EFFECTS OF POSITIVE REINFORCEMENT COUNSELLING TECHNIQUE ON TOBACCO SMOKING AMONG SECONDARY SCHOOL STUDENTS IN KATAGUM, BAUCHI STATE-NIGERIA

BY

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(B. Ed Language Arts A.B.U. Zaria)

MED/EDUC/42442/2012-2013

A DISSERTATIONSUBMITTED TO THE DEPARTMENT OF EDUCATIONAL PSYCHOLOGY & COUNSELLING AHMADU BELLO UNIVERSITY ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS DEGREE IN GUIDANCE AND COUNSELLING

August, 2016

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AHMADU BELLO UNIVERSITY, ZARIA.

August, 2016

DECLARATION

I declare that this work entitled 'EFFECTS OF POSITIVE REINFORCEMENT COUNSELLING TECHNIQUE ON TOBACCO SMOKING AMONG SECONDARY SCHOOL STUDENTS IN KATAGUM, BAUCHI STATE-NIGERIA' was carried out by me in the Department of Educational Psychology and Counselling. The information derived for the literature has been duly acknowledged in the text and list of references provided. No part of this dissertation had previously been used for another degree or diploma at any University.

_____ _____

Jummai Gajere UMAR Date

CERTIFICATION

This dissertation entitled 'EFFECTS OF POSITIVE REINFORCEMENT COUNSELLING TECHNIQUE ON TOBACCO SMOKING AMONG SECONDARY SCHOOL STUDENTS IN KATAGUM, BAUCHI STATE-NIGERIA ' by Jummai Gajere UMAR meets the regulations governing the award of Master's Degree (M. Ed) Guidance and Counselling of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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Dr Mustapha Ibrahim Abdullahi Date
Chairman Supervisory Committee

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Dean, School of Postgraduate Studies

DEDICATION

This work is dedicated to my late Mother Hajiya Fatima Yalwa Aliyu, my late Grand Mother Hajiya Mariya Abdullahi, my late brothers Bello Baba and Tata Gajere who did not live to see the end of this programme. May Jannatul Firdaus be their permanent abode.

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ABSTRACT

The study investigated the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in Katagum, Bauchi State. The research design adopted for this study was a quasi-experimental involving a pre-test and post-test research design. Population of the study consists of 1772 SS2 students from twelve senior secondary schools. The instrument used for this study Tobacco Smoking Assessment Scale (TSAS) was designed by the researcher. Section A sought for the Demographic data while Section B contains 15 items that may likely be the reasons of tobacco smoking. Data collected were analysed using Spearman's coefficient correlation to find out the reliability of the instrument. A coefficient correlation of 0.778 was obtained. The procedure for data collection in this study was in three stages, the pre-test, treatment session and post-test, the subjects were pretested then exposed to positive reinforcement counselling technique treatment for six weeks; each session lasted for 30 minutes. The Treatment group were post tested after the treatment. The data collected were analysed.Null hypothesis one was tested using the inferential statistics of paired sample t test, null hypothesis two and three with the independent t test. It was found out that significant difference existed on the effect of Positive reinforcement counselling technique on reducing tobacco smoking among secondary school students ($t = 23.09$ and $p = 0.00$), There was no significant difference in effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students ($t = 0.97$ and $p = 0.34$) and There was no significant difference of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area ($t = 0.73$ and $p = 0.47$). Based on the findings,it was recommended that the school counsellors should make use of positive reinforcement counselling technique to reduce and manage the tobacco smoking habit of the secondary school students among others

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OPERATIONAL DEFINITION OF TERMS

The following are the operational definition of terms:

Positive Reinforcement: giving of reward following a replacement of undesired behaviour with a desired behaviour with the purpose of maintaining it.

Tobacco Smoking: the practice of burning tobacco and inhaling the smoke, it include simply taking tobacco smoke into the mouth, and then releasing it.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

It is the ambition of every parent to see the successful graduation of their children or wards without any behavior problem. One of the major problems constituting a stumbling block to the achievement of that ambition is the problem of adolescents, particularly on drug and substance abuse. One of the substances commonly abused by the adolescents particularly of secondary school level is nicotine, which has been classified as one of the leading ‘’gateway’’ drugs. The gateway drugs have been described as the substances people tend to try first when they start using drugs. This substance has been classified along with alcohol and marijuana. Personal experiences by the researcher in some secondary schools in Bauchi state show that students hide themselves in groups confining themselves in obscured places during break times to indulge in cigarette smoking which is harmful to their health.

Cigarette smoking remains one of the foremost causes of preventable disease and death across the world. In the United States, approximately 23% of adults are regular smokers (Center for Disease Control [CDC], 2002) and smoking is associated with one in every five deaths (CDC, 1999). Recent reports show that the rate at which people quit smoking in clinical trials are on the decline and suggest that those smokers able to quit relatively easily have done so (Irvin & Brandon, 2000 and Irvin, Hendricks and Brandon, 2003). The remaining smokers are believed to be those who are particularly dependent or have disproportionate difficulty quitting. It has been suggested that the recalcitrant nature of remaining smokers reflects underlying psychological and biological factors rendering these individuals highly resistant to change and disproportionately prone to relapse following a quit attempt (Gilbert & Gilbert, 1995 and Gilbert et al., 1998).

