally purchase tobacco products of a particular brand. It has also been found that the most important factors for choosing a particular brand by the respondents is "*Easy Availability*" followed by "*Flavor and Feel*" and "*Low Price*".

6.3.2 Question 2: What is the decision-making process adopted for consuming tobacco products by undergraduate tobacco consumers in Mizoram?

According to WHO (n.d.), the consumption of tobacco depends on various factors such as price of the tobacco product, disposable income of the consumer, demographic characteristics and socio-economic status of the population, rural versus urban area of residence, tobacco control interventions and knowledge and information about the health effects of tobacco use. The decision-making process for tobacco consumption by undergraduate students in Mizoram may be explained by exploring such factors which are relevant in the context of Mizoram and by using an appropriate consumer decision-making model. A traditional and more general consumer decision-making process is the "five-stage model of the consumer buying process" which involves five steps that consumers move through during their purchase of a particular product or service (Stankevich, 2017). These five stages include Needs recognition, Information search, Evaluation of alternatives, Purchase and Post-purchase behaviour. Schiffman and Kanuk (2007) has proposed a simplified

model of consumer decision making using three distinct but interlocking stages called the input stage, the process stage and the output stage. This particular model of consumer decision making has been discussed in Chapter 4 (Exhibit 4.1) and used as a foundational framework for exploring the tobacco consumption behaviour of the undergraduate respondents.

A. The Input Stage: As per the primary data, during the input stage, the undergraduate respondents are subjected to two sources of external influences. Firstly, they are exposed to the marketing efforts of the tobacco companies and tobacco sellers and secondly they are exposed to the influences in their sociocultural environment. Due to legal restrictions, the marketing efforts of tobacco companies relies heavily on passive and subliminal marketing techniques in Mizoram such as point-of-sales displays, attractive packaging, extensive and targeted distribution strategies, and indirectly promoting tobacco consumption culture using platforms like movies, internet, social media etc. Factors such as *"the sight of tobacco products being displayed at the shops"*, "*The depiction of someone consuming tobacco in movies or TV shows*", and "*Displays of advertisements related to tobacco products*" were found to be relevant factors that motivates the respondents to consume tobacco. It has been found that out of all the respondents 28% agreed, 40.4% disagreed and 31.6% were not sure that the attractive packaging of tobacco products increases their desire to smoke or consume tobacco. The fact that 89.8% respondents have acknowledged that tobacco products are available within 100 yards of their campuses proves that the tobacco companies and sellers are using extensive and targeted distribution strategies to push tobacco products among the younger generation. There exist a number of influences for tobacco consumption for the undergraduate students in their socio-cultural environment. Family plays an important role in the consumption choices of the undergraduate students where majority (65.8%) of the respondents has 4 to 6 members in their family. Most of the respondent's primary family occupation includes service or business or farming and 69.8% of their average monthly household income is ₹30,000 or below. Though most of the respondents (62%) were financially dependent on their families but there were more (68.53%) Non Tobacco Consumers compared to Active (59.49%) and Past Tobacco

Consumers (58.54%) who were financially dependent on their family. 80.2% respondents have confirmed that one or more members in their family consumes tobacco. Tobacco consumption in families is much higher among the Active Tobacco Consumers (83.54%) than Non Tobacco Consumers (72.73%) and there is a significant association between tobacco consumption in family and tobacco user category. This suggests that students who take up the habit of consuming tobacco may have direct or indirect influence from their family members. However, when it comes to direct influence and initiation by particular person, most of the Active and Past Tobacco Consumers among the respondents have ranked 'friends'. 17.2% of the respondents also said that it is unfriendly to refuse when others offers them tobacco which suggests that high peer pressure is one of the most important factor for tobacco consumption among undergraduate students in Mizoram. Besides 'friends', 'common people from the society', 'relatives' and 'siblings' were also major influences for tobacco consumption among undergraduate tobacco consumers. In general, the undergraduate students in Mizoram do not experience any strong opinion or attitude against tobacco consumption in the contemporary Mizo society and culture. Only 52% of the respondents said that they have objection to their partner's habit of tobacco consumption or smoking and the rest were having either no objection or not sure about their opinion on that. 16.46% of the Active Tobacco Consumers compared to only 3.5% of the Non tobacco Consumers among the respondents considers smoking to be "fashionable" and 31.8% of all respondents consider that consuming tobacco is an easy way to socialize with others. There is significant association between perception regarding younger generation's tobacco consumption and consideration of smoking as fashionable with the tobacco user category. Among all the respondents, 19.4% agrees that tobacco consumption is generally approved by people in public places. In spite of the acceptance of tobacco by general public, 86% of the respondents agreed that using tobacco is likely to increase their chances of getting cancer and 89% of the respondents agree that tobacco or smoking kills. Therefore, the undergraduate students are quite aware about the negative consequences of tobacco on people's health but for some reasons, many of them are not discouraged to consume tobacco in spite of such awareness and knowledge.

B. The Process Stage: This is the stage where the consumer actually makes a decision regarding consumption. The various psychological factors such as motivation, perception, learning, personality and attitudes affects the external influences from the input stage to determine how a consumer recognizes a need, search for information before purchase and evaluate alternatives which also affects the consumers existing psychological factors (Schiffman & Kanuk, 2007). The most common factor for consumption motivation among tobacco consumers has been found to be "*the conscious thought of personal possession of tobacco products*", which is closely followed by "*the physical sight of others consuming tobacco/smoking*". "*The sight of tobacco products being displayed at the shops*", "*The depiction of someone consuming tobacco in movies or TV shows*", and "*Displays of advertisements related to tobacco products*" were other relevant factors that motivates tobacco consumption among students. 28% of all respondents, 29.11% of the Active Tobacco Consumers and 36.59% of the Past Tobacco Consumers have also agreed that the attractive design and brand name of tobacco products increases their desire to consume tobacco products. The attractiveness of tobacco packaging may also work beyond the conscious psychological level of consumers to increase their desire for consumption. During word association by the respondents for the word tobacco, more than half of the respondents (51%) have associated the word "*Addictive*", followed by "*Harmful*" (31.6%) with Tobacco. Most of the Active Tobacco Consumers (60.76%) finds Tobacco to be "Addictive" whereas most of the Non Tobacco Consumers (48.95%) finds it "*Harmful*". 11.39% of the Active Tobacco Consumers associated the word "*Pleasurable*" whereas 13.99% of the Non Tobacco Consumers associated the word "Annoying" with tobacco. This shows a subtle difference of perception regarding tobacco by Non Tobacco Consumers and Active Tobacco Consumers among the undergraduate students. Regarding the perception of cost for tobacco consumption, most of the respondents (68.6%) consider the cost of tobacco consumption to be high and there is a significant association between such perception and tobacco user category. The personality and attitudes of the undergraduate tobacco consumers also contributes to their decision making process for tobacco consumption. There is a significant association between other addictive habits like consuming alcohol or taking drugs with tobacco user

category which suggests that respondents who consume tobacco are more likely to have other addictive habits. 57.91% Active Tobacco Consumers agreed and 51.75% Non-Tobacco Consumers disagreed on tobacco consumption being a matter of their personal choice which others have no right to object. This definitely reflects a strong pro-tobacco attitude by the undergraduate tobacco consumers. Further, the fact that 14.56% Active Tobacco Consumers compared to only 4.9% Non Tobacco Consumers among the respondents agreed that consuming tobacco makes them look cool and mature in front of others also reflects similar attitude among undergraduate tobacco consumers. Therefore, all these psychological factors collectively determine the need recognition, pre-purchase search and subsequent evaluation of alternatives for tobacco consumption by undergraduate tobacco consumers. While evaluating the various alternatives, the undergraduate tobacco consumers consider various factors such as easy availability, flavour and feel and low price. The experiences from these evaluation further strengthens the psychological field consisting motivation, perception, learning, personality and attitude which again affects the stages of need recognition, pre-purchase search and evaluation of alternatives for tobacco consumption by undergraduate tobacco consumers.

C. The Output Stage: The output stage basically represents the post-decision behaviour of the undergraduate tobacco consumers which includes purchase and post-purchase evaluation by the respondents. The way the undergraduate tobacco consumers purchases and consumes tobacco and the feelings related to their consumption experience are important factors that determines their future intentions to continue or quit tobacco. The mean age of tobacco initiation among Active Tobacco Consumers is 15.89 years, which means that most respondents were exposed and influenced to consume tobacco at an early age. Indian branded cigarettes are the most popular type of tobacco product consumed by the respondents (34.49%), closely followed by Gutkha (31.01%) and Zarda (24.68%). There are also lesser yet substantial users of Zial (17.4%), Burmese Cigerettes (15.82%), Khaini (11.07%) and Tuibur (10.13%). There is also a significant association between gender and type of tobacco being consumed, where male respondents are more inclined towards smoking and female respondents are more inclined towards

smokeless forms of tobacco. 80.06% of the Active Tobacco Consumers spend ₹30 or less on daily basis for purchasing tobacco products. It is quite likely that some heavy smokers among the respondents may purchase contraband cigarettes which are cheap alternatives to Indian branded cigarettes. More than half (57.28%) of the active tobacco consumers prefers to purchase tobacco products in single units and 37.97% Active Tobacco Consumers purchase tobacco products in one full packet. Majority of the Active Tobacco Consumers among the respondents (63.61%) consumes tobacco every day, which means most of the tobacco consumers among the respondents are addicted to tobacco. The time and place of consumption may act as a motivating impulse, provide convenience and even offer approval for tobacco consumption by undergraduate tobacco consumers. 65.51% of the Active Tobacco Consumers consumes tobacco after meals, followed by 24.68% who generally consumes tobacco while they are spending time with their friends and 18.67% consumes tobacco in their idle time. This shows that post-meal cravings, group influence and/or peer-pressure and lack of engagement to meaningful tasks are some of the important situational triggers for tobacco consumption among the respondents. 48.2% of the Active Tobacco Consumers among the respondents consumes tobacco outdoors and 18.35% of them consume tobacco inside their home or hostel whereas 25.32% consumes tobacco in all places. However, majority (69.3%) of the Active Tobacco Consumers avoids tobacco in public places and 49.37% of them minds breaking rules to buy or consume tobacco within prohibited areas. 59.5% of the Active Tobacco Consumers either disagrees or they are not sure whether they normally buy tobacco products of a particular brand which shows that the respondents are divided in their opinion regarding their brand loyalty towards any particular tobacco brand. However, there is significant association between certain types of tobacco products (Indian Branded Cigarettes, Sahda, Gutkha and Tuibur) and brand loyalty by the respondents. As pointed earlier, the most important factor for choosing a particular brand is "*Easy Availability*", followed by "*Flavor and Feel*" and "*Low Price*". 65.51% of the Active Tobacco Consumers do not think that consuming tobacco makes them look cool or mature in front of others. 40.51% of the undergraduate Active Tobacco Consumers agrees that they have health related problems caused due to tobacco consumption, 82.91% of them agrees that

consuming tobacco is likely to cause cancer and 87.66% of them believes that consuming tobacco may even cause death. Therefore, the undergraduate tobacco consumers have high level of awareness regarding tobacco's effect on health. Almost 40% of the Active Tobacco Consumers felt that consuming tobacco relives them from stress. 14.24% Active Tobacco Consumers have directly influenced others to consume tobacco and 39.56% are not sure about their influence on others but may indirectly have influenced others to consume tobacco. However, 60.76% of the Active Tobacco Consumers have also encouraged others to quit tobacco. Regarding their own intention to quit, 45.57% of them expressed their willingness to quit tobacco in future, 32.28% were already trying to quit, 17.09% tried to quit tobacco in the past but did not succeed and only 5.06% did not want to quit tobacco at all. However, 69.3% of Active Tobacco Consumers believed that they can successfully quit tobacco. The most common reason for the intention to quit tobacco has been found to be the fear of death and the desire to set good example for the family and future generations. The graphic health warning on the packets of tobacco products has been also found to be decreasing the desire to consume tobacco or smoke among 38.61% of the Active Tobacco Consumers.

The Theory of Reasoned Action (Fishbein and Ajzen, 1975) can explain the way the respondents among the undergraduate students gets motivated to consume tobacco. At first, many undergraduate students in Mizoram develops favourable attitude towards tobacco consumption due to their beliefs about the behavioural consequences and their evaluation. It is likely that the undergraduate tobacco consumers at the age of initiation to tobacco (15.89 years) may fail to consider the adverse behavioural consequences of tobacco consumption. At this age, the perceived health risk of tobacco consumption may not be too high for most of the respondents. On the other hand, the respondents were also motivated by societal influences and peer pressure, which were instrumental in determining a subjective norm for tobacco consumption. This positive attitude coupled with the subjective norm towards tobacco consumption leads to positive intentions and subsequently manifested in the form of positive behaviour towards tobacco consumption. Such consumption behaviour later becomes habit for many undergraduate students due to

the addictive nature of tobacco itself and various other factors from the environment which further facilitates the continuation of such behaviour.

6.3.3 Question 3: How socio-economic backgrounds, cultural and psychological factors influence attitudes and behaviour towards tobacco consumption by undergraduate students in Mizoram?

The primary data revealed that 63.2% undergraduate students from the sample respondents were currently active users of tobacco. This alarming level of tobacco prevalence in Mizoram cannot be attributed to any single cause or factor. There appears to be a combination of various socio-economic, cultural and psychological factors that facilitates, motivates and further reinforces the behaviour of tobacco consumption among the youth in Mizoram.

There socio-economic factors indicates a distinct pattern in tobacco consumption by undergraduate students in Mizoram. The two colleges that were selected for the study represents two contrasting districts in Mizoram in terms of population, economic development, level of urbanization etc. From the primary data it has been found that there are 59.75% and 69.49% active tobacco consumers among the respondents in Pachhunga University College and Government Saiha College, respectively. The substantially higher prevalence of tobacco consumers among the undergraduate students of Saiha compared to Aizawl suggests that there may be some regional factors that determine the level of tobacco consumption among the population. These may be either due to differences in socio-economic conditions and/or difference in the effectiveness of tobacco control measures carried out in both these regions. However, this trend can be compared with the global phenomenon where the relative success of reducing tobacco use in developed countries is contrasted by sharp increase of tobacco use in developing countries (Brandt, 2007). Therefore, at a macro level, low economic development linked with people's lifestyle may indicate higher tobacco consumption. On the other hand, the income patterns from the primary data also suggests that economic constraints could be a factor for the motivation to quit tobacco among the Past Tobacco Consumers and higher income or affordability may be a motivational factor for many undergraduate Active Tobacco Consumers to

continue the habit of tobacco consumption. It has been also found that 69.3% of the Active Tobacco Consumers among the respondents agrees that the cost of tobacco consumption is high and respondents who are financially independent or partially dependent are more inclined towards tobacco consumption than students who are financially dependent. This also corresponds to the findings summarized by WHO (n.d.) across various countries, where it has been concluded that "price and consumer disposable income are the two major determinants of demand for tobacco products" where "increase in price causes tobacco consumption to decrease irrespective of the income status of countries" and "increase in income leads to increase in tobacco consumption particularly in low income settings". Also, "with growing income, consumers' preference shift to higher priced tobacco products".

To understand the role of socio-cultural influences for tobacco consumption in Mizoram, the Social Learning Theory (Bandura, 1977) may be refereed, which suggests that individual learning is strengthened by social reinforcement of learned behaviour. The peer pressure, family influences and influences in the society has contributed in developing a collective pro-tobacco mind-set among the younger generation in Mizoram. According to the Primary data, there are more percentage of Active Tobacco Consumers (83.54%) and Past Tobacco Consumers (80.49%) than Non Tobacco Consumers (72.73%) having family members who consumes tobacco. The higher incidence of tobacco consumption in the family members of both Active and Past Tobacco Consumers makes it likely that such students have been exposed to a family environment which influenced them towards tobacco consumption. According to the primary data, 'Friends' was the highest ranked person who have influenced or initiated the respondents to consume tobacco. A substantial number of respondents also ranked the 'Common People in the Society' for their influence to tobacco consumption. The societal perception regarding tobacco consumption in Mizoram can be further assessed from the findings of the primary data. 86% of the respondents agree that using tobacco is likely to increase their chances of getting cancer and 89% of the respondents agree that tobacco or smoking kills. In spite of people's awareness about tobacco's effect on health in Mizoram, the society in general does not offer strong resistance against tobacco consumption. Though the

respondents are mostly against the view that smoking is fashionable but 12.6% of all respondents does considers smoking as fashionable and around 22.4% of all respondents agrees that they do not have any objection regarding their partner's tobacco consumption. Out of all the respondents, 31.8% agrees that consuming tobacco or smoking is an easy way to socialize with others, 17.2% agrees that it is unfriendly to refuse when other offers them tobacco and 19.4% does not agree that smoking or tobacco consumption is generally disapproved in public places. All these findings suggest that there exists a considerable amount of peer pressure and societal approval for tobacco consumption in Mizoram.

The Theory of Interpersonal Behaviour (Triandis, 1977) explains how the personal beliefs, values, social norms, feelings etc combines to form consumption intention and subsequent consumption behaviour. In Mizoram, there are various encouraging factors that positively reinforce tobacco consumption and make it habit forming behaviour among the youths. According to primary data, the most common factor for consumption motivation among tobacco consumers is "*the conscious thought of personal possession of tobacco products*", followed by "*the physical sight of others consuming tobacco/smoking*". "*The sight of tobacco products being displayed at the shops*", "*The depiction of someone consuming tobacco in movies or TV shows*", and "*Displays of advertisements related to tobacco products*" were also important factors that motivates tobacco consumption among undergraduate students. 28% of all respondents also agree that the attractive design and brand name displayed on packets of tobacco products increases their desire to smoke or consume tobacco. Out of all the respondents, 47.4% agrees that consuming tobacco or smoking is their personal choice which others have no right to object and 11% agrees that consuming tobacco makes them cool and mature in front of others. Therefore, such personal beliefs, values and attitudes of the undergraduate students collectively contribute in forming intention regarding tobacco consumption. Thereafter, such consumption intentions by the undergraduate students results in consumption behaviour under prevailing favourable social conditions and may become consistent overtime due to reinforcement through perceived consequences and temporary sense of reward experiences.

6.3.4 Question 4: What is the role of different organisations regarding prevention and control of tobacco consumption in Mizoram?

For the success of any tobacco control programme, there must be focused attention and coordinated efforts by both government and non-governmental organizations working on the ground with the target population. Since late 20th century there has been global concern towards tobacco's harmful effects on public health and thus there was a realization for having more organized efforts and greater policy intervention to control the menace of tobacco consumption globally. Therefore, in 2003, the World Health Organization constituted the WHO Framework Convention on Tobacco Control (WHO FCTC), which was adopted by the 192 member states of the WHO. India officially became a party to the convention in 2004 and has exercised full efforts to implement all provisions of this international treaty. However a year before that, the Government of India had already introduced a comprehensive legislation on tobacco control called the "Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill, 2003". In 2007-08, The Ministry of Health and Family Welfare, Government of India has launched the National Tobacco Control Programme (NTCP) in India. The National Tobacco Control Cell (NTCC) was formed which is responsible for overall policy formulation, planning, implementation, monitoring and evaluation of the different activities envisaged under the NTCP. The Government of Mizoram has implemented the NTCP in Mizoram as Mizoram State Tobacco Control Programme (MSTCP) and established the Mizoram State Tobacco Control Society (MSTCS) which is entrusted with the task to implement the State Tobacco Control Programme. To ensure the strict enforcement of COTPA in the state, the Government of Mizoram has taken several initiatives in the past like authorizing all ranks of police personnel to enforce Section 4, 6 (a) & (b) and forming Anti-Tobacco Squads (Hmar, 2018), enforcement of prohibition of smoking in public places in government offices, forming special committee to implement Article 5.3 of WHO FCTC and so on.