In Nigeria; according to Global Adult Tobacco Survey Country Report (2012). In 2012, 5.6% (4.7 million) Nigerian adults aged 15 years or older currently used tobacco products: 10.0% (4.2 million) of men and 1.1% (0.5 million) of women. Overall, 3.9% (3.1 million) of adults (7.3% of men and 0.4% of women) currently smoked tobacco, and 3.7% (3.1 million) of adults (7.2% of men and 0.3% of women) currently smoked cigarettes. Overall, 2.9% of adults (2.4 million) were daily smokers (5.6% of men, 0.3% of women) while 0.9% (0.8 million) were occasional smokers (1.8% of men and 0.1% of women). Daily cigarette smokers smoked an average of 8 cigarettes per day; 7 cigarettes per day in urban areas and 9 cigarettes per day in rural areas. More than 60% of 20 to 34 year old males who had ever smoked on a daily basis started smoking daily before the age of 20 years. More than half of all current daily tobacco users (55.3%) had their first tobacco use of the day within 30 minutes of waking up. Smokeless tobacco products were used by 1.9% of adults (1.6 million) (2.9% of men and 0.9% of women). By region, South East has a higher percentage of smokeless tobacco users compared to other regions in Nigeria

Many teenagers and younger children inaccurately believe that experimenting with smoking or even casual use will not lead to any serious dependency. In fact, the latest research shows that serious symptoms of addiction – such as having strong urges to smoke, feeling anxious or irritable, or having unsuccessfully tried to not smoke – can appear among youths within weeks or only days after occasional smoking first begins(Eke & Iscan, 2002).The average smoker tries their first cigarette at age 12 and may be a regular smoker by age 15 (Moszczynski, Fitzpatrick & Blair, 2001). Every day, more than 3,500 kids try their first cigarette and about 1,000 other kids under 18 years of age become new regular, daily smokers. Almost 90 percent of

youths that smoke regularly report seriously strong cravings, and more than 70 percent of adolescent smokers have already tried and failed to quit smoking (DiFranza, 2002).

Part of the addictive power of nicotine according to Caumo, (2001) comes from its direct effect on the brain. In addition to the well understood chemical dependency, cigarette smokers also show evidence of a higher rate of behavioral problems and suffer certain immediate effects such asIncreases Stress;Contrary to popular belief, smoking does not relieve stress. Studies have shown that on average, smokers have higher levels of stress than non-smokers (Eke & Iscan, 2002).

. The feelings of relaxation that smokers experience while they are smoking are actually a return to the normal unstressed state that non-smokers experience all of the time.Additionally, it alters brain chemistry; When compared to non-smokers, smokers brain cells- specifically brain cell receptors- have been shown to have fewer dopamine receptors (Committee on Drugs, 2001). Brain cell receptors are molecules that sit on the outside of the cell interacting with the molecules that fit into the receptor, much like a lock and key. Receptors (locks) are important because they guard and mediate the functions of the cell. For instance when the right molecule (key) comes along it unlocks the receptor, setting off a chain of events to perform a specific cell function. Specific receptors mediate different cell activities.

Smokers have fewer dopamine receptors, a specific cell receptor found in the brain that is believed to play a role in addiction(Trauth, 2000). Dopamine is normally released naturally while engaging in certain behaviors like eating, drinking and copulation. The release of dopamine is believed to give one a sense of reward. One of the leading hypothesis regarding the mechanism of addiction theorizes that nicotine exposure initially increases dopamine transmission, but subsequently decreases dopamine receptor function and number. The initial increase in dopamine

activity from nicotine results initially in pleasant feelings for the smoker, but the subsequent decrease in dopamine leaves the smoker craving more cigarettes(Fredriksson, Bergstrom & Asman, 2002).

Other effects of tobacco smoking; especially to the adolescents according to DiFranza, 2002) includes, Bronchospasm- "airway irritability" or the abnormal tightening of the airways of the lungs, Increases phlegm production in which The lungs produce mucus to trap chemical and toxic substances, Persistent cough, Decreased physical performance, Atherosclerosis; a process in which fat and cholesterol form "plaques" and stick to the walls of an artery, Thrombosis; a process that results in the formation of a clot inside a blood vessel, smoking, even light smoking, causes the body's blood vessels to constrict (vasoconstriction) and Young adult smokers have a resting heart rate of two to three beats per minute faster than the resting heart rate of young adult nonsmokers (Righetti & Sessa, 2001) among other deadly diseases. To assist the young adolescents out of this trouble, an effective technique could be the positive reinforcement counselling technique.