Since the beginning of its formation, MSTCS has taken various initiatives such as implementing projects like "Advocacy & Mobilization for Smoke Free Mizoram and Effective Tobacco Control Implementation in the State" and "Advancing Tobacco Control in Mizoram through Capacity building, Strengthening National Tobacco Control Programme and Effective Enforcement of Tobacco Control Laws" in Mizoram. MSTCS also runs various Tobacco Control Cells across the state which offers treatment and counseling for people to quit tobacco. Over the years, the MSTCS has successfully carried out anti-tobacco campaigns and engaged various other organizations like educational institutes, churches and other non-governmental organizations to the cause of tobacco control in Mizoram. The inclusion of tobacco education in school curriculum, inclusion of thematic topic on tobacco and health in Church services and adoption of tobacco free community in Thingsul Tlangnuam (Hatzaw, 2014) are among some of the notable achievements of the MSTCS. Another organization that is dedicated to the cause of reducing tobacco consumption in Mizoram is the Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC). ISTHMC organized the first ever 'World No Tobacco Day' in Mizoram in collaboration with the Tobacco Society of Mizoram, Department of Health, Government of Mizoram (Hatzaw, 2014). ISTHMC works closely with MSTCS and partners in many of its tobacco control programmes and initiatives. Both ISTHMC and MSTCS have been awarded by the World Health Organization for their exemplary services and commendable contribution to advocacy and awareness of tobacco to public-private partnership. Besides, these two organizations dedicated primarily to the cause of tobacco control; there exists other notable non-governmental organizations like the YMA, MHIP, MZP, MJA etc. which exercises powerful influence on people and society. These organizations has also partnered with the MSTCS and ISTHMC on a number of occasions for the cause of tobacco-control initiatives like raising awareness. For instance, the MHIP had done a state-wide campaign against *Gutkha* and many YMA branches has imposed ban on selling *Gutkha* in their respective areas (WebIndia123, Jun 20, 2010). Similarly, the MJA had in association with the MSTCS and supported by The Union, an international voluntary scientific organisation had organized one day Media Workshop on Tobacco Control in Mizoram and the MZP had jointly organized the Youth

MPOWER summit with MSTCS. The religious organizations especially the churches which remain strong critic of alcoholism in Mizoram were silent for a long time regarding the issue of tobacco consumption (PahrüPou, 2017). However, there are some initiatives like Presbyterian Church which have a policy not to recruit probationary officers addicted to tobacco (Zorammuana, 2010), the Seven Day Adventist Church has a general view against tobacco considering it to be "unclean" for human consumption and the Presbyterian Church had included the Thematic topic on tobacco and health in the Wednesday Night Church service (Hatzaw, 2014).

It may be concluded that the relentless efforts by organizations especially the MSTCS and ISTHMC, the Mizoram State Tobacco Control Programme (MSTCP) has seen considerable progress. This is evident from the comparison of GATS 2009-2010 with GATS 2016-2017 reports where the overall tobacco prevalence in Mizoram has come down to 58.7% from a staggering 67.2%. However, it cannot be denied that a prevalence of 58.7% is still alarmingly high and therefore, there is a need to further step up measures to reduce tobacco consumption. There are few areas and challenges which needs greater attention and control from the government and other organizations such as free availability of contraband cigarettes, free availability of tobacco products near prohibited areas and instances of tobacco use in public places. On the positive side, there exists a very good opportunity to have greater engagement of the various influential non-governmental and religious organizations towards promotion of an anti-tobacco mindset and culture among the people in Mizoram. However, the true potential of these organizations in this regard still remains underutilized.

6.3.5 Question 5: How can we improve the social marketing efforts and strategies and have a comprehensive and integrated approach for prevention and control of tobacco consumption in Mizoram?

Lantz (2018), has pointed that "research on tobacco control program and policy efforts has demonstrated that a comprehensive approach is needed, including, as recommended by the Centers for Disease Control and Prevention, interventions aimed at knowledge/attitudes, increased cost through taxation, youth access

restrictions, environmental exposure reduction, and cessation". According to Novotny and Mamudu (2008), "a comprehensive tobacco control program focuses simultaneously on changing social norms, implementing smoke-free policies, expanding efforts to assist quitting, and strengthening efforts to prevent smoking initiation. It involves educational, clinical, regulatory, economic, and social strategies". In order to build a comprehensive tobacco control program, it is essential to incorporate ideas from the field of social marketing. The concept of social marketing and various theoretical models used in it has been extensively covered in chapter 5. Social marketing has been regarded as a promising intervention approach which is effective across a range of behaviours and target groups, in different settings (Stead et al., 2007). However, due to the uniqueness of lifestyle, psychology, socio-economic and cultural factors in Mizoram, the general social marketing and intervention strategies may not necessarily be as effective as they are elsewhere. Hu et al., (2013) in their analysis of the barriers in implementation of WHO FCTC in China has acknowledged the unique characteristics of the country and has recommended a comprehensive strategy of top-down and bottom-up approaches to overcome those barriers. Therefore, in a similar manner, there is a need to have a customized yet comprehensive social marketing plan for the prevention and control of tobacco consumption in Mizoram. There is also a need to create a synergy among the efforts of various organizations that are working for the cause of tobacco control in Mizoram. The MSTCS with its position as the central nodal agency for tobacco control in Mizoram may take a leadership role in devising a comprehensive social marketing plan with active support and participation from various other organizations like the ISTHMC. In order to have a compressive social marketing plan, a marketing mix strategy that identifies the key elements of social marketing is essential. Lee and Dewhirst (2011) pointed that 4Ps should be developed synergistically for social marketing mix considerations regarding tobacco control. The social marketing mix which includes the 4Ps, namely: *Proposition, Perception, Platform* and *Persuasion* (Akhtar & Bhattacharjee, 2014) may be applied in this regard. Singh and Ladusingh (2014) suggested a targeted, population-based approach to control and reduce tobacco consumption in India. According to Lee and Dewhirst (2011) social marketing approaches for tobacco control may be classified as either

prevention- or cessation-focused. However, for a long term solution to the problem of tobacco prevalence in Mizoram, the social marketing efforts must have two parallel running approaches based on a segmentation strategy which segments the target population into two distinct segments of existing tobacco consumers and prospective future tobacco consumers. The existing tobacco consumers may be addressed and targeted under a curative approach and the prospective future tobacco consumers may be targeted under a preventive approach. The concepts of preventive and curative approach is generally used in field of medicine and healthcare services and they also forms essential part of the WHO's definition of primary health care (WHO, 2019). These two approaches, in the context of social marketing for tobacco control in Mizoram are discussed as follows:

A. The Curative Approach: This is where the social marketing efforts are planned and directed towards the existing consumers of tobacco and ensuring them to quit. For this approach there are certain theoretical models which can be applied. Using the Protection Motivation Theory (Rogers, 1975), it is possible to understand how tobacco consumers perceives the health related threats caused by tobacco and find out their intentions to quit or continue tobacco consumption. It has been revealed from the primary data that 40.5% of the respondents among the Active Tobacco Consumers are aware that they have some health problem caused due to tobacco and 22.78% have associated the word *"harmful"* with the word *"tobacco"*. Also, 82.1% of the respondents from Active Tobacco Consumers agree that using tobacco is likely to increase their chances of getting cancer and 87.66% agrees that tobacco or smoking kills. This perception is even higher in the GATS 2 survey which revealed that 96.7% adults believed that smoking and smokeless tobacco causes serious illness (Ministry of Health & Family Welfare, Government of India, 2018). This indicates, there exists a perceived 'vulnerability' from the respondent's threat appraisal about tobacco consumption. Therefore, the social marketers have to stress and communicate the message to the target tobacco consumers that quitting tobacco is going to avoid or substantially reduce their existing or future health problems. It may be noted that 69.3% of the respondents among the Active Tobacco Consumers agrees that the monetary cost of consuming tobacco is very high. Therefore, the Health

Belief Model which explores the perceived health risks associated with tobacco consumption and the costs and benefits of quitting it can be applied to encourage tobacco consumers participating in quit intervention programs by social marketers. The Elaboration-Likelihood Model (Petty & Cacioppo, 1983, 1986) can also be useful in designing effective message content to persuade tobacco users to quit tobacco and the Heuristic-Systematic Model (Chaiken, 1987) can be applied to ensure systematic processing of such persuasive message by the target audience. Campaign messages should also be able to increase the Cognitive Dissonance (Festinger, 1957) among the existing tobacco consumers whenever they consume tobacco and the non-consumption behaviour should be promoted as a viable alternative to eliminate that dissonance. As per the primary data regarding the intention to quit, 45.57% respondents among Active Tobacco Consumers expressed their desire to quit tobacco or smoking in future, 32.28% of them are already trying to quit and 69.3% of them agrees that they believe they can successfully quit tobacco. According to GATS 2, 53.5% current smokers and 71.2% current smokeless tobacco users have planned to or were thinking about quitting tobacco (Ministry of Health & Family Welfare, Government of India, 2018). The Theory of Trying (Bagozzzi & Warshaw, 1990) can be used to effectively design social marketing campaigns to make people quit tobacco based on their existing attitude and intentions regarding quitting tobacco. To segment the target tobacco consumers, the Stages of Change Model (Prochaska & DiClemente, 1984, 1986) can be applied which identifies six specific stages of change that people move through, namely: Pre-contemplation, Contemplation, Preparation, Action, Maintenance and Termination and suggests appropriate types of intervention according to the stages. Overall, as recommended by Mohan and Lando (2016), tobacco cessation programs should be made a paramedical subject and included as a primary health care service in Mizoram. According to the findings from the primary study, it has been also revealed that there are significant associations between genders and the type of tobacco products consumed by the respondents. Therefore, a gender specific tobacco control approach such as targeting women users of smokeless tobacco may be effective. In this context, it may be noted that the Swedish tobacco control efforts with a gender

specific approach has been successful in decreasing female smoking in Sweden (Patja et al., 2009).

B. The Preventive Approach: This is about creating an overall environment as well as increasing individual sensibilities against tobacco consumption among all the non-consumers of tobacco and the general public in Mizoram so that an anti-tobacco attitude is strengthened and retained as part of their behaviour. In this regard the Theory of Reasoned Action (Fishbein & Ajzen, 1975) can be applied to predict people's intentions and prospective behaviour regarding tobacco consumption. The theory explores how people hold (their own and of others) particular beliefs regarding consumption and non-consumption of tobacco, how they view its respective consequences (positively, negatively or neutrally) and the level of their motivation to conform to other's behaviour in the society. As per the primary data, Friends were most common influence for most of the respondents to consume tobacco. Also 83.5% of the respondents among the Active Tobacco Consumers have members in their family who consumes tobacco. So it is likely that very often and at some point of time, the family, friends and society in general acts as an influence and/or tacit approver to tobacco consumption for the non-tobacco consumers. There is a need for creating greater awareness especially for families in Mizoram regarding responsible tobacco use to protect the health and wellbeing of their younger generation. Therefore, the preventive approach of social marketing in this regard needs de-normalization campaigns (Lee & Dewhirst, 2011) to challenge this existing societal norm and pro-tobacco mindset among the substantial section of the population. Proper media platforms should be utilized to engage people for the cause of tobacco control and partnerships between various organizations in this regard should be encouraged. There should be a branding strategy for popularizing the cause of tobacco control and providing momentum to the on-going anti-tobacco movement in Mizoram. The policy parameters and legal factors are also crucial in this regard which requires strict enforcement of COTPA, 2003 and its subsequent provisions in Mizoram. Special attention should be given towards restricting sale of contraband tobacco products, sale of tobacco products to minors, sale of tobacco products in and around educational institutes and ensure no-smoking in prohibited public places.

From a policy perspective, besides imposing a blanket ban on tobacco advertising, it is also recommended to be vigilant about tobacco company's innovative and sometimes manipulative sales and marketing strategies. Therefore, a supportive socio-cultural and legal environment must be created to decrease demand for tobacco and discourage tobacco consumption in all public places.

The proposed social marketing framework for tobacco control in Mizoram (Exhibit 6.1) incorporates the social marketing mix and the curative and preventive approaches as discussed already.

Exhibit 6.1
Social Marketing Framework for Tobacco Control in Mizoram
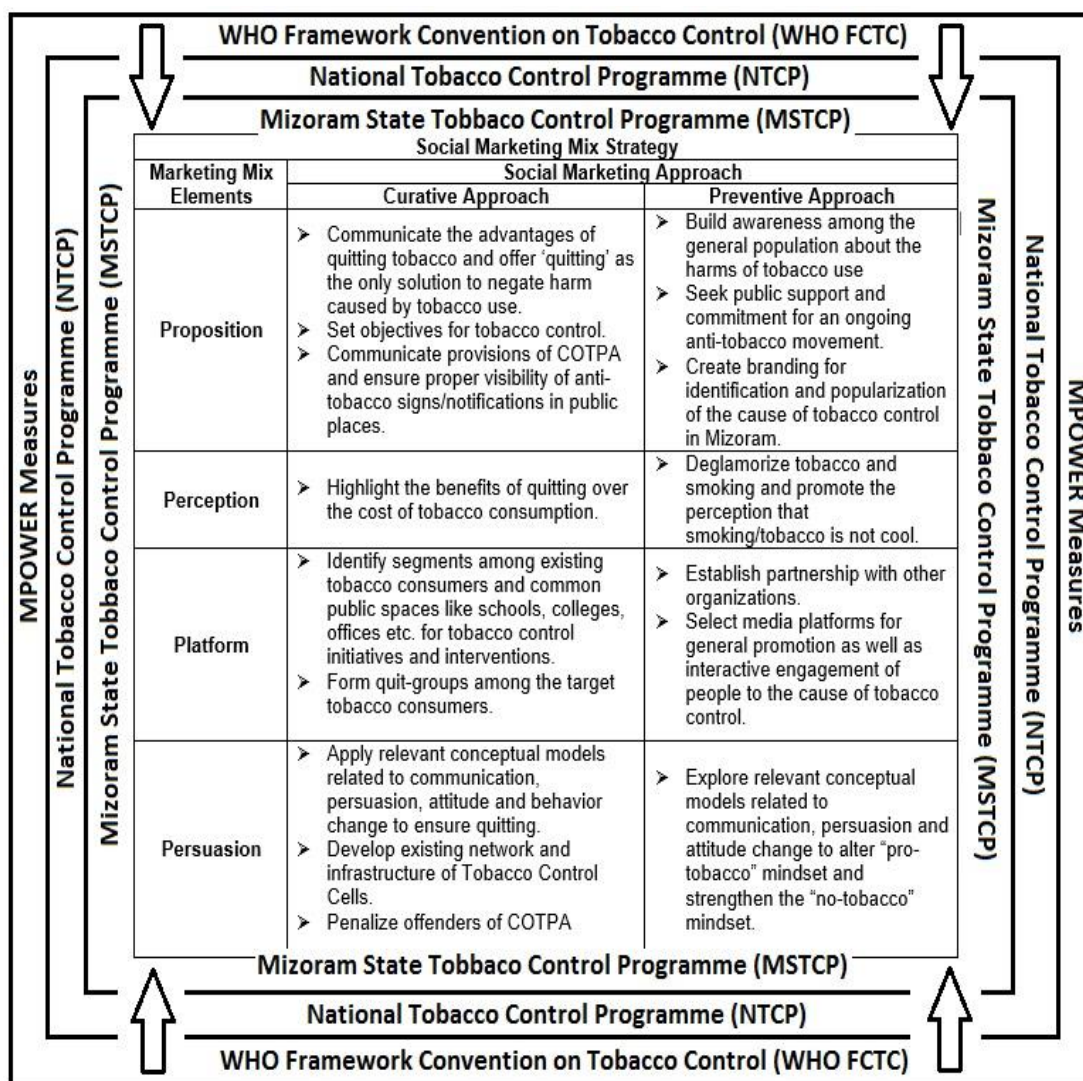
Global evidences suggest that multi-component intervention strategies are effective in reducing tobacco consumption among the youth (Flay, 2000; McAlister et al., 1979; Vartiainen et al., 1990). Mishra et al., (2005) have advocated the use of a multi-component approach that targets the social, environmental, and intrapersonal factors which influence tobacco use among the youth. A comprehensive and integrated approach for prevention and control of tobacco consumption in Mizoram may use strategic social marketing within the policy parameters of WHO FCTC and MPOWER guidelines, NTCP and MSTCP (Exhibit 6.1). The WHO FCTC provides the foundation and normative structure for controlling global tobacco use (Reddy et al., 2010). Inputs from GATS are also important for national and state-level policymakers to focus on specific tobacco-related challenges (Lal et al., 2015). The social marketing mix strategy should have a parallel focus on both curative approach targeted to the existing tobacco consumers and preventive approach targeted to the general public. The Proposition strategy under the curative approach should include measures to create awareness about the harms of tobacco use among tobacco consumers and offer 'quitting' as the only solution to it. Objectives should be set for tobacco control measures such as target for overall usage reduction and specific contents should be developed for the message to communicate the idea of "quitting tobacco" and its advantages for the tobacco users preferably in vernacular language and relatable non-verbal means like images and graphics. The provisions of COTPA, 2003 which imposes conditions and restrictions on tobacco sales, purchases and consumptions by the tobacco users should be communicated among the targets. Tobacco-free (TF) policies which have been recognized to be globally effective in reducing firsthand and second-hand smoke (Ickes., 2017; Seitz., 2018) and the proper visibility of anti-tobacco signs/notifications in public places must be ensured. The Proposition strategy under preventive approach should include measures to build awareness among the general population specially the younger generation about the harms of tobacco use and seek their support and commitment for an ongoing anti-tobacco movement. It is important that the non-smokers are aware of the harms of passive smoking and conscious about their right to a smoke-free environment (Hu et al., 2013). The strategy should also include branding efforts for identification and popularization of the cause of tobacco control in Mizoram. The Perception strategy

under curative approach should take measures in highlighting the benefits of quitting tobacco over the cost of consuming tobacco. On the other hand, the Perception strategy under preventive approach should include measures like de-normalization campaigns (Lee & Dewhirst, 2011) which deglamorizes tobacco and smoking in the minds of the younger generation and promote the perception that it is not "cool" to smoke or consume tobacco. The Platform strategy under curative approach should start by identifying different segments among existing tobacco consumers such as school students, college students, office employees etc. Next, it should identify common public spaces like schools, colleges, offices etc. for tobacco control initiatives and interventions such as forming quit-groups among the target tobacco consumers. On the other side, the Platform strategy under preventive approach should try to establish long-term partnership with civil society, non-governmental organizations and associations like YMA, Churches, MZP, MHIP etc. It should also select media platforms like local television channels, newspapers, sport events, social media etc. for general promotion as well as interactive engagement of people to the cause of tobacco control. The Persuasion strategy under curative approach should make use of relevant conceptual models related to communication, persuasion, attitude and behaviour change to ensure quitting by tobacco consumers, try to develop the network and infrastructure of existing Tobacco Control Cells and Cessation Clinics in the State and penalize the offenders of the COTPA, 2003. Finally, the Persuasion strategy under preventive approach should explore relevant conceptual models related to communication, persuasion and attitude change to alter the "pro-tobacco" mindset and strengthen the "no-tobacco" mindset among the general population.

6.4 Suggestions based on the findings

At the outset it is very important to set clear, precise and achievable objectives for tobacco control in Mizoram. Based on which there should be a focused approach and strategy to address all the identified objectives for tobacco control in Mizoram. Based on the findings of the previous chapters and the proposed social marketing

framework for tobacco control in Mizoram discussed earlier (Exhibit 6.1), following steps are suggested for making tobacco control strategies more effective in Mizoram:

A. Focus on Public Communication and Engagement: Awareness should be built among the general population about the harms of tobacco use. Mass education and community empowerment is needed to mobilize people (Jandoo & Mehrotra, 2008; Jhanjee, 2011) at the grass-root level for tobacco control in Mizoram. The message highlighting the advantages of quitting tobacco and offer 'quitting' as the only solution to negate the harm caused by tobacco use should be particularly communicated to the existing tobacco consumers. The benefits of quitting over the cost of tobacco consumption should be highlighted to existing tobacco consumers and there should be efforts to deglamourize tobacco and smoking and to promote the perception that smoking/tobacco is "not cool". There should also be rigorous campaigning against second-hand smoke similar to California's Tobacco Control Program (CTPC) (Ekpu & Brown, 2015). The relevant conceptual models related to communication, persuasion and attitude change should be explored to alter "pro-tobacco" mind-set and strengthen the "no-tobacco" mind-set among general population. The de-normalization of tobacco campaigns (Lee & Dewhirst, 2011) as practiced in Canada may be useful in this regard. The concept of retail point-of-sale guardianship which prevents the purchase of tobacco products by underage youths (Gilbertson, 2007) should be promoted. A branding strategy is also necessary for identification and popularization of the cause of tobacco control in Mizoram and the selection of appropriate media platforms for general promotion as well as interactive engagement of people to the cause of tobacco control is much needed. In several cases the online media has been identified as important platform for tobacco control (Freeman & Chapman, 2008; National Cancer Institute, 2008). For promoting general awareness against tobacco use, continuous mass media campaigns have been particularly effective in India (Murukutla et al., 2012) and the use of social media may also provide an additional interactive platform for engaging people to the cause of tobacco control. The positive aspects of the Mizo society in this regard such as high literacy rate, adherence to discipline, people's commitment towards community service etc can be utilized to convince and engage people for tobacco control. In this

way a larger support base and commitment for an on-going anti-tobacco movement in Mizoram may be sought and achieved from the general public.

B. Ensuring Participation of Various Organizations:

According to Novotny and Mamudu (2008), "the lack of civil society development is a barrier to the full implementation of the FCTC particularly in low- and middle-income countries". It has been felt that there needs to be greater engagement and more coordinated efforts among various organizations for the cause of tobacco control (Reddy et al., 2012) in Mizoram. The various non-governmental organizations like YMA, MHIP, MZP, the Church etc. has considerable influence on public life and lifestyle in Mizoram. Therefore, various influential non-governmental and religious organizations should be encouraged to come forward for the promotion of an anti-tobacco mind-set and culture and also participate in government's initiatives and activities for tobacco control in Mizoram. Besides, non-governmental and religious organizations, the local self-government bodies like village councils should also be encouraged to participate in tobacco control initiatives in Mizoram. Such local self-government bodies has the potential to influence the mainstream policymakers and public for tobacco control (Mohan, Mini & Thankappan, 2013) and has been recommended to be empowered to effectively undertake tobacco control programmes in rural areas (Reddy & Gupta, 2004). There is also a need for greater engagement from schools, colleges and other educational institutes particularly to maintain restrictive environment, create awareness and control early initiation of tobacco among students.

C. Strengthening Existing Legal Environment: The various provisions of COTPA should be strictly enforced in Mizoram as stressed time and again by many experts including Dr. Jane Ralte (The Indian Express, May 27, 2010). There should be proper visibility of anti-tobacco signs/notifications in public places and point-of-sales. The non-availability of tobacco products in and around educational institutions must be ensured with regular and unannounced inspections. The offenders of COTPA should be held accountable and penalized as per the law. According to Gupta (2006) the COTPA, 2003 is "reasonably strong to comply with most of the

provisions in FCTC, in fact it exceeds some of the minimum requirements but it does have few weaknesses that render it less than fully effective."The challenges posed by the availability of contraband cigarettes against the tobacco control and prevention in Mizoram have been already discussed in Chapter 5. According to one report, smuggled cigarettes from countries like China, UAE, Indonesia and Bangladesh accounts for over a fifth of the cigarettes sold in India (Agarwal, 2017) and the high existence of contraband cigarettes in Northeast India poses big challenge for human health and sustainability (Agarwala & Barman, 2017). In Mizoram, the low end cigarette market is visibly dominated by contraband cigarettes which particularly make the younger population more vulnerable towards its consumption and addiction. Substantial number of users of contraband cigarettes in Mizoram has been reflected among the respondents from the primary data. Therefore, it has become necessary to impose a total ban on the sales and distribution of contraband cigarettes and tobacco products in Mizoram. Mohan et al., (2018) has highlighted the importance of state legislations for tobacco control in India. The Government of Mizoram may consider bringing separate legislation to address specific issues about tobacco control in the state.

D. Making Effective and Accessible Interventions: The existing network and infrastructure of Tobacco Control Cells in Mizoram should be improved, upgraded, empowered and made more accessible to people from remote areas. Cessation clinics may also serve as behavioural laboratory to create new messages and approaches (Nichter & Muramoto, 2010), which is more suited to targeted local population. The community-pharmacist-based smoking cessation (CPSC) measure may be explored in this regard which has been found to be effective in Thailand (Ekpu & Brown, 2015; Thavorn & Chaiyakunapruk, 2008). Different segments should be identified among existing tobacco consumers based on their tobacco consumption behaviour and socio-economic profile for targeted intervention strategies. Quit-groups may be formed among such segments and target tobacco consumers. The common public platforms like schools, colleges, offices etc. should also be identified for various tobacco control initiatives and interventions. The application of relevant conceptual models related to communication, persuasion, attitude and behaviour change to

ensure quitting may prove to be particularly useful in this regard. It is also suggested that direct community-based interventions may be an effective alternative in rural areas where immediate infrastructure for cessation clinics is difficult to establish (Barik et al., 2016). Such intervention activities may be centrally managed by the existing District Tobacco Control Cells with extended capacity and resources.

E. Monitoring, Feedback and Control: According to Lee and Dewhirst (2011), "social marketing campaigns need to be evaluated continuously". It is also important to have a proper mechanism for the monitoring, feedback and control of the entire planning to execution process of tobacco control strategies in Mizoram. The monitoring of current status related to various aspects of tobacco consumption, the feedback related to the progress made regarding tobacco control and ensuring flexibility and full control over the entire tobacco control strategy should be part of this entire mechanism. The use of latest data generated from GATS is vital for such monitoring mechanism. The upstream approach to social marketing is also necessary where inputs may be provided to influence government's policy and decision-making regarding functioning of tobacco industry. One such input is to implement plain packaging. The term plain packaging refers to "the standardisation of pack colour and removal of all branding from packaging, with the exception of brand name which appears in a standardised font, typeface and position on the package" (Moodie et al., 2011, p1). FCTC's guidelines for implementation of Article 13 recommend that "there should be no advertising or promotion inside or attached to the package or on individual cigarettes or other tobacco products" (WHO, 2008b, p7; WHO, 2016,). Attractive packaging of tobacco products is a prominent way of promoting tobacco brands, tobacco products and tobacco consumption (WHO, 2016). The primary data has revealed that there is a significant association between increased consumption desire due to attractive tobacco packaging and tobacco users among the respondents. Jhanjee (2011) has suggested enforcing generic tobacco packaging to make tobacco products less attractive in India. Evidences from international studies also suggested that plain packaging is an effective way to reduce tobacco consumption (Australia India Institute, 2012; Moodie et al., 2012; WHO, 2016). The Australia India Institute (2012) in their report of the Taskforce on Tobacco Control has strongly argued for

implementation of plain packaging in India and concluded that, "plain packaging would help in reducing the attractiveness, appeal and promotional value of the tobacco pack, prevent experimentation and initiation of tobacco use among children and youth, increase noticeability and effectiveness of the pictorial health warnings on tobacco packs and reduce the sale of tobacco products". Therefore, plain packaging could be an effective measure for tobacco control and has the potential to reduce the overall visibility and appeal of tobacco products, especially among the young, vulnerable, existing and prospective tobacco consumers in Mizoram.

Exhibit 6.2
A Visual Guide for Plain Packaging
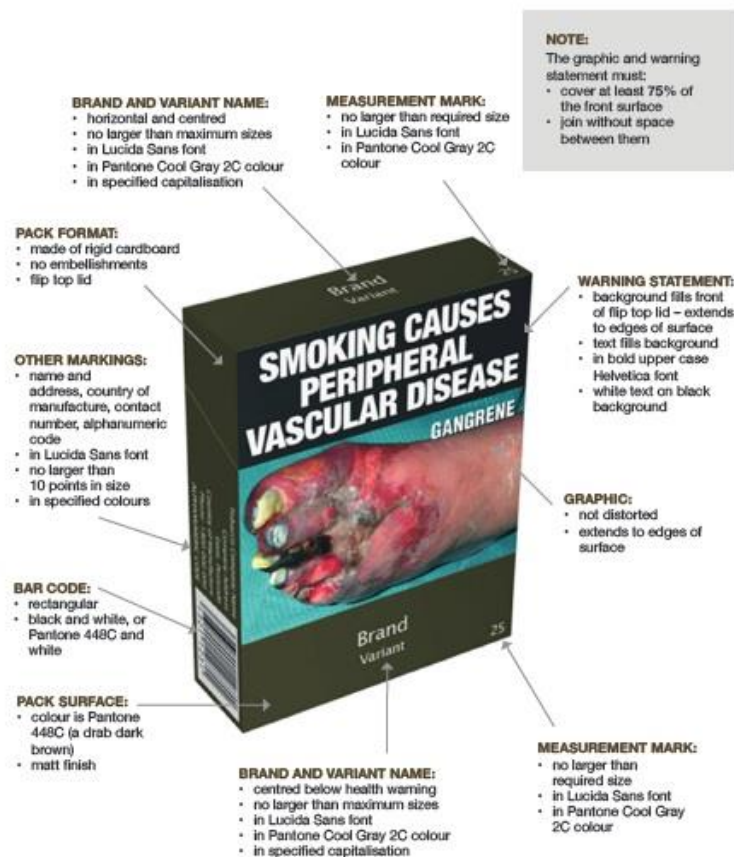
Source: Department of Health, Australian Government (2018)

Exhibit 6.2 demonstrates a visual guide for plain packaging of cigarettes (Department of Health, Australian Government, 2018). The experiences of the Department of Health, Australian Government regarding implementation of plain

packaging (WHO, 2016) and the Report of the Australia-India Institute Taskforce on Tobacco Control (Australia India Institute, 2012) can provide essential resource for evaluation, planning and execution of such policy in the Indian context.

6.5 Overall Summary and Conclusion

The present study has explored the socio-economic background of tobacco consumers, decision-making process and tobacco consumption habits and factors affecting tobacco consumption among the undergraduate students in Mizoram. It also discussed the social marketing practices adopted by different organizations in Mizoram regarding tobacco control and suggested an appropriate strategic social marketing framework for the prevention and control of tobacco consumption in Mizoram. The various research questions were framed according to the objectives of the research and have been duly discussed by incorporating the findings from previous chapters.

Tobacco is the single greatest preventable cause of death in the world that kills more than 7 million people every year and results economic loss of more than US$1.4 trillion in healthcare costs and lost productivity (Bloomberg Philanthropies, 2017). The high incidence of addiction to tobacco is still one of the major problems that continue to adversely affect the physical and social wellbeing of the Mizo population. However unlike GATS 2009-2010, GATS 2016-2017 does shows some promise for Mizoram in controlling tobacco consumption where there has been a decline in tobacco use prevalence from 67.2% to 58.7% in Mizoram and also exposure to second hand smoke at home and work place has decreased from 96.5% to 84.1% and 64.6% to 44.4%, respectively (Ministry of Health & Family Welfare, Government of India, 2018; The Morung Express, November 27, 2017). Despite getting away from being tagged as the state having maximum tobacco users in India revealed during GATS, 2010 surveys, Mizoram still have miles to go as it still remains as the state with second highest percentage of active tobacco users in the country (Khojol, 2018; Ministry of Health & Family Welfare, Government of India, 2018; The Morung Express, May 2, 2018). In spite of the efforts and proactive role played by organizations such as Mizoram State Tobacco Control Society (MSTCS)

and NGOs such as the Indian Society on Tobacco and Health (Mizoram Chapter) (Health & Family Welfare Department, Government of Mizoram, 2018; Hmar, 2018; Khojol, 2018), the fight against the menace of tobacco consumption in Mizoram remains challenging and requires greater efforts for further improvement of the overall situation.

Mohan et al., (2018) has suggested culture-based strategies for better penetration of tobacco control policies. Therefore, to make the tobacco control program and strategies more effective, it is necessary to carefully investigate the underlying causes and motives behind such addictive behaviours associated with tobacco consumption in Mizoram. Moreover, it should be kept in mind that due to the uniqueness of lifestyle, psychology, socio-economic and cultural factors in Mizoram, the general social marketing and intervention strategies may not necessarily be as effective as they are elsewhere. Therefore, especially for Mizoram, a comprehensive social marketing strategy needs to be formulated with due consideration to all the relevant local factors. In this regard a social marketing framework (Exhibit 6.1) has been proposed for tobacco control in Mizoram. When such policies and strategies are implemented, they are expected to offer better control of tobacco consumption in the state. The suggestions for making tobacco control strategies more effective in Mizoram broadly includes (a) focus on public communication and engagement, (b) ensuring participation of various organizations, (c) strengthening existing legal environment, (d) making effective and accessible interventions and (e) monitoring, feedback and control. In conclusion, it feels apt to quote Allan Brandt, the author of *The Cigarette Century* –

> "The challenge for the tobacco control field is to promote things we know actually work, while at the same time developing a sharper research agenda to understand the new technologies and changing cultures of smoking" (Zatoński & Stokłosa, 2017).

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Appendices

LIST OF ABBREVIATIONS

1. 4Ps: Product, Price, Promotion and Place; Proposition, Perception, Platform and Persuasion
2. ACT-India: Action Against Tobacco-India
3. AIDS: Acquired Immunodeficiency Syndrome
4. B2B: Business to Business
5. BA: Bachelor of Arts
6. BCom: Bachelor of Commerce
7. BRGF: Backward Region Grant Fund
8. BSc: Bachelor of Science
9. CAGR: Compound Annual Growth Rate
10. CASAA: Consumer Advocates for Smoke-free Alternatives Association
11. CBO: Community Based Organization
12. CDC: US Centers for Disease Control and Prevention
13. CEO: Chief Executive Officer
14. CID: Crime Investigation Department
15. CMO: Chief Medical Officer
16. COTPA: Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act
17. CPHA: Canadian Public Health Association
18. CPSC: Community-Pharmacist-Based Smoking Cessation
19. CSO: Civil Society Organization
20. CTPC: California's Tobacco Control Program
21. CYMA: Central Young Mizo Association
22. DDG: Deputy Director General
23. DGP: Director General of Police
24. DRS: Demand Reduction Service
25. DTCC: District Tobacco Control Cell
26. EFCI: Evangelical Free Church of India
27. EI: Educational Institution
28. ELM: Elaboration-Likelihood Model
29. ENDS: Electronic Nicotine Delivery Systems
30. ETS: Environmental Tobacco Smoke
31. FCB: Foote, Cone and Belding
32. FCTC: Framework Convention on Tobacco Control
33. FCV: Flue-Cured Virginia
34. FDA: U.S. Food and Drug Administration
35. FGD: Focus Group Discussions
36. GATS: Global Adult Tobacco Survey
37. GDP: Gross Domestic Product
38. GHPS: Global Health Professional Survey
39. GHPSS: Global Health Professions Student Survey
40. GSC: Government Saiha College
41. GSDP: Gross State Domestic Product
42. GSPS: Global School Personnel Survey
43. GST: Goods and Services Tax
44. GSVA: Gross State Value Added
45. GTSS: Global Tobacco Surveillance System
46. GYTS: Global Youth Tobacco Survey

47. HBM: Health Belief Model
48. HIMNA-MADAT: Mizoram against Drugs, Alcohol and Tobacco
49. HIV: Human Immunodeficiency Virus
50. HRIDAY-SHAN: Health Related Information Dissemination Amongst Youth-Students Health Action Network
51. I&PR: Information & Public Relations
52. IBEF: India Brand Equity Foundation
53. IBM SPSS: International Business Machines Statistical Package for the Social Sciences
54. ICI: Independent Church of India
55. ICMR: Indian Council of Medical Research
56. ICTC: Indian Central Tobacco Committee
57. IEC: Information, Education and Communication
58. ISTHMC: Indian Society on Tobacco and Health, Mizoram Chapter
59. ITC Ltd: Indian Tobacco Company Limited
60. ITC: International Tobacco Control
61. KAB: Knowledge-Attitude-Behaviour
62. LIKBK: Lairam Jesus Christ Baptist Church
63. LSA: Lushai Students Association
64. LTR: Licensed Tobacco Retailers
65. LYG: Life Year Gained
66. MDG: Millennium Development Goal
67. MHFW: Ministry of Health and Family Welfare
68. MHIP: Mizo Hmeichhe Insuihkhawm Pawl
69. MJA: Mizoram Journalist Association
70. MKHC: Mizoram Kohhran Hruaitute Committee
71. MLTP: Mizoram Liquor Total Prohibition
72. MP: Member of Parliament
73. MPOWER: Monitoring tobacco use and prevention policies, Protecting people from tobacco smoke, Offering help to quit tobacco use, Warning about the dangers of tobacco, Enforcing bans on tobacco advertising, promotion and sponsorship, and Raising taxes on tobacco.
74. MSCI: Mizoram State Cancer Institute
75. MSOA: Mizoram State Olympic Association
76. MSTCP: Mizoram State Tobacco Control Programme
77. MSTCS: Mizoram State Tobacco Control Society
78. MUP: Mizoram Upa Pawl
79. MZP: Mizo Zirlai Pawl:
80. NCCD: National Calamity Contingent Duty
81. NCCP: National Cancer Control Programme
82. NCT: National Capital Territory
83. NESO: North East Students' Organisation
84. NFHS: National Family Health Survey
85. NGO: Non-Governmental Organization
86. NHS: National Health Service
87. NITI Aayog: National Institution for Transforming India
88. NRT: Nicotine Replacement Therapy
89. NSSO: National Sample Survey Organization
90. NTCC: National Tobacco Control Cell
91. NTCP: National Tobacco Control Programme
92. OECD: Organisation for Economic Co-operation and Development

93. PBCR: Population Based Cancer Registries
94. PHW: Pictorial Health Warning
95. PMT: Protection Motivation Theory
96. PPS: Probability Proportional to Size
97. Project MYTRI: Mobilizing Youth for Tobacco Related Initiatives in India
98. Project QTI: Project Quit Tobacco International
99. PUC: Pachhunga University College
100. QALY: Quality-Adjusted Life Years
101. R&M: Routine and Manual
102. RTI International: Research Triangle Institute
103. SBC: Steps to Behaviour Change
104. SEP: Socio-Economic Position
105. SES: Socioeconomic Status
106. SHS: Second Hand Smoke
107. SLT: Smokeless Tobacco; Social Learning Theory
108. SRS: Supply Reduction Service
109. STCC: State Tobacco Control Cell
110. SWOT: Strength, Weakness, Opportunity and Threat
111. TCC: Tobacco Control Cell
112. TEPC: Tobacco Export Promotion Council
113. TF: Tobacco-Free
114. TIB: Theory of Interpersonal Behaviour
115. TISS: Tata Institute of Social Sciences
116. TMT: Telecoms, Media, and Technology
117. TRA: Theory of Reasoned Action
118. TT: Theory of Trying
119. TV: Tele Vision
120. UAE: United Arab Emirates
121. UK: United Kingdom
122. UN: United Nations
123. UNDP: United Nations Development Programme
124. UNESCO: United Nations Educational, Scientific and Cultural Organization
125. US NCI: United States National Cancer Institute
126. US: United States
127. USA: United States of America
128. USC: United States Code
129. USDHHS: United States Department of Health and Human Services
130. VAT: Value Added Tax
131. VHAI: Voluntary Health Association of India
132. VST Industries Ltd: Vazir Sultan Tobacco Industries Ltd
133. WHO: World Health Organization
134. YMA: Young Mizo Association

FORMAT OF THE QUESTIONNAIRE USED FOR THE STUDY

~~~~~~~~ *Part A (Personal)* ~~~~~~~~

1. **Name of your college:**   (a) Pachhunga University College   (b) Government Saiha College
2. **Course of study:**   (a) B.A.   (b) B.Com   (c) B.Sc
3. **Age:** ....Years
4. **Sex:**   (a) Male   (b) Female
5. **Total Number of members in the family:**   (a) Less than 4   (b) 4 to 6   (c) 7 to 10   (d) More than 10
6. **Relationship Status:**   (a) Single   (b) In an open relationship   (c) In a committed relationship
    (d) In a complicated relationship   (e) Married   (f) Divorced   (g) Widowed
7. **Which of the following habits do you have?**
    (a) Drinking Alcohol   (b) Using Drugs (Oral)   (c) Using Drugs (Injected)   (d) Gambling   (e) None of these
8. **Are there any tobacco products available within 100 meter radius around your college campus?**   (a) Yes   (b) No