In behavioral psychology, reinforcement is a consequence that will strengthen an organism's future behavior whenever that behavior is preceded by a specific antecedent stimulus. This strengthening effect may be measured as a higher frequency of behavior (pulling a lever more frequently), longer duration (pulling a lever for longer periods of time), greater magnitude (e.g., pulling a lever with greater force), or shorter latency (pulling a lever more quickly following the antecedent stimulus)(Johnson & Slach, 2001). Although in many cases a reinforcing stimulus is a rewarding stimulus which is "valued" or "liked" by the individual (money received from a slot machine, the taste of the treat, the euphoria produced by an addictive drug), this is not a requirement. Indeed, reinforcement does not even require an

individual to consciously perceive an effect elicited by the stimulus. (Winkielman, Berridge & Wilbarger, 2005). Furthermore, stimuli that are "rewarding" or "liked" are not always reinforcing: if an individual eats at a fast food restaurant (response) and likes the taste of the food (stimulus), but believes it is bad for their health, they may not eat it again and thus it was not reinforcing in that condition.Thus, reinforcement occurs only if there is an observable strengthening in behavior. In most cases reinforcement refers to an enhancement of behavior but this term may also refer to an enhancement of memory. One example of this effect is called post-training reinforcement where a stimulus (food) given shortly after a training session enhances the learning (Mondadori, Waser & Huston, 2005)

Much of the work regarding reinforcement began with behavioral psychologists such as Thorndike, Watson and Skinner and their use of animal experiments. Skinner is famous for his work on reinforcement and believed that positive reinforcement is superior to punishment in shaping behavior (Winkielman, Berridge & Wilbarger, 2005). At first glance, punishment can seem like just the opposite of reinforcement, yet Skinner argued that they differ immensely; he claimed that positive reinforcement results in lasting behavioral modification (long-term) whereas punishment changes behavior only temporarily (short-term) and has many detrimental side-effects. Skinner defined reinforcement as creating situations that a person likes or removing a situation he doesn't like, and punishment as removing a situation a person likes or setting up one he doesn't like (Shanks, 2010). Thus, the distinction was based mainly on the pleasant or aversive (unpleasant) nature of the stimulus.

Two other researchers, Azrin and Holz, expanded upon operant conditioning by focusing on the definition of punishment in their chapter to Honig's volume on operant behavior, and they

defined it as a "consequence of behavior that reduces the future probability of that behavior." Skinner's assumptions regarding reinforcement and punishment were thus challenged throughout the 1960s, and some studies have shown that positive reinforcement and punishment are equally effective in modifying behavior; that debate, however, continues in studies today as to whether or not reinforcement is more than or equally as effective as punishment (Domjan, 2003). According to Shanks, (2010) Thorndike also did some work regarding reinforcement in learning theory and believed that learning could occur unconsciously; that is, reinforcements or punishments could have an effect upon learning even if the person or organism is unaware of it. The research on the effects of positive and negative reinforcement alongside punishment continue today as those concepts apply directly to many forms of learning and behavior.

Positivereinforcement occurs when an event or stimulus is presented as a consequence of a behavior and the behavior increases (Domjan, 2003). Since tobacco smoking is a behaviour which is learned or acquired and certainly that behaviour can be changed for better.

1.2 Statement of the problem

Despite the hazards associated with tobacco smoking there is high increase in the habit among the adolescents and youths. The widespread of tobacco smoking is no longer confined to small segments of a given population but cut across nooks and corners of the society. Growing tobacco smoking is much more than a street problem as it has invaded the homes, work places and educational institutions affecting individuals of all ages and classes. Secondary school students in Bauchi state are no exceptions. The prevalence nature of the problem is so alarming that itrequires counselling intervention which prompted the researcher to attempt a way of addressing the problem through testing the effect of positive reinforcement counselling technique

in reducing tobacco smoking among secondary school students. Odebunmi (2008) affirms that tobacco is dangerous to health;it can destroy human life, and damages the traditional values, styles and national economy. Hundreds of thousands of people globally die every year from harmful effects of smoking. Other harmful, effects include the stench that lives on smokers breathe, environment and clothing. Other complications, resulting as harmful effect from smoking include chronic cough, decrease in the smoker's blood flow to body extremities such as fingers and toes which become dark, effect on the brain and the nervous system, rise in blood pressure, effect on heart rate which beats faster than normal and psychological dependency. It is against this background the researcher intends to establish the effectiveness of Positive Reinforcement Counseling Technique from Behaviour Therapy in minimizing tobacco smoking among secondary school students in Katagum Local Government of Bauchi state

1.3 Objectives of the Study

The objectives of this study were;

1. To assess the effect of positive reinforcement counselling technique on Tobacco smoking among secondary school students in Katagun, Bauchi State.
2. To determine the effect of positivereinforcement counselling technique on minimizing tobacco smoking among male and female secondary school students in Katagun, Bauchi State..
3. To examine the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in urban and rural schools in Katagun, Bauchi State..