~~~~~~~~ *Part B (Economic)* ~~~~~~~~

9. **Average Monthly Household Income:**
    (a) Less than ₹5,000   (b) ₹5,000 to ₹10,000   (c) ₹10,001 to ₹15,000   (d) ₹15,001 to ₹20,000   (e) ₹20,001 to ₹25,000   (f) ₹25,001 to ₹30,000
    (g) ₹30,001 to ₹35,000   (h) ₹35,001 to ₹40,000   (i) ₹40,001 to ₹45,000   (j) ₹45,001 to ₹50,000   (k) More than ₹50,000
10. **Family's primary occupation (tick one):**
    (a) Service   (b) Business   (c) Farming   (d) Pension   (e) Any other (please specify).....................
11. **How much money on a daily basis do you usually spend for purchasing tobacco products?**
    (a) Less than ₹ 10   (b) ₹ 10 to ₹ 20   (c) ₹ 21 to ₹ 30   (d) ₹ 31 to ₹ 40   (e) ₹ 41 to ₹ 50   (f) More than ₹ 50
12. **You choose a particular brand/type of tobacco product because of its (Rank up to three in order of their importance):**
    (a) [   ] Flavour and feel   (b) [   ] Brand value   (c) [   ] Easy availability   (d) [   ] Low price
    (e) [   ] Popularity   (f) [   ] Lower perceived health risk   (g) [   ] Any other reason (please specify).....................
13. **Are you financially dependent on your family for all your expenses?**   (a) Yes   (b) No   (c) Partially
14. **The monetary cost of consuming tobacco/smoking is very high:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
15. **Government should keep increasing taxes on tobacco products:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
16. **I have health related problems that caused or increased due to my habit of tobacco consumption/smoking?**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

~~~~~~~~ *Part C (Socio-Cultural)* ~~~~~~~~

17. **Does anyone in your family consume tobacco products or smoke?**   (a) Yes   (b) No   (c) Can't say
18. **Who among the following initiated or influenced you most to consume tobacco or smoke? (Rank up to three in order of their influence):**
    (a) [   ] Parents   (b) [   ] Siblings   (c) [   ] Friends
    (d) [   ] Relatives   (e) [   ] Common people in the society   (f) [   ] Famous persons or celebrities
19. **I consider smoking to be fashionable:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
20. **It is unfriendly to refuse when others offer you tobacco/smoke:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
21. **Consuming tobacco/smoking is an easy way to socialize with others:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
22. **Consuming tobacco/smoking is generally disapproved by people in public places:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
23. **Consuming tobacco/smoking is my personal choice which others have no right to object:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
24. **Consuming tobacco/smoking makes me look cool and/or mature in front of others:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
25. **I don't have any objection if my partner (girlfriend, boyfriend, wife, husband etc) consumes tobacco/smoking:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree
26. **I don't want my younger generation (kids, younger siblings etc) to consumes tobacco/smoking:**
    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

~~~~~~~~~~~ *Part D (Behavioural)* ~~~~~~~~~~~

27. Select the following activities and specify the number of hours that you DAILY indulge yourself into:

	Activities	None	Less than 30 minutes	30 minutes to 1 hour	1 to 2 hours	2 to 3 hours	3 to 4 hours	4 to 5 hours	More than 5 hours
(a)	Watching TV								
(b)	Listening music								
(c)	Spending time with family								
(d)	Spending time with friends								
(e)	Studying								
(f)	Playing outdoor sports/workouts								
(g)	Reading newspapers/magazines/books								
(h)	Playing indoor games								
(i)	Surfing internet								
(j)	Cooking and household works								
(k)	Going out/travelling								
(l)	Religious activities								
(m)	Other hobbies (Please specify)…………..								

28. What type of tobacco products do you consume? (You may tick more than one option)

(a) Indian Branded Cigarettes   (b) International Branded Cigarettes   (c) Zial (Local unbranded cigarettes)

(d) Burmese Cigarettes   (e) Sahdah (Khaini)   (f) Zarda   (g) Gutkha   (h) Tuibur

29. I normally buy tobacco products of a particular brand:

(a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

30. In what quantity do you prefer buying tobacco products at a time?

(a) In bulk (more than one packet)   (b) One full packet   (c) In single units

31. How often do you consume tobacco or smoke?

(a) Never   (b) Everyday   (c) 3 to 4 days a week   (d) Occasionally (once in a week)

(e) Used to consume in past but have quitted now

32. How old were you when you first consumed tobacco? ……………….…………Years

33. Where do you usually consume tobacco or smoke?

(a) Inside Home   (b) Inside College   (c) Outdoors   (d) All these places

34. When do you consume tobacco or smoke? (you may tick more than one option)

(a) After waking up in the morning   (b) After meals   (c) Before going to bed   (d) While travelling

(e) In my idle time   (f) While I'm chatting and spending time with my friends or family   (g) Any time