1.4 Research Questions

The following research questions guided the study;

1. What is the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students?

2. What is the effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students?

3. What is the effect of positive reinforcement counselling technique on tobacco smoking among students in urban and rural schools?

1.5 Hypotheses

The following hypotheses guided the conduct of the study;

1. There is no significant effect of positive reinforcement counselling technique on tobacco smoking among secondary school students.

2. There is no significant effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students.

3. There is no significant effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area.

1.6 Significance of the Study

Several people stand to benefit from the findings of the study. They include the students, counselors, teachers, researchers and the government. Very few students who indulge in tobacco usage know about the negative effects. This study will help them know the negative consequences attached to tobacco smoking. It will also create feelings of belonging in them, at least for them to know that somebody cares about them and spend time trying to remedy their

problems and rehabilitate them in an emphatic manner which makes them feel accepted and wanted in the society.

Successful application of positive reinforcement technique in this research will be of benefit to counsellors as it willprovide information on how to minimize or solve problem of tobacco smoking among students. Counselors will not have to worry about unidentified causes of tobacco smoking among students in secondary schools, because this study will go a long way in detecting the possible causes and effects of the above problems.

This research will also help to minimizestudents' use of tobacco and other illegal substances, in the sense that it gives the feelings of somebody somewhere will always know when they use such drugs, this may help break the rather strong association with the use of tobacco. The success of this study will lead to replication of this study which will go a long way in reducing the risks adolescents involved themselves in the habit of tobacco smoking.

To the teacher,it will be of great benefit in the sence that the duty of the classroom teacher do not stop at imparting knowledge but also to assist in moulding the students character. Effect of tobacco smoking is enourmous as it could affect the students health. A student may not be able to assimilate what the teacher is saying if the student engages in tobacco smoking. This will be a source of concern to any serious teacher as suchreading through this work will help all efforts at eliminating the habit of tobacco smoking which will greately benefit the teachers.

The government will aslo benefit from the findings of this study as the government spends a lot of resources in the prevention and treatment of tobacco smoking related illnesses. Such funds could be channeled to other health related areas such as reducing child mortality rate and provision of drugs in the hospitals. Tobacco smoking has been a serious problem to successive

governments as the health risks associated with tobacco smoking is on the increase even when the menance is stoppable.

1.7 Basic Assumptions

For this particular research, the following assumptions were made:

1. That positive reinforcement counselling technique may have effect on tobacco smoking among secondary school students in Katagum, Bauchi State.
2. That the effect of positive reinforcement counselling technique may affect male and female students.
3. That the effect of positive reinforcement counselling technique on tobacco smoking among secondary schools may be affected by school location of the respondents.

1.8 Scope and Delimitations

This research was intended to find out the effect of positive reinforcement counselling technique from behaviour therapy in minimizing tobacco smoking among secondary school students in Katagum Local Government area of Bauchi State. This category of students was targeted for the study because at this stage they were prone to many behaviour problems (between 16 to 17 years) among which tobacco smoking is one. They were also not busy preparing for any external examination and were therefore more likely to co-operate with the researcher.

The study wasdelimited to only smokers in SS2 from Bauchi state with Katagum Local Government as focus. Within the Local Government two secondary schools were selected, one from urban, Government Girls College, Azare; one rural school; Government Secondary School, Matsango.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents a review of related literature on the nature and related factors to tobacco smoking among secondary school students, the conceptual and theoretical frameworks were also highlighted, Behaviour Therapy,Basic assumptions about human nature and behaviourbasic assumptions and goals of Behaviour Therapy were discussed, possible causes of tobacco smoking, harmful effects of tobacco on health, influence of tobacco use on hard drugs, influence of peer group on tobacco usage, positive reinforcement counselling technique to be used in order to minimize the prevalence nature of the problem and the summary.

2.2 Conceptual Framework

This sub-section presents the definitions of the concepts of tobacco smoking and Reinforcement

2.2.1 Concept ofTobacco Smoking

Tobacco smoking is the inhalation of smoke from burned dried or cured leaves of the tobacco plant, most often in the form of a cigarette. People may smoke casually for pleasure, habitually to satisfy an addiction to the nicotine present in tobacco and to the act of smoking, or in response to social pressure. In some societies, people smoke for ritualistic purposes.