35. I have influenced others to cultivate the habit of tobacco consumption?

(a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

36. I often encourage tobacco users/smokers to quit:

(a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

37. I avoid consuming tobacco/smoking in public places:

(a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

38. I don't mind breaking rules by buying or consuming tobacco products within prohibited areas:

(a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

~~~~~~~~~~ *Part E (Psychological)* ~~~~~~~~~~

39. I believe that tobacco/smoking kills:

(a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

40. I believe that tobacco consumption would likely to increase the chances of getting cancer:

(a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

41. **Consuming tobacco/smoking relieves stress:**

    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

42. **With which of the following words would you associate "TOBACCO"?**

    (a) Pleasurable   (b) Harmful   (c) Addictive   (d) Annoying   (e) Any other (please specify)...........................

43. **Which of the following campaigns have you been exposed most often? (You may tick more than one option)**

    (a) Anti-tobacco information and messages in newspapers and magazines

    (b) Anti-tobacco information and messages on radio

    (c) Anti-tobacco information and messages on internet

    (d) Anti-tobacco information on television and in movies

    (e) Health warnings on packets of cigarettes and other tobacco products

    (f) Prohibitory signboards and stickers about smoking in common public places

    (g) Prohibitory signboards and stickers about smoking and tobacco use inside the college campuses

    (h) Visual health warnings about tobacco use in common public place

44. **The detail graphic warning on packets of tobacco products decreases my desire to consume tobacco/smoking**

    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

45. **The attractive design and brand name displayed on packets of tobacco products increases my desire to consume tobacco/smoking:**

    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

46. **What motivates you the most among the following to consume tobacco/smoke? (Please rank up to three in order of their importance)**

    (a) [ ] Displays of advertisements related to tobacco products

    (b) [ ] The physical sight of others consuming tobacco/smoking

    (c) [ ] The sight of tobacco products being displayed at the shops

    (d) [ ] The depiction of someone consuming tobacco in movies or TV shows.

    (e) [ ] The mention of tobacco products or any words associated with it by someone or somewhere

    (f) [ ] The conscious thought of personal possession of tobacco products

47. **What is your intentions regarding quitting tobacco/smoking?**

    (a) Yes I want to quit tobacco/smoking in future   (b) I am already trying to quit tobacco/smoking

    (c) I tried quitting tobacco/smoking but failed   (d) No I don't want to quit tobacco/smoking

48. **What is the main reason for your motivation to quit tobacco/smoking? (Please rank up to three in order of their importance)**

    (a) [ ] I don't want to die out of cancer or any other disease caused by tobacco use

    (b) [ ] I want to set a good and positive example for my family and the future generation

    (c) [ ] I am concerned about the rising prices of tobacco products and want to reduce my financial burdens

    (d) [ ] It is inconvenient to consume tobacco/smoking in public places

    (e) [ ] I have been forced to quit tobacco/smoking by members of my family and friends

    (f) [ ] Any other reason (Please specify)......................................

49. **Which of the following measures in your opinion would help in combating tobacco consumption? (Please rank up to three in order of their importance)**

    (a) [ ] Anti-tobacco campaign in print-media

    (b) [ ] Anti-tobacco campaign in electronic media

    (c) [ ] Anti-tobacco campaign in internet

    (d) [ ] Implementation of punitive measures against tobacco consumption in public places

    (e) [ ] More proactive role and counseling done by parents and other family members

    (f) [ ] More proactive role and counseling done by teachers

    (g) [ ] More proactive role and counseling done by community leaders and the Church

    (h) [ ] More pictorial warnings on public places

    (i) [ ] Raising taxes on tobacco products

    (j) [ ] More proactive role by the NGOs

    (k) [ ] Any other measures (Please specify)......................................

50. **I believe that I can successfully quit tobacco/smoking:**

    (a) Strongly Agree   (b) Agree   (c) Not Sure   (d) Disagree   (e) Strongly Disagree

BRIEF BIO-DATA OF THE CANDIDATE

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ABSTRACT ON

TOBACCO CONSUMPTION BEHAVIOUR OF

UNDERGRADUATE STUDENTS IN SELECT COLLEGES IN

MIZORAM: A SOCIAL MARKETING PERSPECTIVE

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE

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Introduction

Drug Abuse, Alcoholism, HIV and high prevalence of tobacco consumption with early tobacco initiation and young generation's addiction to it are among the facts that paint a contrasting and worrying picture about this otherwise beautiful and peaceful state of Mizoram. According to the World Health Organization, "tobacco is the only legal drug that kills many of its users when used exactly as intended by manufacturers". Tobacco consumption kills more than 8 million people every year– an average of one person every six seconds – and accounts for one in 10 adult deaths worldwide. The six out of eight foremost reasons of deaths in the world is also associated with the consumption of tobacco. Various international agencies and organizations are fighting a tough battle against tobacco use and addiction through various types of policy interventions and social marketing efforts. The high prevalence of tobacco has been a major concern especially for India's northeastern region and particularly for the state of Mizoram. The consecutive national surveys like GATS 1 and GATS 2, shows that the prevalence and problem of tobacco in Mizoram still remains a major challenge for the society and the future generation of Mizoram. Therefore, this study was carried out with the goal of exploring the prevalence, pattern of tobacco consumption among the undergraduate students in select colleges in Mizoram, draw a socio-economic profile of the undergraduate students and the tobacco consumers among them, understand and analyze their tobacco consumption behaviour, explore and understand the role of various organizations for the prevention and control of tobacco consumption and finally make conclusion and recommendations based on the findings of the study from a social marketing perspective. The undergraduate students from select colleges were chosen as a target group for conducting primary research due to their vulnerability towards initiation, experimentation, addiction and future implications regarding tobacco use.

From the collective review of relevant literature, analysis of primary data, and findings of the study, it has been concluded that the local consumption psychology, culture, attitude and behaviour of tobacco users among the undergraduate students is

unique in Mizoram and therefore these aspects should be given due consideration to device effective social marketing strategies for prevention and control of tobacco consumption. Accordingly, a comprehensive social marketing framework has been proposed for tobacco control in Mizoram, which has the potential to improve the situation of overall tobacco control in the state.

Summary of Chapters

This entire research study has been structured, written and presented in the form of following six chapters:

- Chapter 1: Introduction
- Chapter 2: Review of literature
- Chapter 3: Socio-Economic Profiling of Undergraduate Students according to their Tobacco Consumption Status
- Chapter 4: Behaviour of Undergraduate Students regarding Tobacco Consumption
- Chapter 5: Role of Organizations and Social Marketing Strategies for Tobacco Control in Mizoram
- Chapter 6: Summary of Findings and Suggestions

The summery of these chapters has been presented as follows:

Chapter 1

The "Chapter 1: Introduction" sets the foundation for the present research study with introductory notes on various topics and discussion of various concepts relevant to the concerned areas of this research. It also covers various aspects of the research design, scope, significance and limitations of the study. The chapter begins with an overview of tobacco and its consumption which discusses the concept of tobacco and tobacco products as defined by COTPA, 2003 and FDA and further discusses the scientific nature and addictive properties of tobacco. The section further highlights the menace of tobacco consumption globally and nationally using statistical data from the WHO and GATS 2016-2017 reports. It was pointed out that if global

tobacco consumption is left unchecked, it will lead to more than 8 million deaths every year by 2030 (WHO, 2008).

The next section presents the historical background of tobacco consumption. Tobacco has been cultivated and used since 600 BC by Native Americans, introduced in Europe in the early 15th century and later became a popular commodity for trade and also used as a cash-crop. From 18th century onwards the commercial production of tobacco in the form of cigarettes, cigars and snuff started. American companies like Philip Morris became hugely successful with aggressive marketing and promotion strategies. The harmful effects of tobacco was realized much later in 1912 when connection between smoking and lung cancer was first reported and in 1947, Lorillard chemist admits that there is enough evidence that smoking can cause cancer. In 1996 researchers found conclusive evidence that tobacco damages a cancer-suppressor gene. Consequently, from 1990 onwards there has been increased concern and organized efforts by governments of various countries and international agencies to counter tobacco consumption. Tobacco was bought in India by the Portuguese through the cost of Goa in the 16th century. In Mizoram tobacco has been consumed traditionally and is linked with the practice to ward off mosquitoes and insects during agricultural activities in the fields. Use of tobacco was also practiced by Mizos for various healing purposed (Hatzaw, 2014). The introduction of foreign cigarettes and cigars in Mizoram happened during the colonial times and became popular thereafter. However, through the advent of television and movies during the latter half of 20th century, tobacco consumption especially cigarette smoking became distinctive part of a popular culture in Mizoram. In recent times e-cigarettes or products categorized under electronic nicotine delivery systems (ENDS) are becoming increasingly available in the market. Though the e-cigarettes and ENDS are often promoted and perceived as safer alternative to traditional smoking but they are at the same risk of contracting lung diseases and cancer as conventional cigarette users (Yadav, 2019). Recently the Government of India has proposed to ban e-cigarettes and ENDS (Yadav, 2019).

The next section discusses the pattern of tobacco consumption in India using secondary information from India GSPS (Global School Personnel Survey) 2006,

India GYTS (Global Youth Tobacco Survey) 2006 and Global Adult Tobacco Survey (GATS). Some important points from the GATS 2 related to tobacco use, cessation, second-hand smoke, media, knowledge, attitude and perception were highlighted as follows:

- 28.6% of all adults in India consume tobacco in any form. Out of that, 42.4% are men and 14.2% are women.

- Currently 10.7% (99.5 million) of all adults in India smoke tobacco out of which 19.0% are men and 2.0% are women.

- 21.4% (199.4 million) of all adults in India currently use smokeless tobacco out of which 29.6% are men and 12.8% are women.

- There are 55.4% of current smokers and 49.6% of current smokeless tobacco users who are planning or thinking of quitting.

- There are 48.8% of current smokers and 31.7% of current smokeless tobacco users who were advised by health care provider to quit smoking or tobacco.

- There are 38.7% and 30.2% of adults who were exposed to second hand smoke at home and at their work place respectively.

- There are 19.2% and 18.3% of adults who noticed smoking tobacco and smokeless tobacco advertisement.

- There are 68.0% and 59.3% of adults who noticed anti-smoking and anti-smokeless tobacco information on television or radio respectively.

- There are 92.4% and 95.6% of adults who believed that smoking or use of smokeless tobacco causes serious illness.

The next section discusses tobacco consumption in Northeast India, which is known to have very high prevalence of tobacco consumption. Some important facts about tobacco consumption in Northeast India according to GATS 2009-2010 and 2016-2017 reports are as follows:

- Tripura leads in tobacco consumption in India with 64.5 % of its population using tobacco. Tripura also has the highest prevalence of smokeless tobacco users (48.5%) and Mizoram has the highest number of smokers (34.4%).

- Current tobacco use among all age groups in Manipur, Tripura and Assam recorded 55.1%, 64.5% and 48.2% respectively.

- Sikkim registered a decline from 41.6% to 17.9% which is lower than the national average. Though Sikkim, Mizoram and Meghalaya achieved remarkable progress in tobacco control, Arunachal Pradesh and Manipur achieved no major progress.

- In India northeast have the highest tobacco consumers in all forms in the 15 to 17 years age group. Mizoram tops with 27% of its population in this age group are users of tobacco, which came down from the earlier record of 35.4% reported in GATS 1. This is in sharp contrast with Sikkim which has now zero users of tobacco in this age group which earlier stood at 11.6% during GATS 1. Among all north-eastern states only Arunachal Pradesh registered an increase in tobacco users from 14.3% in GATS 1 to 25.1% in GATS 2.

Section 1.5 discusses tobacco consumption in Mizoram. Mizoram has done well in areas of public health, like for example Mizoram ranked second among all states according to "Health States, Progressive India" report of NITI Aayog and the World Bank Group released on 9[th]February 2018. However there remains some challenges like low accessibility of healthcare services for people from remote places (Chakraborty, 2017), high incidences of Cancer, HIV, AIDS, alcoholism and drug abuse. In fact, Mizoram has the highest number of recorded cancer cases in the country (Karmakar, 2018). According to the Population Based Cancer Registries (PBCR) report, there were on an average 1,552 new cancer cases per year in Mizoram (Bhonde, 2016). Such high cases of cancer may be due to genetic or environmental factors like life style and food habits, especially tobacco and alcohol (Tonsing et al., 2018). Mizoram has the second highest prevalence of tobacco users at 58.7%, which is more than double the national average of 28.6 per cent in the country. There is extreme prevalence of both smoke (*Cigarette and Zial or local cigar*) and smokeless tobacco (namely, *Tuibur or liquid tobacco, Sahdah, Khaini, Zarda, Gutkha* etc.) in Mizoram. Given below are some important facts about tobacco consumption in Mizoram according to GATS 2 India Report 2016-2017.

- There has been a significant decline in tobacco prevalence from 67.2% (GATS-1) to 58.7% (GATS-2) but is still more than double of the national average at 28.6 %. The prevalence of smoking and smokeless tobacco usage has decreased by 5.3% and 7.2% respectively.

- 25.1% of the tobacco users in Mizoram use only smoke tobacco, 24.3% uses only smokeless tobacco and 9.2% consumes both smoke and smokeless tobacco.

- Out of the 34.4% adult smokers in Mizoram, 54% were males and 14.3% were females. Similarly for smokeless tobacco users, 52.4% were males and 21.3% were females.

- Though the percentage of tobacco users in the age group of 15 to 17 has come down to 27% (GATS 2) from 35.4% (GATS 1), but it is still way above the national average of 4.4%.

- 64.9% of men, 52.4% of women and 58.7% of all adults in Mizoram either smoke tobacco and/ or use smokeless tobacco. 54.1% of men, 14.3% of women and 34.4% of all adults currently smoke tobacco. 21.3% of men, 46.0% of women and 33.5% of all adults currently use smokeless tobacco.

- Age of initiation of tobacco use was 17.4 years in GATS 1 which has increased to 17.8 years in GATS 2.

- The percentage of people exposed to second hand smoke at home, work place and public places has reduced from 96.5% to 84.1%, 64.6% to 44.4% and 27.3% to 18.2%, respectively.

- The monthly expenditure by current cigarette smokers on cigarettes has come down to Rs 712.6 in GATS 2 from Rs 1201.5 in GATS 1, while monthly expenditure by current bidi smokers on bidis has increased to Rs 256.1 in GATS 2 from Rs 189.8 in GATS 1

- 51.8% of smokers and 37.5% of smokeless tobacco users were advised by a health care provider to quit smoking/use of smokeless tobacco.

- 17.2% of cigarette smokers and 26.0% of smokeless tobacco users thought of quitting smoking/smokeless tobacco because of warning label.

- The most commonly used tobacco products in Mizoram are cigarette and tobacco for oral applications. 29.1% of the adults smoke cigarette and 21.6 percent use tobacco for oral application.

The section 1.6 examines the tobacco consumption control in Mizoram. The MSTCS (Mizoram State Tobacco Control Society) has taken many initiatives for tobacco control in Mizoram. The society has implemented the projects *"Advocacy and mobilization for smoke free Mizoram and effective tobacco control implementation in the State"* and *"Advancing tobacco control in Mizoram through capacity Building, strengthening National Tobacco Control Programme and Effective enforcement of tobacco control laws"*. The Society also looks after the National Tobacco Control Programme (NTCP) under the Ministry of Health and Family Welfare, Government of India and Tobacco Cessation Clinic funded by World Health Organization. The society has so for successfully undertaken activities like training and sensitization workshops, anti-tobacco awareness campaigns and programmes, anti-tobacco club and spot-the-smoker activities, meetings, talk shows etc. According to MSTC, pro-tobacco mindset and societal acceptance of tobacco, low awareness, tobacco users among health professionals and enforcement officials, and low priority given to tobacco control by most departments are highlighted as the major challenges and problems in enforcing COTPA in Mizoram.

Section 1.7 explores the concept of consumer behaviour in the context of tobacco consumption. Consumer behaviour is defined as "the decision process and physical activity individuals engage in when evaluating, acquiring, using, or disposing of goods and services" (Loudon & Bitta, 2002). The consumer decision making in consumer behaviour has been explained with the three stage model of consumer decision making: the input stage, the process stage, and the output stage (Schiffman & Kanuk, 2007). The consumption psychology, attitude and behaviour of tobacco users need to be studied in a systematic manner to device effective social marketing strategies for tobacco consumption control.

Section 1.8 discusses the concept and evolution of social marketing. According to Andreasen (1994), "Social Marketing is the adaptation of commercial technologies to

influence the voluntary behaviour of target audiences to improve their personal welfare and that of the society of which they are a part." Social marketing is different from cause-related marketing or cause marketing which refers to a commercial entity forming a partnership with a pro-social cause such that sales of the commercial organization's products benefits the pro-social cause (Webb & Mohr, 1998). The ideas about social marketing has evolved from the earlier works of Weibe (1952) and McGinnis (1969) and later conceptualized and the term Social marketing was coined by Philip Kotler and Gerald Zaltman (1971). However, the concept of social marketing dates back to the historic times and has been used in religious missions. Similarly, the collective works by artists, writers, philosophers and scientists roughly during the 15th - 17th century renaissance of Europe was also early forms of social marketing and so was the social reforms started in India during the 19th century. The concept of social marketing became more organized and directed to specific social causes when countries started social campaigns like family planning, health campaigns, environmental conservation programs etc. By 1980s the World Bank, WHO and Centre for Disease Control and Prevention started using the term social marketing and promote greater interest in the area (Kotler et al, 2002).

Section 1.9 explains the scope and significance of the study. It points out that how Drug Abuse, Alcoholism, HIV and high tobacco consumption with early tobacco initiation has affected the wellbeing of people in Mizoram. The problem and prevalence of tobacco in Mizoram is complex due to many underlying factors. This study, though primarily addresses the areas of social marketing and consumer behaviour in marketing discipline, has in its view a wider scope and objectives which adopt a cross-disciplinary approach. The outcome of this study will not only enrich our understanding of social marketing from intellectual and academic point of view, but at the same time it will also provide valuable inputs for the social marketers and policy makers to formulate strategies and policies for designing successful social marketing campaigns.

Research design has been discussed in section 1.10 and it addresses the various aspects of the research and research methodology like statement of the problem,

research objectives, research questions, data collection, sampling, analysis, presentation etc. It has been stressed that in spite of the collective efforts by various organizations, tobacco consumption continues to be a major problem in Mizoram. Therefore for effective social marketing, the social marketers need to investigate the underlying causes and motives behind tobacco consumption. Due to uniqueness of lifestyle, psychology, socio-economic and cultural factors, the social marketing strategies which are effective elsewhere may not necessarily be equally effective in the context of Mizoram. The aim of the study is to explore the tobacco consumption behaviour of the undergraduate students in Mizoram, understand the role of various organizations in controlling tobacco consumption in Mizoram and suggest a comprehensive social marketing strategy for prevention and control of tobacco consumption, especially among the student community in Mizoram. The primary data for this study has been collected through questionnaire which was distributed to the target respondents from a sample size of 500 undergraduate students studying in Pachhunga University College, Aizawl and Government Saiha College, Saiha. The section 1.11 and 1.12 discussed the limitations of the present study and suggested areas for further research.

Chapter 2

Chapter 2 provides an extensive review of more than 120 literatures related to various important studies that were carried out across the world in the areas of tobacco consumption, its prevalence, causes and consequences and policies and strategies to control tobacco consumption. Though the collected literatures have been reviewed, grouped and discussed under eight broad sections, but the findings and scope of many such literatures goes beyond the particular sections and therefore, there may be overlapping of contexts between the grouped sections. The reviewed literatures have been presented and discussed in paragraph wise format with a chronological order for the purpose of documenting the gradual exploration and continuous developments happening in the area. The chapter is divided into ten sections as follows:

2.1 Introduction: This section introduces the selection, nature, extent and context of literatures that have been reviewed and highlights the importance of such reviews for the course and progress of this research work.

2.2 Global Tobacco Consumption: This section presents the review of literatures that were carried out by individuals, groups and organizations across the world in the area of tobacco consumption and tobacco consumption behaviour. Some of these were done exclusively for particular country or its selected regions while others were done for selected group of countries and are comparative in nature. This section primarily discusses the prevalence and patterns of tobacco consumption studied and explored across the globe. In total, 13 literatures were reviewed in this section.

2.3 Tobacco Consumption in India: This section reviewed the various studies available on tobacco consumption in India which includes national surveys and studies conducted by individual or team of researchers. It has been found that the nationally representative household surveys on tobacco consumption in India are only available since 1995-1996. The more tobacco focused surveys in India were conducted after the development of Global Tobacco Surveillance System (GTSS). GTSS was jointly developed by the WHO, the U.S. Centre for Disease Control and Prevention (CDC), and the Canadian Public Health Association (CPHA) to assist the member states of WHO in establishing continuous tobacco-control surveillance and monitoring. The GTSS includes collection of data through the Global Youth Tobacco Survey (GYTS), Global School Personnel Survey (GSPS), Global Health Professional Survey (GHPS), and Global Adult Tobacco Survey (GATS). The section extensively reviewed such national surveys on tobacco consumption, in addition to other relevant literatures related to prevalence and pattern of tobacco consumption in different parts of India. In total, 24 literatures were reviewed in this section.

2.4 Tobacco Consumption in Northeast India: This section presents reviews of available literatures that deals with tobacco consumption in north-eastern part of India, which is distinguishable from the rest of India in terms various geographic, economic, social and cultural factors. It has been found that Northeastern states

together as a region is having highest prevalence of tobacco use in India (Dutt, 2018). The 3 literatures that were reviewed in this section were related to the diverse aspects of tobacco consumption, in Northeast India.

2.5 Tobacco Consumption in Mizoram: This section reviewed the available literatures on tobacco consumption in Mizoram. However, only limited numbers of literatures were available which exclusively discussed about tobacco consumption in Mizoram. Some studies have covered the prevalence and pattern of tobacco consumption in Mizoram as part of their overall study on north-eastern states or part of the pan India surveys. Few important literatures reviewed in this regards were the doctoral studies that have been carried out in recent past and were particularly related to various psycho-social aspects of tobacco consumption in Mizoram. In total, 6 literatures were reviewed in this section.

2.6 Factors Contributing Tobacco Consumption: The most important aspects of tobacco consumption that has been studied over the years through research is the exploration of various factors that lead to its initiation, use and addiction. Numerous research studies from across the world have tried to determine these factors which includes environmental factors such as socio-economic conditions, cultural dimensions, demographic factors, pro-tobacco advertisement as well as individual factors related to personality, behaviour, gender, income, family etc. This section reviewed 14 such relevant literatures.

2.7 Implications of Tobacco Consumption: There are multiple implications of tobacco consumption which particularly becomes the basis of arguments for and against the tobacco industry and the need for tobacco control. Over the years, research studies have explored issues such as the health related consequences of tobacco consumption, cost of tobacco consumption, and socio-economic implications of tobacco industry. This section presented the review of 15 such literatures which brings out both the negative and positive implications of tobacco consumption.

2.8 Control of Tobacco Consumption Globally: This section reviewed the various available literatures that evaluates the existing or past tobacco control measure and