Tobacco smoking is the practice of burning tobacco and inhaling the smoke (consisting of particles and gaseous phases). A more broad definition may include simply taking tobacco smoke into the mouth, and then releasing it, as is done by some with tobacco pipes and cigars. Smoking is a practice where a substance, most commonly tobacco, is burned and the smoke tasted or inhaled. This is primarily practiced as a route of administration for recreational drug use, as combustion releases the active substances in drugs such as nicotine and makes them

available for absorption through the lungs. It can also be done as a part of rituals, to induce trances and spiritual enlightenment. The most common method of smoking today is through cigarettes, primarily industrially manufactured but also hand-rolled from loose tobacco and rolling paper. Other smoking tools include pipes, cigars, hookahs and bongs. Smoking is one of the most common forms of recreational drug use. Tobacco smoking is today by far the most popular form of smoking and is practiced by over one billion people in the majority of all human societies. Less common drugs for smoking include cannabis and opium. Most drugs that are smoked are considered to be addictive. Some of the substances are classified as hard narcotics, like heroin and crack cocaine, but the use of these is very limited as they are often not commercially available.

Tobacco is an American plant (Nicotiana Tabacum) of the nightshade family, much used for smoking, chewing and as snuff. As medicine, it is narcotic, emetic and cathartic. Tobacco has a strong peculiar smell and an acrid taste. The leaves of the plant are prepared for smoking, chewing, snuffing etc, by drying and manufactured in various ways (Odebunmi, 2008). Smoking has been succinctly described as the inhalation of the smoke of burning tobacco encased in cigarettes, pipes and cigars. Casual smoking is the act of smoking only occasionally; usually in a social situation or to relieve stress. A smoking habit is a physical addiction to tobacco products. Many health experts now regard habitual smoking as psychological addiction and one with serious health consequences. When products made from tobacco leaves are smoked or chewed, nicotine chemically attached to the brain receptor to causing relaxing effect. The continued intake of nicotine causes addiction when the nicotine user become dependent on it and its effects on the addicted person's body and mind become a necessity.

According to Adenijo, (2001) "tobacco is a major industrial crop and is fast coming a major source of cash income for some peasant farmers in West Africa ". He added that Niger and Ivory Coast are leading in the producer of tobacco in West Africa. The most important part of tobacco plant is the broad leaves. The leaves are harvested and processed into cigars, cigarette, pipe tobacco and its burnt ash is often disinfectants or insecticide (Adenijo, 2001). There are however different varieties of tobacco plant. These include Virginian hybrid and barley. According to the international cancer congress (as cited in Folawiyo, 1998) wild claims are made by anti- tobacco people, some alleged that insanity was inherited from parents who used tobacco. Judge blamed cigarettes for corrupting the morals deadening the sense of young people. By 1939, as scientist began to look more closely at the physiological effects of smoking, it was noted by one cancer authority that the increase in the incidence of pulmonary carcinoma is due largely to the increase in cigarette smoking. In the United Kingdom the Health Education Authority, in its 1995 report confirmed that cigarettes smoke contained more than 4,000 chemicals of which many are known to be toxic, carcinogenic or magnetic. Then report estimates that 121,000 people per year die prematurely as a result of smoking. The causes of death were divided as 38 percent cancer of which two third are lung cancers, 34 percent heart and circulatory disease and, 28 percent respiratory illness. This physiological effect of smoking was supported by Nigerian Television authority (NTA) News reported of 31st may, 2000 which stated that tobacco constitutes 70% of cancer causative agents. And according to Kuti 2001(3) "over 9 million Nigerian smoke and over 3.5 million smoke more than 20 sticks a day". He added that the chemicals in cigarette damage the eyes, nose and throat with infections. Carbon dioxide, a component of the smoke, he said, enters the blood stream and combines with haemoglobin to form carbon haemoglobin, a substance which interferes with the body's ability to obtain and use oxygen from blood.

.According to the WHO about one-third of the world's male population smokes tobacco, 'with two-thirds of all the world's smokers residing in 10 countries'. In order they are China, India, Indonesia, Russia, the U.S., Japan, Brazil, Bangladesh, Germany and Turkey respectively. (This is not strange as over two-thirds of the world's population lives in those countries) The practice encountered criticism from its first import into the Western world onwards, but embedded itself in certain strata of a number of societies before becoming widespread upon the introduction of automated cigarette-rolling apparatus. Despite efforts to decrease tobacco use, smoking continues to be a leading cause of preventable morbidity and premature death. The associated economic burden is substantial, both in the form of direct costs (healthcare expenditures) and indirect costs (lost productivity), regardless of whether the burden is assessed from the standpoint of an employer, a health plan, or society as a whole. Cessation programs are considered among the most cost-effective in healthcare, and are often used as a benchmark for other medical interventions.

German scientists identified a link between smoking and lung cancer in the late 1920santi-smoking campaign, leading to the first in modern history, albeit one truncated by the collapse of the Third Reich at the end of the Second World War In 1950, British researchers demonstrated a clear relationship between smoking and cancer. Evidence continued to mount in the 1980s, which prompted political action against the practice. Rates of consumption since 1965 in the developed world have either peaked or declined. However, they continue to climb in the developing world.Smoking is the most common method of consuming tobacco, and tobacco is the most common substance smoked. The agricultural product is often mixed with additives and then combusted. The resulting smoke is then inhaled and the active substances absorbed through the alveoli in the lungs Combustion was traditionally enhanced by addition of potassium or other

nitrates. Many substances in cigarette smoke trigger chemical reactions in nerve endings, which heighten heart rate, alertness and reaction time, among other thingsDopamine and endorphins are released, which are often associated with pleasure. As of 2008 to 2010, tobacco is used by about 3 billion people (about 49% of men and 11% of women) with about 80% of this usage in the form of smoking. The gender gap tends to be less pronounced in lower age groups

2.2.2 Types and Methods of smoking tobacco

There are over sixty species of Nicotiana but only two major ones are put into use and addiction "Nicotiana tobacco" which is specie of tobacco with the large leaves. This specie is widely cultivated for smoking and chewing products. It can be found in South America. It belonged only to South America, which maintain its monopoly for over a hundred years. The second was the "Nicotina rustica", which is regarded as less desirable specie with smaller leaves. This was the species which existed in Eastern northern America and West Indies. (Odebunmi, 2008).

There are two types of tobacco which contain nicotine. They are smokeable tobacco which includes cigarettes, cigars and pipe tobacco. The second is smokeless tobacco product which includes chewing tobacco, moist and dry snuff. According to Odebunmi (2008), there are three types of smokers:

- Smokers who smoke for enjoyment. Such smokers smoke because they enjoy smoking.
- Habitual smokers: these are smokers who smoke regularly at certain times or during certain activity.
- Relief smokers: these are smokers who smoke to be able to cope better with certain situations

Tobacco Smoking

The most popular type of substance that is smoked is tobacco. There are many different tobacco cultivars which are made into wide variety of mixtures and brands. Tobacco is often sold flavored, often with various fruit aromas, something which is especially popular for use with water pipes, such as hookahs. The second most common substance that is smoked is cannabis, made from the flowers or leaves of Cannabis sativa. The substance is considered illegal in most countries in the world and in those countries that tolerate public consumption, it is usually only pseudo-legal. Despite this, a considerable percentage of the adult populations in many countries have tried it with smaller minorities doing it on a regular basis. Since cannabis is illegal or only tolerated in most jurisdictions, there is no industrial mass-production of cigarettes, meaning that the most common form of smoking is with hand-rolled cigarettes (often called joints) or with pipes. Water pipes are also fairly common, when used for cannabis are called bongs. A few other recreational drugs are smoked by smaller minorities. Most of these substances are controlled, and some are considerably more intoxicating than either tobacco or cannabis. These include crack cocaine, heroin, methamphetamine and PCP. A small number of psychedelic drugs are also smoked, including DMT, 5-Meo-DMT, and Salvia divinorum.

Even the most primitive form of smoking requires tools of some sort to perform. This has resulted in a staggering variety of smoking tools and paraphernalia from all over the world. Whether tobacco, cannabis, opium or herbs, some form of receptacle is required along with a source of fire to light the mixture. The most common today is by far the cigarette, consisting of a tightly rolled tube of paper, which is usually manufactured industrially or rolled from loose tobacco, rolling papers which can include a filter. Other popular smoking tools are various pipes and cigars. A less common but increasingly popular form is through vaporizers, which operate

using hot air convection by heating and delivering the substance without combustion; thereby decreasing health risks to the lungs. Other than the actual smoking equipment, many other items are associated with smoking; cigarette cases, cigar boxes, lighters, matchboxes, cigarette holders, cigar holders, ashtrays, pipe cleaners, tobacco cutters, match stands, pipe tampers, cigarette companions and so on. Many of these have become valuable collector items and particularly ornate and antique items can fetch high prices at the finest auction houses. A new development towards a healthier way of smoking has been made with the introduction of electronic cigarettes. These cigarettes do not contain the harmful substances tar or carbon monoxide and can be used as an alternative to smoking conventional cigarettes or as a means to gradually lower the nicotine input to help stop smoking. The most important part of tobacco plant is the broad leaves. The leaves are harvested and processed into cigars, cigarette, pipe tobacco and its burnt ash is often disinfectants or insecticide (Adenijo, 2001). There are however different varieties of tobacco plant. These include Virginian hybrid and barley.

According to Abdu (2008), there are different types of tobacco, among which are; Beedi, Cigarette, Cigar, Hookah, Kreteks, Pipe, Rolleys etc.

Beedis, these are similar to cigarettes, and are becoming increasingly popular in India and other South-East Asia. It produces three times more carbon monoxide and nicotine and five times more tar than regular cigarettes.

Cigarette

Cigarette smoking is the most common form of tobacco consumption. Because of the curing process, the smoke is mild enough to inhale in overdose quantities, unlike cigar, roll-your-own or pipe tobacco. Cigarettes also contain a number of additives, particularly to enhance taste. Cigarettes are smoked by some with a cigarette holder.