strategies adopted in different countries from across the globe and also included literatures that made specific future recommendation for prevention and control of tobacco consumption for specific countries or from a global perspective. A total of 38 literatures were reviewed in this section.

2.9 Control of Tobacco Consumption in India: This section presented the review of various available literatures that have discussed, explored and evaluated tobacco control policies, legislations and measure in India and also includes reviews of literatures that have made important recommendations for future tobacco control in India. A total of 21 literatures were reviewed in this section.

2.10 Identifying the Research Gap: This section begins by highlighting some of the research gaps and suggested areas of research identified by various researchers. From the review of literature, it was observed that in India, most studies were carried out from the perspective of psychology, social work, health care and medical science discipline and may not be sufficient to address certain core issues related to tobacco consumption from the social marketing perspective. It was also pointed that the age group of college students may be considered as a vulnerable age group for tobacco consumption due to various reasons duly listed in the section. Therefore, it was concluded that there exist research gaps where tobacco consumption behaviour in Mizoram, particularly among the specific age group of undergraduate students remained mostly uncovered and the social marketing aspects for controlling such consumption behaviour remained as an unexplored territory.

Chapter 3

This chapter explored the socio-economic factors about the undergraduate students from the select colleges. The socio-economic factors has been discussed separately for the overall sample respondents, Active Tobacco Consumers, Non Tobacco Consumers and Past Tobacco Consumers. The important findings about the demographic composition of the sample are as follows:

- 64.6 % of the respondents were from Pachhunga University College and 35.4 % were from Government Saiha College.

- Out of the 500 students in the sample, 71.6% were pursuing BA, 21% were pursuing BCom and 7.4% were pursuing BSc courses.

- Gender wise, 49.8% of the sample respondents were females and 50.2% were males.

- 70.6% of the sample respondents were aged between 18 and 21 and the average age of the respondents were 20.52 years.

- 65.8% of the sample respondents were having 4 to 6 members in their respective families followed by 22% of the respondents having 7 to 10 members in their respective families.

- In terms of relationship status, 77.8% of the sample respondents were found to be "singles" followed by 8.2% who were "in an open relationship", followed by 7% who were "in a committed relationship".

- Most of the sample respondent's (69.8%) average monthly house hold income ranges from ₹5,0001 to ₹30,000. Out of that 30.2% of the sample respondent's average monthly house hold income is between ₹10,0001 to ₹20,000.

- Majority (43.4%) of the sample respondent's primary family occupation is service followed by business (26%) and farming (22.4%).

- Out of all the sample respondents, 63.2% were currently Active Tobacco Consumers, 28.6% were Non Tobacco Consumers and only 8.2% were Past Tobacco Consumers.

The findings about the socio-economic profile of Active Tobacco Consumers are as follows:

- Majority of the active tobacco consumers (63.6%) consumes tobacco daily followed by 19.9% of them who consumes it occasionally (once in a week), followed by 16.5% of them who consumes it 3 to 4 days a week.

- Out of all the active tobacco consumers, 61.08% were from Pachhunga University College and remaining 38.92% were from Government Saiha College. Within the respective colleges, 59.75% and 69.49% respondents were active tobacco consumers in Pachhunga University College and

Government Saiha College respectively. Therefore the percentage of Active Tobacco Consumers among the respondents is more at Government Saiha College compared to Pachhunga University College.

- Out of all the Active Tobacco Consumers, 76.55% were studying BA, 16.77% were studying BCom and the rest 6.65% were studying BSc.

- 88.6% of all Active Tobacco Consumers were aged between 18 to 23 years. The average age of the Active Tobacco Consumers was 20.71 years.

- Gender wise, 54.1% of the Active Tobacco Consumers were males and 45.9% of the Active Tobacco Consumers were females.

- 65.19% of the Active Tobacco Consumers were having 4 to 6 members in their families, followed by 23.42% of them who have 7 to 10 members in their families and only 6.33% of them having 4 or less members in their families.

- In terms of relationship status, 75.3% of the Active Tobacco Consumers were single, 9.2% of them confessed to be in an open relationship whereas 7.6% of them were in a committed relationship.

- More than half (51.27%) of the Active Tobacco Consumer's average monthly household income is somewhere between ₹10,000 to ₹30,000.

- 44.6% of the Active Tobacco Consumer's primary family occupation is service followed by business (28.2%), followed by farming (20.3%).

- Most of the Active Tobacco Consumers (80.1%) in Mizoram spends ₹30 or less for consuming tobacco on a daily basis.

- 59.5% of the Active Tobacco Consumers are found to be financially dependent, followed by 22.2% who are partially financially dependent on their families and only 18.4% of them are financially independent.

- 40.5% of the Active Tobacco Consumers either strongly agrees or agrees that they have tobacco related health problems. However, 39.9% of them are also not sure about any health problems caused due to tobacco consumption.

- Majority of the Active Tobacco Consumes (83.5%) have members in the family who consumes tobacco.

- Spending time with families, friends and surfing the internet are some of the most popular activities performed by the Active Tobacco Consumers.
- The average age of initiation of tobacco by Active Tobacco Consumers is 15.89 years.

The findings about the socio-economic profile of Non Tobacco Consumers are as follows:

- 71.33% of the total Non Tobacco Consumers were from Pachhunga University College and 28.67% of them were from Government Saiha College. In Pachhunga University College, 31.58% of the total respondents were Non-Tobacco Consumers and in Government Saiha College, 23.16% of the total respondents were Non-Tobacco Consumers. Therefore the percentage of Non Tobacco Consumers among the respondents is more at Pachhunga University College compared to Government Saiha College.
- 59.44% of the Non Tobacco Consumers among the respondents were studying BA, followed by 31.47% studying BCom, followed by 9.09% studying BSc courses.
- The average age of the Non-Tobacco Consumers among the respondents is 20.2 years.
- 37.8% of all Non-Tobacco Consumers among the respondents were males and remaining 62.2% were females. Therefore the female undergraduate students are less likely to consume tobacco compared to their male counterparts.
- 62.94% of the undergraduate Non-Tobacco Consumers among the respondents have 4 to 6 members in their family
- 83.2% of all the undergraduate Non-Tobacco Consumers among the respondents were single.
- More than half (53.15%) of the Non-Tobacco Consumer's average monthly household income among the respondents falls somewhere between ₹10,000 to ₹30,000. 27.27% of Non-Tobacco Consumers among the respondents

belongs to poor economic background where their family income is below ₹10,000 a month.

- 44.1% of Non-Tobacco Consumers among the respondents have service as their primary family occupation, followed by 25.2% whose primary family occupation is farming followed by 21.7% whose primary family occupation is business.

- 68.5% of the Non-Tobacco Consumers among the respondents were financially dependent on their respective families.

- 72.7% of the Non-Tobacco Consumers among the respondents have members in their family who consumes tobacco.

- Most of the Non-Tobacco Consumers among the respondents spends substantial amount of their daily time with family, friends and surfing the internet.

The findings about the socio-economic profile of Past Tobacco Consumers are as follows:

- Out of the total Past Tobacco Consumers among the respondents, 68.3% were from Pachhunga University College and the rest 31.7% were from Government Saiha College. 8.67% of the respondents in Pachhunga University College and 7.34% of the respondents in Government Saiha College were Past Tobacco Consumers.

- 75.61% of the total Past Tobacco Consumers among the respondents were studying BA followed by 17.1% studying BCom and remaining 7.32% studying BSc.

- The average age for the Past Tobacco Consumers among the respondents is 20.24%.

- 63.4% of the Past Tobacco Consumers among the respondents were males and the rest 36.6% were females.

- 80.49% of the Past Tobacco Consumers among the respondents were having 4 to 6 members in their family.

- 78% of the Past Tobacco Consumers among the respondents were single.

- 80.49% of the Past Tobacco Consumers among the respondents were having an average monthly family income of ₹30,000 or less.

- 31.7% Past Tobacco Consumers among the respondents were having service as their primary family occupation followed by 29.3% of them whose primary family occupation is farming and 24.4% of them whose primary family occupation is business.

- 70.7% of the Past Tobacco Consumers among the respondents used to spend less than ₹10 daily to consume tobacco.

- 58.5% of the Past Tobacco Consumers among the respondents were financially dependent, followed by 22% who were partially financially dependent on their families and only 19.5% were financially independent.

- Majority (39%) of the Past Tobacco Consumers among the respondents either strongly agreed or agreed that they have had tobacco related health problems.

- 80.5% of Past Tobacco Consumers among the respondents have members in the family who consumes tobacco.

- Most of the Past Tobacco Consumers among the respondents spends substantial amount of their daily time with family, friends and surfing the internet.

- The average age of initiation of tobacco by the Past Tobacco Consumers is 13.73 years.

The findings from the comparison of socio-economic profiles between Active Tobacco Consumers, Non Tobacco Consumers and Past Tobacco Consumers are as follows:

- Saiha Government College have much more Active Tobacco Consumers (69.49%) than Pachhunga University College (59.75%).

- Active Tobacco Consumers are highest (67.59%) among respondents studying BA, followed by BSc (56.76%) and BCom (50.48%) respondents. Non-Tobacco Consumers are highest among BCom (42.86%) respondents, followed by BSc (35.14%) respondents and BA (23.74%) respondents. Past

Tobacco Consumers are highest among BA (8.66%) respondents, followed by BSc (8.11%) respondents and BCom (6.67%) respondents.

- The average age of the Active Tobacco Consumers (20.71 years) were slightly higher compared to the Past Tobacco Consumers (20.24 years) and Non Tobacco Consumers (20.2 years) among the respondents.

- 54.11% Active Tobacco Consumers among the respondents were males and 45.89% were females. 62.24% Non Tobacco Consumers among the respondents were females and 37.76% were males. Therefore, tobacco consumption is more prevalent among male undergraduate students than female undergraduate students among the respondents.

- The percentage of Past Tobacco Consumers who belongs to medium sized families of 4 to 6 members is comparatively higher (80.49%) then the percentage of Non-Tobacco Consumers (62.94%) and Active Tobacco Consumers (65.19%) who belongs to similar sized families.

- In terms of relationship status, most of the respondents were single and the percentage of singles is highest (83.22%) among the Non Tobacco Consumers. However, the percentage of undergraduate students who were in an open relationship is highest (9.18%) among the Active Tobacco Consumers and the percentage of undergraduate students who were in a complicated relationship is highest (7.32%) among the Past Tobacco Consumers.

- The Past Tobacco Consumers among the respondents have the highest percentage of students who have less than ₹10,000 as their average monthly family income and also they have less percentage of students having monthly household income of ₹10,001 to ₹20,000, ₹20,001 to ₹30,000 and more than ₹40,000 compared to Non Tobacco and Active Tobacco Consumers. Therefore economic constraints could be a key factor for the motivation to quit tobacco among the Past Tobacco Consumers and higher income or affordability may be another key factor for many undergraduate Active Tobacco Consumers to continue the habit of tobacco consumption.

- Service is the most common family occupation across respondents. However, business is the second most common family occupation only for Active Tobacco Consumers whereas farming is the second most common primary family occupation for both Non Tobacco Consumers and Past Tobacco Consumers. Also, there are very less respondents whose family's primary occupation includes pension and other sources but Past Tobacco Consumers includes slightly higher (9.76%) percentage of students whose family's primary occupation involves pension.

- 80.06% of the Active Tobacco Consumers and 92.68% of the Past Tobacco Consumers among the respondents used to spend ₹30 or less daily on tobacco consumption. 70.73% of the Past Tobacco Consumers among the respondents used to spend less than ₹10 daily on tobacco.

- The percentage of financially dependent students is more among Non Tobacco Consumers (68.53%) than Active Tobacco Consumers (59.49%) and Past Tobacco Consumers (58.54%) among the respondents. Whereas, financially independent students are also more among both Active Tobacco Consumers (18.35%) and Past Tobacco Consumers (19.51%) compared to Non Tobacco Consumers (17.48%) among the respondents. This indicates that, students who are financially independent or partially dependent are slightly more inclined towards tobacco consumption than students who are financially dependent.

- Most of the Active Tobacco Consumers and Past Tobacco Consumers among the respondents agree that they have health problems caused due to their habit of consuming tobacco. However, the percentage of Past Tobacco Consumers (26.83%) is slightly more compared to Active Tobacco Consumers (19.62%) who either strongly disagrees or disagrees that they have tobacco related health problems.

- There are more Active Tobacco Consumers (83.54%) than Non Tobacco Consumers (72.73%) and Past Tobacco Consumers (80.49%) among the respondents who have members in the family who consumes tobacco.

Therefore, tobacco consumption by family members seems to have an influence on students who consumes or consumed tobacco in the past.

- Most of the respondents spend considerable amount of time with their families and friends and moderate amount of time in watching television daily. Listening to music is popular among most respondents and majority of the respondents spends lengthy hours daily in surfing the internet.

- The percentage of respondents, who does not spend any time daily on their studies is unusually high among the Past Tobacco Consumers (12.2%), followed by Active Tobacco Consumers (5.7%) and then Non Tobacco Consumers (3.5%). The percentage respondents who spends more than 5 hours daily in their studies is highest among Non Tobacco Consumers (2.8%). The percentage of respondents who does not spend any time on studies is highest among the Past Tobacco Consumers (12.2%), followed by Active Tobacco Consumers (10.76%) and lowest among the Non Tobacco Consumers (4.2%). So, it may be assumed that Non Tobacco Consumers spends more time on their studies compared to Active and Past Tobacco Consumers.

- 55.8% of the respondents do not spend any time daily in playing indoor games and 43.6% of the respondents does not spend any time on a daily basis for going out or travelling.

- The percentage of respondents who spends 30 minutes to 4 hours daily on cooking and other household works is highest among the Non Tobacco Consumers (66.43%), followed by Active Tobacco Consumers (57.59%) and Past Tobacco Consumers (56.1%).

- 46.9% of all respondents spend 30 minutes to 2 hours daily on religious activities. The percentage of respondents who does not spends any time on religious activities is highest among the Past Tobacco Consumers (14.63%), followed by Active Tobacco Consumers (12.97%) and least among Non Tobacco Consumers (8.39%). The percentage of respondents who spends more than 5 hours daily on religious activities is highest among the Non Tobacco Consumers (3.5%) followed by Active Tobacco Consumers (1.27%)

and totally absent among the Past Tobacco Consumers. Therefore, Non Tobacco Consumers among the respondents are slightly more inclined towards spending time in religious activities than Active and Past Tobacco Consumers.

- The average age of initiation to tobacco for the total 357 tobacco consumers (Active and Past) is 15.64 years, 15.89 years for Active Tobacco Consumers and 13.73 years for Past Tobacco Consumers. Due to such early age of initiation to tobacco, it is necessary to start educating students early regarding the harmful effects of tobacco and strictly control tobacco consumption at the school level.

Chapter 4

The chapter titled "Behaviour of Undergraduate Students regarding Tobacco Consumption" explores the consumption pattern and behaviour of the undergraduate tobacco consumers studying in the select colleges based on primary data. Consumer Behaviour is broadly defined as "the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society" (Hawkins et al., 2007, p. 6). The chapter explores the consumption behaviour of undergraduate students using the Schiffman & Kanuk (2007) model of consumer behaviour.

Section 4.2 discusses the various external influences for tobacco consumption which include marketing efforts of tobacco industry and socio-cultural influences for tobacco consumption. In spite of much regulation from the government on marketing of tobacco products in India, companies invests huge amount of money in promotion, distribution and sales. The marketing efforts of tobacco companies in Mizoram are not very different from rest of India and rely heavily on passive and subliminal marketing techniques such as point-of-sales displays, attractive packaging, extensive and targeted distribution strategies, and indirectly promoting tobacco consumption culture using platforms like movies, internet, social media etc. Due to the blanket ban on tobacco advertising in India, companies now often resort to surrogate advertising

to promote their products (Business Wire, March 20, 2019). Exposures to tobacco through movies and tobacco-branded merchandise make adolescents more receptive to tobacco advertising and more likely to try tobacco (Arora et al., 2012; Mohan & Lando, 2016; WHO, 2003). There were also instances of tobacco companies violating norms to market their products in India. The aggressive marketing strategies of the tobacco industry are one of the most important factors leading to initiation of tobacco use among children and teenagers (Chadda & Sengupta, 2002). The innovative product and marketing strategies by tobacco companies has resulted in the increase of tobacco experimentation and consumption among youths (Planning Commission, Government of India, 2002). According to Gupta (2006), the taxes for tobacco products in India are low and not collected effectively for all tobacco products except for cigarettes making them easily affordable for even school children. It has been observed that after the implementation of GST, there has been a reduction in the amount of tax collection and very little increase in the final retail price of various tobacco products in India (John, Dauchy & Goodchild, 2019).

The socio-cultural environment includes family, friends, social class, culture, sub culture, values etc. According to Mohan et al., (2018), "tobacco use is deeply ingrained as a cultural practice". The Mizo society in general is characterized by closely knit families with strong tradition of shared family values among the family members. A test of association between family size and tobacco user category revealed that family sizes are not a determining factor for consumption of tobacco by the respondents. The major occupational choices for the families in Mizoram broadly include service, business and farming. A test of association between family occupation and tobacco user category suggests that occupation may not be regarded as a determining factor for tobacco consumption among the respondents. A test of association between family income and tobacco user category reveals that there is no significant association between family income and tobacco user category. There is also non-significant association between tobacco user category and their status of financial dependency. Similarly a test of significance also shows that the relationship status of the undergraduate students is not a determining factor for their choice of tobacco consumption. However, there is a significant association between tobacco

consumption in family and tobacco user category which suggests that tobacco consumption in the family does have an influence on respondent's choice of tobacco consumption. It has also been found that friends were the most common influence for tobacco consumption among the respondents. The respondents were also exposed to easy availability of tobacco products as 89.8% of the respondents said that tobacco products are available within the 100 meter radius around their college campuses. There is also association between the perception regarding increase of taxes on tobacco products and tobacco user category. Consumption of tobacco can be related with other addictive habits like alcohol consumption and drugs. A test of association also reveals that there is a significant association between the other addictive habits and tobacco user category. Regarding attitude towards partner's tobacco consumption, it has been found that the Past Tobacco Consumers (82.93%) have the strongest objection followed by Non Tobacco Consumers (66.43%) and Active Tobacco Consumers (41.46%) on the matter of tobacco consumption by their partners. There is also a significant association between the perception regarding younger generation's tobacco consumption and tobacco user category. Therefore, the students in general and particularly the Non Tobacco Consumers and Past Tobacco Consumers are a bit more concern about their partners and the younger generations wellbeing. There is a significant association between consideration of smoking as fashionable and tobacco user category which suggests smoking is not considered fashionable more by Non-Tobacco Consumers than Active Tobacco Consumers and Past Tobacco Consumers. The fact that 17.2% respondents agreed that it is unfriendly to refuse when other offers them tobacco shows certain amount of peer pressure among the respondents regarding tobacco consumption. The majority of the Active Tobacco Consumers (41.77%) agrees and an overwhelming majority of the Non-Tobacco Consumers disagrees that Consuming tobacco/smoking is an easy way to socialize with others. Majority of the respondents also agreed that tobacco consumption is generally disapproved by people in public places though more than a quarter of respondents are not quite sure if people in general disapprove tobacco consumption or smoking in public places. There is no significant association between exposure to various types of anti-tobacco messages and media campaigns and tobacco user category except for the exposure to the health warnings on packets of

cigarettes and other tobacco products. Therefore, TV and movies are the best platform where respondents are mostly exposed to anti-tobacco campaigns and messages. 86% of the respondents agreed that using tobacco is likely to increase their chances of getting cancer and 89% of the respondents agree that tobacco or smoking kills. Therefore, majority of the respondents seems to be quite aware about the adverse effects of tobacco on their health and wellbeing.

Section 4.3 discusses the consumer decision making regarding tobacco consumption by the respondents. There are various factors or impulses that motivate or triggers tobacco consumers to consume tobacco. The most common factor for consumption motivation among tobacco consumers has been found to be "the conscious thought of personal possession of tobacco products", closely followed by "the physical sight of others consuming tobacco/smoking". A test of association between increased consumption desire due to attractive tobacco packaging and tobacco user category shows significant association. It may be concluded that there exists a large number of young Active Tobacco Consumers who are attracted by the packaging and branding of tobacco products. Most of the Active Consumers finds Tobacco to be "Addictive" (60.76%). However, Non Tobacco Consumers and Active Tobacco Consumers have a very different perception when they think about the word Tobacco. A test of association between perception of tobacco cost and tobacco user category reveals that perception regarding the cost of tobacco consumption is somewhat different for the consumers, non-consumers and past-consumers of tobacco among the respondents. There is a sharp contrast between Active Tobacco Consumers and Non-Tobacco Consumers in their attitude regarding tobacco consumption being a matter of personal choice. Most of the respondents do not agree that consuming tobacco makes them look cool and mature. However, this attitude is stronger among Non-Tobacco Consumers (83.22%) compared to the Active Tobacco Consumers (65.51%). Therefore the need recognition for tobacco consumption is affected by various motivating factors like conscious thought of tobacco possession, sight of others consuming tobacco, sight of tobacco products displayed in shops, tobacco use depicted in movies or TV shows and attractive packaging. Tobacco consumption in the family, the perception of tobacco as addictive and pleasurable by many tobacco

consumers and the strong pro-tobacco attitude by the respondents also determines their realization of need, pre-purchase search and evaluation of alternatives on tobacco products. Easy availability, flavour and feel and low price are important factors considered by the undergraduate tobacco consumers while evaluating the alternatives. The experience from these evaluations further strengthens the psychological field consisting motivation, perception, learning, personality and attitude.

The section 4.4 discusses the post-decision behaviour of the respondents regarding tobacco consumption. 80.06% of the Active Tobacco Consumers spend ₹30 or less on daily basis for purchasing tobacco products. However, due to the availability of cheap contraband cigarettes, a consumer in Mizoram is able to purchase a whole pack of 20 cigarettes within ₹30. The gender wise distribution of tobacco products clearly shows that smokers which include users of Indian Branded Cigarettes, International Branded Cigarettes, Zial and Burmese Cigarettes are higher among male respondents whereas smokeless tobacco users which include users of Sahdah, Zarda, Gutkha and Tuibur are higher among female respondents. There are also significant associations between genders and the type of tobacco products consumed across all the different types of tobacco products consumed by the undergraduate students in Mizoram. More than half (57.28%) of the Active Tobacco Consumers prefers to purchase tobacco products in single units which are both easily available and affordable. Majority (63.61%) of the Active Tobacco Consumers consumes tobacco every day which shows that the extent of tobacco addiction among the tobacco consumers in colleges of Mizoram is very high. The choice of time and place for consuming tobacco by students may consciously or sub-consciously motivate and provide convenience and even approval for tobacco consumption to tobacco consumers. 65.51% of the respondents (Active Tobacco Consumers) consume tobacco after meals, followed by 24.68% who generally consumes tobacco while they are spending time with their friends and 18.67% consumes tobacco in their idle time. There may be strong psychological impulse which motivates tobacco consumers to consume tobacco after meals, tendencies where they influence each other to consume tobacco while hanging out as friends and also to some extent