There is no credible evidence that “Low Tar,” “Light,” or “Ultra Light” cigarettes are safer than regular cigarettes. Most of these terms refer to the type of filter that is used, and can vary depending on the brand. In some countries, advertising cigarettes as being “Light” has been banned. Smoking cigarette increases mortality rate by 40% in those who smoke less than 10 cigarettes a day, by 70%in those who smokes 10-19 a day, by 90% in those who smoke 20-39 a day, and by 120% in those smoking two packs a day or more.

Roll-Your-Own

Roll-Your-Owns, often called rolleys or roll ups is very popular particularly in European countries; these are prepared from loose tobacco, cigarette papers and filter all bought separately.

Cigar

A cigar is generally puffed, not inhaled. Cigars come in many shapes and sizes, the most common being the "Corona", "Cigarillo", and "Robusto". The tobacco used is grown throughout the Caribbean in places such as the Dominican Republic, Nicaragua, Honduras, Jamaica, and Cuba, but also in countries in other regions such as Brazil and Indonesia. Cigars generally come available in 2 categories in reference to colour, "Natural" and "Maduro". "Natural" shades are ones that do not undergo a further fermenting process, unlike "Maduro" which in its construction involves a further fermenting process to darken and strengthen (in taste) the leaf.

Cigar is generally not inhaled as a cigarette smoke, because the high alkalinity of the smoke can quickly become irritating to the trachea and lungs. A NIH study done concerning those who smoked at least one cigar per day, found that “the health risk associated with less than daily smoking (occasional smokers) are not known. Though most cigar smokers do not inhale the smoke, but they are among those that have risk of lung cancer similar to cigarette smokers. Increased risk for heart attack is less for cigar smokers, but still present.

Pipe This is the usage of tobacco from which the tobacco leaves are grinded and placed into pipe for inhalation**.** A pipe for smoking typically consists of a small chamber (bowl) for combustion of the substance to be smoked and a thin stem (shank) that ends in a mouthpiece (also called a bit). Pipes are made from a variety of materials (some obscure): briar, corncob, meerschaum, clay, wood, glass, gourd, bamboo, and various other materials, such as metal. Tobacco used for smoking pipes is often chemically treated to change smell and taste not available in other commercial tobacco products. Many of these are mixtures using staple ingredients of variously cured Barley and Virginia tobacco which are mixed with tobacco from different areas, such as Oriental or Balkan locations. Traditionally, many U.S. tobaccos are made of American Burley with artificial sweeteners and flavorings added to create an artificial "aromatic" smell, whereas "English" blends are based on natural Virginia tobaccos enhanced with Oriental and other natural tobaccos. There is a growing tendency towards "natural" tobaccos which derive their aromas from blending with spice tobaccos alone and historically-based curing processes.

Pipes can range from the simple machine-made briar pipe to handmade and artful implements created by pipe-makers which can be expensive collectors' items. The popularity of pipe smoking in Western countries has declined in recent years under the onslaught of cigarette advertising. However, it has also enjoyed a resurgence of late among younger and middle aged smokers who find its contemplative nature and age-transcendent status as "hobby not habit" to be both thoroughly enjoyable and stress-relieving. As many pipe-smokers say, "We don't inhale."

Hookah

A hookah (or *sheesha*) is a type of traditional Middle Eastern and South Asian water pipe, which operates by water-filtration and indirect heat. Hookahs are most popular in the Middle East, but form a niche market in many other places. In other contexts, hookahs are used to smoke

cannabis, hashish or opium.Some studies suggest that hookah smoking is safer than other forms of smoking. However, water is not effective for removing all relevant toxic substances. For instance, the carcinogenic aromatic hydrocarbons are not water-soluble. Several negative health effects are linked to hookah smoking and studies indicates that it is likely to be more harmful than cigarettes, due in part to the volume of smoke inhaled.

Typically, tobacco is smoked from a hookah by placing richly flavored tobaccos in the smoking bowl, covering it with foil, and placing a coal on top of the foil. This keeps the tobacco from burning, and allows it to bake. The resulting vapors are further cooled by the hookah water and filtered by a bubbling action in the basin of the hookah, resulting in a moist, warm light smoke. The Al-Waha, Al Fakher, and Nakhla tobacco companies compete for market share in the Middle East by producing flavored tobaccos for use in the hookah. Some flavors include the traditional apple, grape, double apple, orange, strawberry, cherry, mango, vanilla, and melon flavors; as well as more modern flavours of cola, coconut, cappuccino, and banana milk.

Kreteks ; theseare clove and tobacco cigarettes most commonly smoked in Indonesia.

Establishing a link between tobacco smoking and health

Many smokers begin during adolescence or early adulthood. During the early stages, a combination of perceived pleasure acting as positive reinforcement and desire to respond to social peer pressure may offset the unpleasant symptoms of initial use, which typically include nausea and interrupted sleep patterns. After an individual has smoked for some years, the avoidance of withdrawal symptoms and negative reinforcement become the key motivations to continue.Tobacco smoke contains nicotine and harmane (a MAO inhibitor), which combined give rise to addictive stimulant and euphoriant properties. The effect of

nicotine in first time or irregular users is an increase in alertness and memory, and mild euphoria. Nicotine also disturbs metabolism and suppresses appetite. This is because nicotine, like many stimulants, temporarily increases blood sugar levels.