unoccupied time forces tobacco consumers to consume tobacco. Almost half (48.2%) of the respondents (Active Tobacco Consumers) usually consume tobacco outdoors which reflects that the ban on smoking at outdoor public places have not been strictly enforced by the administration. The considerable number of respondents consuming tobacco inside their hostel and college campuses also points towards the failure of "no-tobacco policy" in college campuses in Mizoram. Though, the majority (69.3%) of the respondents (Active Tobacco Consumers) agreed that they avoid tobacco in public places, but still there are considerable numbers of college students who may consume tobacco or smoke in public places and expose others to the dangers of second-hand smoke. Besides this, 25.63% of the respondents (Active Tobacco Consumers) agreed that they do not mind breaking rules by smoking in prohibited areas which shows lack of concern by many college students. Overall, the respondents are divided in their opinion regarding their brand loyalty towards any particular tobacco brand and the most important factors for the Active Tobacco Consumers for choosing a particular brand is "*Easy Availability*", followed by "*Flavor and Feel*" and "*Low Price*". However, there is significant association between certain types of tobacco products like Indian Branded Cigarettes, Sahdah (Khaini), Gutkha and Tuibur and brand loyalty among the respondents. 65.51% of the Active Tobacco Consumers do not agree that tobacco consumption makes them look cool or mature in front of others. 40.51% of the Active Tobacco Consumers agree and 39.87% of them are not sure that they have health related problems caused due to tobacco consumption. Therefore, a substantial number of the Active Tobacco Consumers are actually aware and acknowledge that they have health related problems caused due to tobacco consumption while still, a large percentage of them either disagree or not sure about such problems. An overwhelming 82.91% of the respondents agree that consuming tobacco is likely to increase their chances of getting cancer and 87.66% of them agree that consuming tobacco can kill them. There are also a large number of consumers who may use tobacco as a means to cope with stress. It is interesting to note that in spite of majority of the tobacco consumers considering the monetary cost of tobacco consumption to be high, continue to consume tobacco. 46.2% of the Active Tobacco Consumers disagree, 14.24% agrees and 39.56% were not sure that they have influenced others to consume tobacco.

However, 60.76% of the respondents also agree, 10.44% disagrees and the rest 28.8% were not sure that they often encourage others to quit tobacco. Therefore, in spite of being regular users of tobacco themselves, many Active Tobacco Consumers actually encourages others to quit tobacco. 45.57% of the respondents responded expressed that they want to quit tobacco or smoking in future, 32.28% are already trying to quit, 17.09% of them tried to quit in the past but did not succeed, and only 5.06% do not want to quit tobacco or smoking. The fear of death caused by cancer or any other tobacco related diseases was the most common reason for the motivation to quit tobacco followed by the desire to set good example for the family and future generations. 38.61% of the respondents agree, 24.03% disagree and 37.03% are not sure that the graphic health warning on the packets of tobacco products decreases their desire to consume tobacco. Therefore, a large number of Active Tobacco Consumers are still not convinced by the health warnings displayed on the packets. 69.3% of the respondents agree, 4.75% disagrees and 25.95% of them were not sure that they can successfully quit tobacco.

To alter the tobacco consumption behaviour of undergraduate students, it is important to "understand how their perceptions of control are undermined by tobacco and how external forces influence goals to quit or control tobacco" (Johnson et al., 2004). The respondents go through detail process of consumer decision making for their tobacco consumption behaviour. During such decision making process the respondents get motivated by various factors such as indirect marketing efforts by the tobacco industry, socio-cultural factors in the environment, individual psychological factors of the respondents and their individual experiences related to tobacco and its consumption. A combination of such factors has been found to determine the purchase, consumption and post-purchase behaviour of the respondents. Some of the major findings from the analysis of primary data were as follows:

1. Tobacco consumption in the family of the respondents act as an early influence for tobacco consumption among the respondents.

2. There is a pro-tobacco mindset among many respondents and substantial tobacco consumers among the respondents consider smoking as fashionable.

3. The attractive design and packaging of tobacco substantially increases the desire for tobacco consumption among the tobacco consumers.

4. Other addictive habits such as alcohol consumption and drug abuse were positively associated with tobacco consumption among the respondents.

5. Female tobacco consumers were more inclined towards smokeless tobacco than male tobacco consumers among the respondents.

6. Consumers of certain type of tobacco products like Indian branded Cigarettes, Sahdah (Khaini), Gukha and Tuibur have expressed more brand loyalty towards such products than consumers of International Branded Cigarettes, Zial and Burmese Cigarettes.

The most preferred measure to combat tobacco use as suggested by the respondents is "more proactive role and counseling did by parents and other family members", followed by "anti-tobacco campaigns on internet". The measures suggested by the respondents for tobacco control along with the deeper understanding of the tobacco consumption behaviour of the undergraduate students explored in this chapter will be very useful for designing an effective and comprehensive social marketing strategy for controlling tobacco consumption in Mizoram.

Chapter 5

This Chapter titled "Role of Organizations and Social Marketing Strategies for Tobacco Control in Mizoram" discusses the important contributions of various governmental and non-governmental organizations and associations towards tobacco control in the state of Mizoram and also explores and presents the social marketing strategies for controlling tobacco consumption in Mizoram.

Section 5.2 examines the role of Mizoram State Tobacco Control Society (MSTCS), which is the most prominent organization primarily entrusted to implement the Mizoram State Tobacco Control Programme (MSTCP) under the National Tobacco Control Programme across the state. MSTCS has successfully implemented projects

like "Advocacy & Mobilization for Smoke Free Mizoram and Effective Tobacco Control Implementation in the State" and "Advancing Tobacco Control in Mizoram through Capacity building, Strengthening National Tobacco Control Programme and Effective Enforcement of Tobacco Control Laws". MSTCS runs various Tobacco Control Cells which offers services like Nicotine Replacement Therapy where they provide necessary interventions, treatments and counselling for people to quit tobacco. MSTCS also collaborates with various organization and associations like Indian Society on Tobacco & Health (Mizoram Chapter), MZP, MHIP etc. for tobacco control initiatives. MSTCS observes the "World No Tobacco Day" every year with various themes related to bring awareness against tobacco related issues. MSTCS has carried out many activities like anti-tobacco awareness programmes at educational institutions, anti-tobacco programmes at Churches and community platforms, trainings and sensitization workshops, meetings, talk shows and many such other activities in the recent past. The important achievements of MSTCS include inclusion of tobacco education in school curriculum, inclusion of thematic topic on tobacco and health in Church services and adoption of tobacco free community in Thingsul Tlangnuam (Hatzaw, 2014).

The section 5.3 discusses the role of the Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC), which is the oldest organization dedicated to the cause of reducing tobacco consumption in Mizoram. Since 1989, Ms. Lal Riliani, the president of ISTHMC has been working tirelessly to convince and educate the people of Mizoram about the evils of tobacco (Hmar, 2018).The society actively participates and often coordinates with other similar organizations such as the MSTCS in various tobacco control initiatives and programmes in the state like observing the Mizoram State Anti-Tobacco Day, creating awareness among school children and church interventions, starting 'Tobacco Free Sports' campaign etc. In 2015, ISTHMC along with MSTCS was jointly awarded the Regional Director Appreciation Award by WHO. The primary objective of ISTHMC in recent times is to achieve smoke-free homes and smoke-free vehicles in Mizoram.

Section 5.4 discusses the roles of various religious organizations in controlling tobacco consumption in Mizoram. 87.1% of the population in Mizoram follows Christianity, which has a strong influence on people's day to day conducts and lifestyles. The religious views and opinions on tobacco consumption is varied and at the same time, evolving. On 3ʳᵈ May, 1999, a meeting on Tobacco and Religion was held at WHO headquarters, in Geneva (WHO, 1999), which summarized the positive views regarding the Tobacco Free Initiative expressed by all major religions. A smoking cessation programme delivered through church coalitions in African-American adults in a rural community in Virginia, found higher quit rates among intervention community and church goers (Schorling et al., 1997). Another study concluded that "public health interventions may profit by seeking to expand cooperation with religious congregations to facilitate efforts to promote healthy lifestyles" (Hofstetter et al., 2010). Though the churches in Mizoram are against alcoholism and were instrumental in pressurizing the government to enact the MLTP Act, but they are yet to express similar opposition for tobacco consumption. There is however some exceptions like the Presbyterian Church which as a policy decided not to recruit probationary officers who are addicted to tobacco (Zorammuana, 2010). The Church has also included the thematic topic on tobacco and health in the Wednesday Night church service and in the yearly observation of health Sunday like leprosy Sunday, cancer Sunday etc. (Hatzaw, 2014).The Seven Day Adventist Church has a general view which prohibits its followers from consuming anything is "unclean" such as alcohol, drugs, tobacco, meat etc.

Section 5.5 discusses the roles of other prominent NGOs regarding tobacco control in Mizoram, namely, the YMA, MHIP, MJA and MZP. The YMA has been referred as the oldest, largest and the most powerful social organization in Mizoram (Chawngthanmawii, 2014).The YMA actively campaigns against the evils of drugs and alcohol and has recently taken a special programme on HIV/AIDS. Though YMA was initially somewhat indifferent to the cause of tobacco control in Mizoram but in recent times it has become more concerned about the menace of tobacco, has supported the various initiatives taken by the government and partnered with the MSTCS in this regard. One such step was imposing a ban on selling of gutkha in the

respective areas covered by the YMA branches in Mizoram. The MHIP is the largest women organisation in Mizoram which primarily works on issues of women rights and empowerment. MHIP has done some remarkable contributions in the field of health awareness which covered Injecting Drug Users, Female Sex Workers and Migrant labourers for preventing HIV/AIDS. The MHIP had participated in Anti-Tobacco Squad drives and Joint Enforcement with other departments and also done a state-wide campaign against gutkha where leaders of its branches in Aizawl took an oath to fight the menace and stop the selling of gutkha in their respective jurisdictions. The MJA is a welfare body for working journalists in Mizoram which has partnered with the Department of Health and MSTCS on a number of occasions for health awareness programmes. It has organized one day Media Workshop on Tobacco Control in Mizoram at the Aizawl Press Club and participated in the 'Training on Tobacco Control for MJA and I&PR' conducted by the Lunglei DTCC. The MZP is the largest student organization and apex students' body in Mizoram which along with other NGOs attended the first meeting of State Level Coordination Committee (Tobacco Control) held on 29th July, 2014. It also jointly organized the Youth MPOWER summit with MSTCS.

Section 5.6 examines the implementation of NTCP & COTPA in Mizoram. COTPA regulates the consumption, production, supply and distribution of the tobacco products by imposing restrictions on advertisement, promotion and sponsorship of tobacco products; prohibiting smoking in public places; prohibiting sale to and by minors; and prohibiting sale of tobacco products within a radius of 100 yards of educational institutions, and through mandatory depiction of specified pictorial health warnings on all tobacco product packs. The objectives of NTCP are as follows:

a) Create awareness about the harmful effects of tobacco consumption about tobacco control laws
b) Reduce the production and supply of tobacco products
c) Ensure effective implementation of the provisions made under COTPA 2003
d) Help the people quit tobacco use through Tobacco Cessation Centers

The Government of Mizoram has implemented the NTCP in Mizoram as Mizoram State Tobacco Control Programme (MSTCP). Under the programme MSTCS was established which runs 9 District Tobacco Control Cells (DTCC) and 1 State Tobacco Control Cell (STCC) in the state. Since 2014, 11th September every year is being observed as the official 'Mizoram State Anti-Tobacco Day' and Mizoram is the first state in India to do so. The Government of Mizoram constituted a special committee on 20th May 2016 to implement Article 5.3 of WHO Framework Convention on Tobacco Control. Following are some of the important steps taken by the Government of Mizoram to implement COTPA in the state:

- Mizoram is the only state in India to authorise all ranks of police personnel to enforce Section 4, 6 (a) & (b) and it is also the first state to adopt Anti Tobacco Squad.

- Prohibition of smoking in public places in government offices, public transport.

- Forming Joint Task Force for controlling and checking mass influx of illegal tobacco products in Mizoram and enforcement on contraband cigarettes in all the districts of Mizoram.

- Notification to completely ban the sale of tobacco products individually, in single sticks, loose or outside its package without pictorial health warning as specified by COTPA, 2003.

The Ruantlang village in Champhai district was declared as a 'Tobacco Free Village' due to compliance to all sections of COTPA. The implementation of State Tobacco Control Program has shown some improvements like the decrease in overall tobacco use prevalence from 67.2% to 58.7%, decline in the second hand smoke exposure at home from 96.5% to 84.1% and the decline in second hand smoke exposure at the work place from 64.6% to 44.4% as per GATS-1 and GATS-2 comparisons. However, there has been limited success when it comes to the total implementation of COTPA in Mizoram. Firstly, from the primary data it has been found that tobacco products are still available within the 100 meter radius around college campuses violating the Section 6 of COTPA, 2003. Secondly, the free availability of

contraband cigarettes of Chinese and Myanmar origin in Mizoram makes the various provisions of COTPA, 2003 to be practically ineffective. Besides being available at cheap prices which make them viable alternative against Indian brands, the contraband cigarettes packaging doesn't have proper graphic warnings as mandated by Cigarettes and Other Tobacco Products (Packaging and labeling) Second Amendment Rules 2018. The local unbranded tobacco products such as Zial, Sahda and Tuibur also do not have similar graphic warnings. These are the challenges that have made the NTCP in Mizoram less effective.

Section 5.7 looks into the definition and concept of social marketing. Social marketing is defined as "the applications of marketing strategies and tactics to alter or create behaviour that have a positive effect on the targeted individuals or society as a whole" (Hawkins et al., 2007). The concept of social marketing differs from commercial marketing in three ways. Firstly, social marketers focus on selling 'behaviour' whereas commercial marketers mostly focus on selling goods and services. Secondly, commercial marketers position their products against competing products of other companies while social marketers compete with target audiences existing behaviour and associated benefits. And thirdly, the ultimate goal of social marketing is the welfare of individuals, groups or the society whereas commercial marketing primarily aims for increasing the shareholder's wealth (Kotler & Lee, 2008).

Section 5.8 explores the concept of social marketing mix. As stressed by Andreasen (1994), the social marketing mix strategy may be either be based the conventional marketing mix which includes the 4Ps of Product, Price , Place and Promotion or may include additional Ps like People, Policy and Partnership (Donovan & Henley, 2010). Gordon (2012) advocated that "social marketers should be encouraged to engage, inspire, debate and propose ideas" which "would facilitate the development of a new, delimiting, and contemporary social marketing mix". Therefore based on the distinctiveness of the social marketing concept, the marketing mix for social marketing may be reinterpreted in the form alternative 4Ps which consists of Proposition, Perception, Platform and Persuasion (Akhtar & Bhattacharjee, 2014)

and can be used for framing a comprehensive social marketing strategy for controlling tobacco consumption in Mizoram.

Section 5.9 discusses the importance of persuasion, attitude and behavioural change in social marketing. In this regard, the application of following models related to communication, persuasion, attitude and behaviour change in the context of tobacco consumption in Mizoram has been discussed:

- *Elaboration-Likelihood Model* (Petty & Cacioppo, 1983, 1986): ELM may be applied to frame specific and effective message content for the target community in Mizoram.

- *Heuristic-Systematic Model* (Chaiken, 1987): This model may be used while designing anti-tobacco campaigns in Mizoram where greater emphasis is given towards systematic processing of the campaign message by the target audiences.

- *Rossiter-Percy Motivational Model* (Rossiter & Percy, 1997): The tobacco consumption behaviour of people in Mizoram may be explained by this model where people have low perceived risk about consuming tobacco and thus low involvement in their decision to consume tobacco. At the same time, their addictive behaviour or choice to continue consume tobacco is likely to be a result of a positive motivation to have temporary feel good experience. Therefore, to counter this way of decision making by tobacco consumers, the social marketing message should result in high involvement and negative motivation among the target audience.

- *FCB Grid Model* (Vaughn, 1980, 1986): The consumer decision making for tobacco consumption in Mizoram can also be explained using this model as such decision making is characterized by low involvement which may fall either under the habitual or the satisfaction quadrant of the model.

- *Health Belief Model*: This model may be applied to encourage tobacco consumers in Mizoram to participate in quit interventions by understanding how they perceives the health risks associated with tobacco and the costs and benefits of quitting it.

- *Protection Motivation Theory* (Rogers, 1975): This theory may be applied to understand how people perceives health related threat caused by tobacco consumption and also to understand their intentions to quit or continue tobacco consumption.

- *Social Learning Theory* (Bandura, 1977): This theory can explain the role of socio-cultural influences for tobacco consumption in Mizoram and also suggest the extent of peer pressure, influences from family and role models in developing pro-tobacco mindset among the younger generation.

- *Theory of Reasoned Action* (Fishbein & Ajzen, 1975): This theory can be applied in the context of social marketing for tobacco consumption in Mizoram to understand how people hold (their own and of others) particular beliefs regarding consumption and non-consumption of tobacco, how they view its respective consequences (positively, negatively or neutrally) and the level of their motivation to conform with other's behaviour in the society. The model can therefore be applied to predict people's intentions and prospective behaviour regarding tobacco consumption.

- *Theory of Trying* (Bagozzzi & Warshaw, 1990): This theory may be applied in the context of tobacco control in Mizoram, especially to effectively design social marketing campaigns to make people quit tobacco based on their existing attitude and intentions regarding quitting tobacco.

- *Cognitive Dissonance* (Festinger, 1957): The anti-tobacco campaigns in Mizoram may be designed in such a way that the target audience feels cognitive dissonance whenever they consume tobacco and the non-consumption behaviour is thus promoted as a means to eliminate that dissonance.

- *Theory of Interpersonal Behaviour* (Triandis, 1977): This model can be used to highlight the personal beliefs, values, social norms, feelings etc in forming consumption intention and subsequent consumption behaviour of tobacco consumers in Mizoram. The model can further explore the various encouraging factors that positively reinforce tobacco consumption and makes it habit forming behaviour among the youths.

- *Diffusion Theory* (Rogers, 1995): The steps to behaviour change (SBC) framework which is an adaptation of diffusion of innovation theory and the input/output persuasion model may be applied for promoting anti-tobacco behaviour among the youths in Mizoram.
- *Stages of Change Model* (Prochaska & DiClemente, 1984, 1986): This model can be applied in the context of tobacco control in Mizoram where the target market may be segmented based on the suggested stages and the social marketing campaign may be designed accordingly.

Section 5.10 explores the social marketing strategies for tobacco control in Mizoram. The WHO FCTC is the first global health treaty on tobacco control which requires its members "to implement comprehensive measures, covering both the demand for and supply of tobacco products, as well as counteracting the tobacco industry and promoting international cooperation for global action" (WHO, 2009). The six demand reduction policies under the MPOWER package (WHO, 2009) developed by WHO includes monitoring tobacco use and prevention policies, protecting people from tobacco smoke, offering help to quit tobacco use, warning about the dangers of tobacco use, enforcing bans on tobacco advertising and raising taxes on tobacco. Tobacco control in Mizoram would require a comprehensive yet specific social marketing strategy within the boundaries of a broad framework like the WHO FCTC. A social marketing strategic framework for tobacco control in Mizoram must begin with a social marketing mix plan for which the proposed social marketing mix model (Akhtar & Bhattacharjee, 2014) may be applied. Then under each element of this marketing mix, the models discussed earlier in section 5.8 may be applied to achieve desired tobacco control strategies. The 'Elaboration-Likelihhod Model', 'Heuristic-Systematic Model', 'Rossiter-Percy Model' and the 'FCB Model' may be applied to understand consumption decision and for effective communication strategy. Other models like the 'Health Belief Model', 'Theory of Trying' and 'Protection Motivation Theory' may be considered to understand the perception regarding tobacco's health related consequences among tobacco consumers and frame motivational interventions for them to quit. The 'Social Learning Theory', 'Theory of Reasoned Action' and theory of 'Interpersonal Behaviour' may be useful to

understand socio-cultural influences, personal beliefs and values in determining choice of tobacco consumption and the 'Diffusion Theory', 'Steps to Behavior Change' and 'Stages of Change Model' can be used to bring social change by motivating people to discard the pro-tobacco lifestyle. Therefore a combination of theories and approaches is necessary for making social marketing efforts and strategies to be more effective for tobacco control in Mizoram.

Chapter 6

Chapter 6 presents the chapter wise findings of all previous chapters and discusses the research questions which embodies the purpose of this entire research work. The research questions are discussed as follows:

Question 1: What are the prevalence, pattern and habits regarding tobacco consumption by undergraduate students in Mizoram?

The overall pattern and habits of tobacco consumption by undergraduate students in Mizoram may be understood by exploring factors like type of tobacco products consumed, frequency of tobacco use, quantity of tobacco purchased, daily expenditure on tobacco, time and place of consumption etc. There is wide range of tobacco products which are available in Mizoram such as cigarettes, gutkha, tuibur, zarda etc. Most of these tobacco products are easily available to the students even near their college campuses. According to the primary data, Indian branded cigarettes are the most popular type of tobacco product consumed by the respondents (34.49%), which is closely followed by Gutkha (31.01%) and Zarda (24.68%). There were also lesser yet substantial users of Zial (17.4%), Burmese Cigarettes (15.82%), Khaini (11.07%) and Tuibur (10.13%) among the respondents. In terms of frequency of tobacco use, the primary data revealed that majority (63.6%) of the Active Tobacco Consumers among the respondents were daily users, 19.9% of them are occasional users and 16.5% were light users (using 3 to 4 times a week) of tobacco. So it may be assumed that most undergraduate tobacco users in Mizoram are heavy users who consume tobacco every day. It must also be pointed that due to the addictive nature of tobacco the remaining medium and light tobacco users among the undergraduate students may also have a high potential of becoming heavy tobacco users in future.

Regarding the quantity of tobacco purchased at a time by the undergraduate students, it has been found that more than half (57.28%) of the respondents among Active Tobacco Consumers prefers to purchase tobacco products in single units. The remaining 37.97% prefers to purchase tobacco products in one full packet and only 4.75% among the respondents purchases tobacco in bulk quantities. Regarding the daily expenditure on tobacco by undergraduate students, it has been found that 80.06% of the Active Tobacco Consumers spend ₹30 or less, followed by 13.61% spending ₹31 to ₹50 and only a small section of respondents (6.33%) were spending more than ₹50 daily on tobacco products. Though, in general the higher expenditure on tobacco reflects higher usage by the respondents but the amount of daily expenditure on tobacco is also dependent on the type and brand of tobacco products being purchased by them. The choice of time and place for consuming tobacco by the undergraduate students reveals some important aspects about the situational environment like motivational impulses and amount of convenience related to tobacco consumption. 65.51% of the Active Tobacco Consumers consumes tobacco after meals, followed by 24.68% who generally consumes tobacco while they are spending time with their friends and 18.67% consumes tobacco in their idle time. The findings from the primary data shows that there may be strong psychological impulses which motivates tobacco consumers to consume tobacco during times such as cravings after meals, motivations (or peer pressure) from friends and lack of engagement in meaningful tasks or hobbies. Regarding the place of tobacco consumption, almost half (48.2%) of the respondents among the Active Tobacco Consumers usually consume tobacco outdoors. The remaining 18.35% of them consume tobacco inside their home or hostel and 7.91% of them consume tobacco inside their college campuses. Also, 25.32% of the respondents say that they consume tobacco in all of these places which points at their strong addiction to tobacco. The high percentage of students consuming tobacco outdoors may be because of the fact that outdoor environment may be less restrictive compared to home, hostel or college campuses which further points out to the fact that the ban on smoking at public places may not have been strictly enforced at many places. Though, it has also been found that 69.3% respondents among the Active Tobacco Consumers generally avoids tobacco consumption in public places but at the same

time there are 10.76% respondents who does not follow the same and the rest 19.94% were not sure about tobacco consumption at public places. In fact, there were less than half of the respondents (49.37%) who disagreed that they do not mind breaking rules regarding public smoking whereas the rest 25.63% agreed and 25% were not sure about such things. Therefore overall, there are considerable numbers of college students who may consume tobacco or smoke in public places. The brand loyalty among the undergraduate Active Tobacco Consumers is divided as 40.51% of the respondents agreed, 25.32% disagreed and the rest 34.18% were not sure that they normally purchase tobacco products of a particular brand. It has also been found that the most important factors for choosing a particular brand by the respondents is "*Easy Availability*" followed by "*Flavor and Feel*" and "*Low Price*".

Question 2: *What is the decision-making process adopted for consuming tobacco products by undergraduate tobacco consumers in Mizoram?*

The consumer decision-making for tobacco by undergraduate tobacco consumers in Mizoram has been elaborately explained using the Schiffman and Kanuk (2007) model of consumer decision-making. The undergraduate tobacco consumers are influenced by tobacco marketing in the form of point-of-sales displays, attractive packaging, extensive and targeted distribution strategies, and indirect promotions. The socio-cultural influences include tobacco consumption in family, friends, peer-pressure and general acceptance for tobacco consumption in the society. Such strong external influences tend to overpower the general awareness of harmful effects of tobacco. There are many motivating factors for tobacco consumption which includes personal possession of tobacco, sight of others consuming tobacco, display in shops and attractiveness of tobacco packaging. Active Tobacco Consumers have a strong pro-tobacco attitude where they perceive tobacco differently from Non Tobacco Consumers and are more likely to have other addictive habits. They gives importance to factors such as '*easy availability*', '*flavour and feel*' and '*low price*' while evaluating alternatives for tobacco consumption. Male tobacco consumers are more inclined towards smoking and female consumers are more inclined towards smokeless tobacco. Majority of the Active Tobacco Consumers spend ₹30 or less on

tobacco on a daily basis and prefers to purchase them in single units. There is generally a lack of strong brand loyalty among undergraduate tobacco consumers. Some of the important situational triggers for tobacco consumption include post-meal cravings, group influence and/or peer-pressure and lack of engagement to meaningful tasks. Many Active Tobacco Consumers also feels that tobacco consumption relives stress. However, many undergradute tobacco consumers have expressed their willingness to quit tobacco and some of them are already trying to quit. Majority of them are also confident that they can successfully quit tobacco. The graphic health warning on the tobacco packets has been also found to be decreasing the desire to consume tobacco among some tobacco consumers. By applying the theory of reasoned action (Fishbein & Ajzen, 1975), it may be concluded that the general positive attitude coupled with the subjective norm towards tobacco consumption leads to positive intentions which are manifested in the form of tobacco consumption by undergraduate tobacco consumers in Mizoram. The addictive property of tobacco and the various other factors discussed above further reinforces and facilitates the continuation of such behaviour.

Question 3: How socio-economic backgrounds, cultural and psychological factors influence attitudes and behaviour towards tobacco consumption by undergraduate students in Mizoram?

There are several socio-economic factors that indicate a distinct pattern in tobacco consumption by undergraduate students in Mizoram. The two colleges that were selected for the study represents two contrasting districts in Mizoram in terms of population, economic development, level of urbanization etc. From the primary data it has been found that there are 59.75% and 69.49% active tobacco consumers among the respondents in Pachhunga University College and Government Saiha College respectively. The substantially higher prevalence of tobacco consumers among the undergraduate students of Saiha compared to Aizawl suggests that there may be some regional factors that determine the level of tobacco consumption among the population. These may be either due to differences in socio-economic conditions and/or difference in the effectiveness of tobacco control measures carried out in both

these regions. This trend is actually in line with the global phenomenon where the relative success of reducing tobacco use in developed countries is contrasted by sharp increase of tobacco use in developing countries (Brandt, 2007). Therefore, at a macro level, low economic development linked with people's lifestyle may indicate higher tobacco consumption. On the other hand, the income patterns from the primary data also suggests that economic constraints could be a key factor for the motivation to quit tobacco among the Past Tobacco Consumers and higher income or affordability may be a motivational factor for many undergraduate Active Tobacco Consumers to continue the habit of tobacco consumption. It has been also found that 69.3% of the Active Tobacco Consumers among the respondents agrees that the cost of tobacco consumption is high and respondents who are financially independent or partially dependent are more inclined towards tobacco consumption than students who are financially dependent. This also corresponds to the findings summarized by WHO (n.d.) across various countries, where it has been concluded that "price and consumer disposable income are the two major determinants of demand for tobacco products" where "increase in price causes tobacco consumption to decrease irrespective of the income status of countries" and "increase in income leads to increase in tobacco consumption particularly in low income settings". Also, "with growing income, consumers' preference shift to higher priced tobacco products".

In order to understand the role of socio-cultural influences for tobacco consumption in Mizoram, the Social Learning Theory (Bandura, 1977) may be refereed, which suggests that individual learning is strengthened by social reinforcement of learned behaviour. There exists a lot of peer pressure, family influences and influences in the society which has contributed in developing a collective pro-tobacco mind-set among the younger generation in Mizoram. According to the Primary data, there are more percentage of Active Tobacco Consumers (83.54%) and Past Tobacco Consumers (80.49%) than Non Tobacco Consumers (72.73%) having family members who consumes tobacco. The higher incidence of tobacco consumption in the family members of both Active and Past Tobacco Consumers makes it likely that such students have been exposed to a family environment which influenced them towards tobacco consumption. According to the primary data, 'Friends' was the highest

ranked person who have influenced or initiated the respondents to consume tobacco. A substantial number of respondents also ranked the 'Common People in the Society' for their influence to tobacco consumption. The societal perception regarding tobacco consumption in Mizoram can be further assessed from the findings of the primary data. 86% of the respondents agree that using tobacco is likely to increase their chances of getting cancer and 89% of the respondents agree that tobacco or smoking kills. In spite of people's awareness about tobacco's effect on health in Mizoram, the society in general does not offer strong resistance against tobacco consumption. Though the respondents are mostly against the view that smoking is fashionable but 12.6% of all respondents does considers smoking as fashionable and around 22.4% of all respondents agrees that they do not have any objection regarding their partner's tobacco consumption. Out of all the respondents, 31.8% agrees that consuming tobacco or smoking is an easy way to socialize with others, 17.2% agrees that it is unfriendly to refuse when other offers them tobacco and 19.4% does not agree that smoking or tobacco consumption is generally disapproved in public places. All these findings suggest that there exists a considerable amount of peer pressure and societal approval for undergraduate students regarding tobacco consumption in Mizoram.

Question 4: *What is the role of different organisations regarding prevention and control of tobacco consumption in Mizoram?*

The Government of Mizoram has implemented the National Tobacco Control Programme (NTCP) in Mizoram as Mizoram State Tobacco Control Programme (MSTCP) and established the Mizoram State Tobacco Control Society (MSTCS) which is entrusted with the task to implement the State Tobacco Control Programme. To ensure the strict enforcement of COTPA in the state, the Government of Mizoram has taken several initiatives in the past like authorizing all ranks of police personnel to enforce Section 4, 6 (a) & (b) and forming Anti-Tobacco Squads (Hmar, 2018), enforcement of prohibition of smoking in public places in government offices, forming special committee to implement Article 5.3 of WHO FCTC and so on.

Since the beginning of its formation, MSTCS has taken various initiatives such as implementing projects like "Advocacy & Mobilization for Smoke Free Mizoram and Effective Tobacco Control Implementation in the State" and "Advancing Tobacco Control in Mizoram through Capacity building, Strengthening National Tobacco Control Programme and Effective Enforcement of Tobacco Control Laws" in Mizoram. MSTCS also runs various Tobacco Control Cells across the state which offers treatment and counselling for people to quit tobacco. Over the years, the MSTCS has successfully carried out anti-tobacco campaigns and engaged various other organizations like educational institutes, churches and other non-governmental organizations to the cause of tobacco control in Mizoram. The inclusion of tobacco education in school curriculum, inclusion of thematic topic on tobacco and health in Church services and adoption of tobacco free community in Thingsul Tlangnuam (Hatzaw, 2014) are among some of the notable achievements of the MSTCS. Another organization that is dedicated to the cause of reducing tobacco consumption in Mizoram is the Indian Society on Tobacco and Health, Mizoram Chapter (ISTHMC). ISTHMC organized the first ever 'World No Tobacco Day' in Mizoram in collaboration with the Tobacco Society of Mizoram, Department of Health, Government of Mizoram (Hatzaw, 2014). ISTHMC works closely with MSTCS and partners in many of its tobacco control programmes and initiatives. Both ISTHMC and MSTCS have been awarded by the World Health Organization for their exemplary services and commendable contribution to advocacy and awareness of tobacco to public-private partnership. Besides, these two organizations dedicated primarily to the cause of tobacco control; there exists other notable non-governmental organizations like the YMA, MHIP, MZP, MJA etc. which exercises powerful influence on people and society. These organizations has also partnered with the MSTCS and ISTHMC on a number of occasions for the cause of tobacco-control initiatives like raising awareness. For instance, the MHIP had done a state-wide campaign against *gutkha* and many YMA branches has imposed ban on selling *gutkha* in their respective areas. Similarly, the MJA in association with the MSTCS and supported by The Union, an international voluntary scientific organisation had organized one day Media Workshop on Tobacco Control in Mizoram and the MZP had jointly organized the Youth MPOWER summit with MSTCS. The religious

organizations especially the Churches which remain strong critic of alcoholism in Mizoram were silent for a long time regarding the issue of tobacco consumption (PahrüPou, 2017). However, there are some initiatives like Presbyterian Church which have a policy not to recruit probationary officers addicted to tobacco (Zorammuana, 2010), the Seven Day Adventist Church has a general view against tobacco considering it to be "unclean" for human consumption and the Presbyterian Church had included the Thematic topic on tobacco and health in the Wednesday Night church service (Hatzaw, 2014).

It may be concluded that the relentless efforts by organizations especially the MSTCS and ISTHMC, the MSTCP has seen considerable progress. This is evident from the comparison of GATS 2009-2010 with GATS 2016-2017 reports where the overall tobacco prevalence in Mizoram has come down to 58.7% from a staggering 67.2%. However, it cannot be denied that a prevalence of 58.7% is still alarmingly high and therefore, there is a need to further step up measures to reduce tobacco consumption. There are few areas and challenges which needs greater attention and control from the government and other organizations such as free availability of contraband cigarettes, free availability of tobacco products near prohibited areas and instances of tobacco use in public places. On a positive note, there exists a very good opportunity to have greater engagement of the various influential non-governmental and religious organizations towards promotion of an anti-tobacco mindset and culture among the people in Mizoram. However, the true potential of these organizations in this regard still remains underutilized.

Question 5: *How can we improve the social marketing efforts and strategies and have a comprehensive and integrated approach for prevention and control of tobacco consumption in Mizoram?*

There is a need to have a customized yet comprehensive social marketing plan for the prevention and control of tobacco consumption in Mizoram. There is also a need to create a synergy among the efforts of various organizations that are working for the cause of tobacco control in Mizoram. The MSTCS with its position as the central nodal agency for tobacco control in Mizoram may take a leadership role in devising a

comprehensive social marketing plan with active support and participation from various other organizations like the ISTHMC. In order to have a compressive social marketing plan, a marketing mix strategy that identifies the key elements of social marketing is essential. The social marketing mix which includes the 4Ps, namely: *Proposition, Perception, Platform* and *Persuasion* (Akhtar & Bhattacharjee, 2014) may be applied in this regard. Singh and Ladusingh (2014) suggested a targeted, population-based approach to control and reduce tobacco consumption in India. For a relatively permanent or long term solution to the problem of tobacco prevalence in Mizoram, the social marketing efforts must have two parallel running approaches based on a segmentation strategy which segments the target population into two distinct segments of existing tobacco consumers and prospective future tobacco consumers. The existing tobacco consumers may be addressed and targeted under a curative approach and the prospective future tobacco consumers may be targeted under a preventive approach. The concepts of preventive and curative approach is generally used in field of medicine and healthcare services and they also forms essential part of the WHO's definition of primary health care (WHO, 2019). These two approaches, in the context of social marketing for tobacco control in Mizoram are discussed as follows:

A. The Curative Approach: This is where the social marketing efforts are planned and directed towards the existing consumers of tobacco and ensuring them to quit. For this approach there are certain theoretical models which can be applied. Using the Protection Motivation Theory (Rogers, 1975), it is possible to understand how tobacco consumers perceives the health related threats caused by tobacco and find out their intentions to quit or continue tobacco consumption. It has been revealed from the primary data that 40.5% of the respondents among the Active Tobacco Consumers are aware that they have some health problem caused due to tobacco and 22.78% have associated the word *"harmful"* with the word *"tobacco"*. Also, 82.1% of the Active Tobacco Consumers agree that using tobacco is likely to increase their chances of getting cancer and 87.66% agrees that tobacco or smoking kills. This perception is even higher in the GATS 2 survey which revealed that 96.7% adults believed that smoking and smokeless tobacco causes serious illness. This indicates,

there exists a perceived 'vulnerability' from the respondent's threat appraisal about tobacco consumption. Therefore, the social marketers have to stress and communicate the message to the target tobacco consumers that quitting tobacco is going to avoid or substantially reduce their existing or future health problems. It may be noted that 69.3% of the Active Tobacco Consumers agrees that the monetary cost of consuming tobacco is very high. Therefore, the Health Belief Model which explores the perceived health risks associated with tobacco consumption and the costs and benefits of quitting it can be applied to encourage tobacco consumers participating in quit intervention programs by social marketers. The Elaboration-Likelihood Model (Petty & Cacioppo, 1983, 1986) can also be useful in designing effective message content to persuade tobacco users to quit tobacco and the Heuristic-Systematic Model (Chaiken, 1987) can be applied to ensure systematic processing of such persuasive message by the target audience. Campaign messages should also be able to increase the Cognitive Dissonance (Festinger, 1957) among the existing tobacco consumers whenever they consume tobacco and the non-consumption behaviour should be promoted as a viable alternative to eliminate that dissonance. As per the primary data regarding the intention to quit, 45.57% Active Tobacco Consumers expressed their desire to quit tobacco or smoking in future, 32.28% of them are already trying to quit and 69.3% of them agrees that they believe they can successfully quit tobacco. According to GATS 2, 53.5% current smokers and 71.2% current smokeless tobacco users have planned to or were thinking about quitting tobacco. The Theory of Trying (Bagozzzi & Warshaw, 1990) can be used to effectively design social marketing campaigns to make people quit tobacco based on their existing attitude and intentions regarding quitting tobacco. To segment the target tobacco consumers, the Stages of Change Model (Prochaska & DiClemente, 1984, 1986) can be applied which identifies six specific stages of change that people move through, namely: *Pre-contemplation, Contemplation, Preparation, Action, Maintenance and Termination* and suggests appropriate types of intervention according to the stages. Overall, as recommended by Mohan & Lando (2016), tobacco cessation programs should be made a paramedical subject and included as a primary health care service in Mizoram. According to the findings from the primary study, it has been also revealed that there are significant associations between
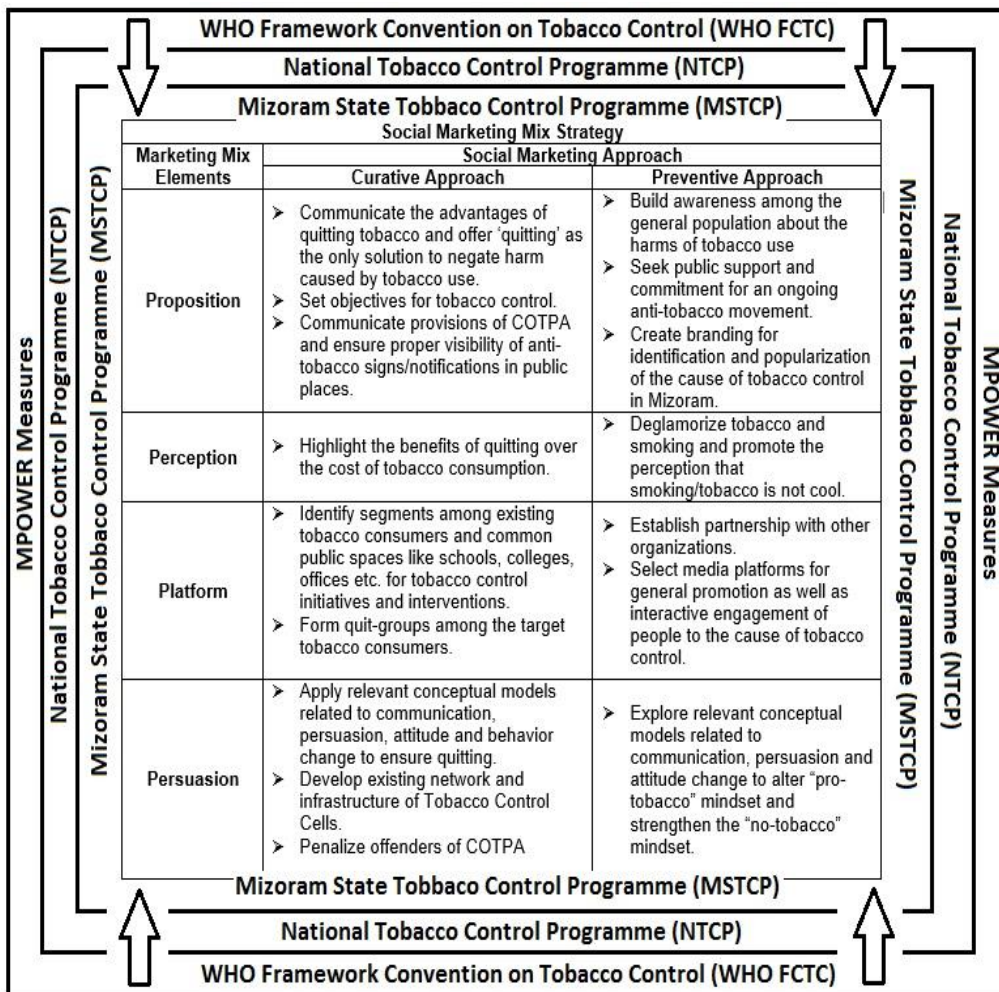
genders and the type of tobacco products consumed by the respondents. Therefore, a gender specific tobacco control approach such as targeting women users of smokeless tobacco may be effective. In this context, it may be noted that the Swedish tobacco control efforts with a gender specific approach has been successful in decreasing female smoking in Sweden (Patja et al., 2009).

B. The Preventive Approach: This is about creating an overall environment as well as increasing individual sensibilities against tobacco consumption among all the non-consumers of tobacco and the general public in Mizoram so that an anti-tobacco attitude is strengthened and retained as part of their behaviour. In this regard the Theory of Reasoned Action (Fishbein & Ajzen, 1975) can be applied to predict people's intentions and prospective behaviour regarding tobacco consumption. The theory explores how people hold particular beliefs regarding consumption and non-consumption of tobacco, how they view its respective consequences and the level of their motivation to conform to other's behaviour in the society. As per the primary data, Friends were most common influence for most of the respondents to consume tobacco. Also 83.5% of the Active Tobacco Consumers have members in their family who consumes tobacco. So it is likely that very often and at some point of time, the family, friends and society in general acts as an influence and/or tacit approver to tobacco consumption for the non-tobacco consumers. There is a need for creating greater awareness especially for families in Mizoram regarding responsible tobacco use to protect the health and wellbeing of their younger generation. Therefore, the preventive approach of social marketing in this regard needs to challenge this existing societal norm and pro-tobacco mindset among the substantial section of the population. Proper media platforms should be utilized to engage people for the cause of tobacco control and partnerships between various organizations in this regard should be encouraged. There should be a branding strategy for popularizing the cause of tobacco control and providing momentum to the on-going anti-tobacco movement in Mizoram. The policy parameters and legal factors are also crucial in this regard which requires strict enforcement of the section of COTPA, 2003 and its subsequent provisions in Mizoram. Special attention should be given towards restricting sale of contraband tobacco products, sale of tobacco products to

minors, sale of tobacco products in and around educational institutes and ensure no-smoking in prohibited public places. From a policy perspective, besides imposing a blanket ban on tobacco advertising, it is also recommended to be vigilant about tobacco company's innovative and sometimes manipulative sales and marketing strategies. Therefore, a supportive socio-cultural and legal environment must be created to decrease demand for tobacco and discourage tobacco consumption in all public places.

The proposed social marketing framework for tobacco control in Mizoram (Exhibit 1) incorporates the social marketing mix and the curative and preventive approaches as discussed above.

Exhibit 1
Social Marketing Framework for Tobacco Control in Mizoram

Global evidences suggest that multi-component intervention strategies are effective in reducing tobacco consumption among the youth (Flay, 2000; McAlister et al., 1979; Vartiainen et al., 1990). Mishra et al., (2005) have advocated the use of a multi-component approach that targets the social, environmental, and intrapersonal factors which influence tobacco use among the youth. A comprehensive and integrated approach for prevention and control of tobacco consumption in Mizoram may use strategic social marketing within the policy parameters of WHO FCTC and MPOWER guidelines, NTCP and MSTCP (Exhibit 1). The WHO FCTC provides the foundation and normative structure for controlling global tobacco use (Reddy et al., 2010). Inputs from GATS are also important for national and state-level policymakers to focus on specific tobacco-related challenges (Lal et al., 2015). The social marketing mix strategy should have a parallel focus on both curative approach targeted to the existing tobacco consumers and preventive approach targeted to the general public. The Proposition strategy under the curative approach should include measures to create awareness about the harms of tobacco use among tobacco consumers and offer 'quitting' as the only solution to it. Objectives should be set for tobacco control measures such as target for overall usage reduction and specific contents should be developed for the message to communicate the idea of "quitting tobacco" and its advantages for the tobacco users preferably in vernacular language and relatable non-verbal means like images and graphics. The provisions of COTPA, 2003 which imposes conditions and restrictions on tobacco sales, purchases and consumptions by the tobacco users should be communicated among the targets. Tobacco-free (TF) policies which have been recognized to be globally effective in reducing firsthand and second-hand smoke (Ickes., 2017; Seitz., 2018) and the proper visibility of anti-tobacco signs/notifications in public places must be ensured. The Proposition strategy under preventive approach should include measures to build awareness among the general population specially the younger generation about the harms of tobacco use and seek their support and commitment for an ongoing anti-tobacco movement. It is important that the non-smokers are aware of the harms of passive smoking and conscious about their right to a smoke-free environment (Hu et al., 2013). The strategy should also include branding efforts for identification and popularization of the cause of tobacco control in Mizoram. The Perception strategy

under curative approach should take measures in highlighting the benefits of quitting tobacco over the cost of consuming tobacco. On the other hand, the Perception strategy under preventive approach should include measures which deglamorize tobacco and smoking in the minds of the younger generation and promote the perception that it is not "cool" to smoke or consume tobacco. The Platform strategy under curative approach should start by identifying different segments among existing tobacco consumers such as school students, college students, office employees etc. Next, it should identify common public spaces like schools, colleges, offices etc. for tobacco control initiatives and interventions such as forming quit-groups among the target tobacco consumers. On the other side, the Platform strategy under preventive approach should try to establish long-term partnership with civil society, non-governmental organizations and associations like YMA, Churches, MZP, MHIP etc. It should also select media platforms like local television channels, newspapers, sport events, social media etc. for general promotion as well as interactive engagement of people to the cause of tobacco control. The Persuasion strategy under curative approach should make use of relevant conceptual models related to communication, persuasion, attitude and behaviour change to ensure quitting by tobacco consumers, try to develop the network and infrastructure of existing Tobacco Control Cells and Cessation Clinics in the State and penalize the offenders of the COTPA, 2003. Finally, the Persuasion strategy under preventive approach should explore relevant conceptual models related to communication, persuasion and attitude change to alter the "pro-tobacco" mindset and strengthen the "no-tobacco" mindset among the general population.

Chapter 6 also includes specific suggestions based on the findings of the previous chapters and the proposed social marketing framework for tobacco control in Mizoram. The suggestions for making tobacco control strategies more effective in Mizoram include (a) focusing on public communication and engagement, (b) ensuring participation of various organizations, (c) strengthening existing legal environment, (d) making effective and accessible interventions, and (e) monitoring, feedback and control.

Conclusion

The present study has explored the socio-economic background of tobacco consumers, decision-making process and tobacco consumption habits and factors affecting tobacco consumption among the undergraduate students in Mizoram. It also discussed the tobacco control measures by different organizations in Mizoram and suggested an appropriate strategic social marketing framework for the prevention and control of tobacco consumption in Mizoram. The various research questions were framed according to the objectives of the research and have been duly discussed by incorporating the findings from previous chapters. At the end specific suggestions were given for making tobacco control strategies more effective in Mizoram.