Medical research has determined that tobacco smoking causes lung cancer, emphysema, and cardiovascular disease among other health problems. The World Health Organization reported that tobacco smoking killed 100 million people worldwide in the 20th century and warned that it could kill one billion people around the world in the 21st century.

The late-19th century invention of automated cigarette-making machinery in the American South made possible mass production of cigarettes at low cost, and cigarettes became elegant and fashionable among society men as the Victorian era gave way to the Edwardian. In 1912, American Dr. Isaac Adler was the first to strongly suggest that lung cancer is related to smoking. In 1929, Fritz Lickint of Dresden, Germany, published a formal statistical evidence of a lung cancer–tobacco link, based on a study showing that lung cancer sufferers were likely to be smokers. Lickint also argued that tobacco use was the best way to explain the fact that lung cancer struck men four or five times more often than women (since women smoked much less).

Prior to World War I, lung cancer was considered to be a rare disease, which most physicians would never see during their career. With the postwar rise in popularity of cigarette smoking, however, came a virtual epidemic of lung cancer.

In 1950, Richard Doll published research in the British Medical Journal showing a close link between smoking and lung cancer. Four years later, in 1954 the British Doctors Study, a study of some 40 thousand doctors over 20 years, confirmed the suggestion, based on which the

government issued advice that smoking and lung cancer rates were related. The British Doctors Study lasted till 2001, with result published every ten years and final results published in 2004 by Doll and Richard Peto. Much early research was also done by Dr. Ochesner. Reader's Digest magazine for many years published frequent anti-smoking articles. In 1964 the United States Surgeon General's Report on Smoking and Health led millions of American smokers to quit, the banning of certain advertising, and the requirement of warning labels on tobacco products.

2.2.3 Effects of Tobacco Smoking

- **Effects on Health**

Of the various methods of consumption the primary health risks pertain to diseases of the cardiovascular system by the vector of smoking, which over time allows high quantities of carcinogens to deposit in the mouth, throat, and lungs. Tobacco-related diseases are some of the biggest killers in the world today and are cited as one of the biggest causes of premature death in industrialized countries. In the United States some 500,000 deaths per year are attributed to smoking-related diseases and a recent study estimated that as much as 1/3 of China's male population will have significantly shortened life-spans due to smoking. Among the diseases and afflictions that can be caused by smoking are vascular stenosis, lung cancer, heart attacks and chronic obstructive pulmonary disease. Many governments are trying to deter people from smoking with anti-smoking campaigns in mass media stressing the harmful long-term effects of smoking.

According to Abdu (2008) nicotine that is contained in cigarettes and other smoked tobacco products is a stimulant and is one of the main factors leading to continued tobacco smoking. Nicotine is a highly addictive psychoactive chemical. When tobacco is smoked, most of the nicotine is pyrolyzed; a dose sufficient to cause mild somatic dependency and mild to

strong psychological dependency remains. There is also a formation of harmane (a MAO inhibitor) from the acetaldehyde in cigarette smoke, which seems to play an important role in nicotine addiction probably by facilitating dopamine release in the nucleus acumens in response to nicotine stimuli. According to studies by Henningfield and Benowitz, overall nicotine is more addictive than cannabis, caffeine, ethanol, cocaine, and heroin when considering both somatic and psychological dependence.

The effects of tobaccoon health are the circumstances, mechanisms, and factors of tobacco consumption on human health. Epidemiological researches have been focused primarily on tobacco smoking, which has been a study more extensively than any other consumption. As of 2000, smoking is practiced by some 1.22 billion people, of whom men are most likely to smoke than women; however the gender gap declines with age, poor more likely than rich, and people of developing countries than those of developed countries.Tobacco use leads most commonly to disease affecting the heart and lungs, with smoking being a major risk factor for heart attacks, strokes, chronic obstructive pulmonary disease (COPD), emphysema, and cancer.

Because of their nicotine addiction, many smokers find it difficult to cease smoking despite their knowledge of ill health effects. The main health risks in tobacco pertain to diseases of the cardiovascular system, in particular myocardial infarction (heart attack), cardiovascular disease, diseases of the respiratory tract such as Chronic Obstructive Pulmonary Disease (COPD), asthma, emphysema, and cancer, particularly lung cancer and cancers of the larynx and tongue. A person's increased risk of contracting disease is directly proportional to the length of time that a person continues to smoke as well as the amount smoked. However, if someone stops smoking, then these chances gradually decrease as the damage to their body is repaired. A year after quitting, the risk of contracting heart disease is half that of a continuing smoker. The health risks

of smoking are not uniform across all smokers. Risks vary according to amount of tobacco smoked, with those who smoke more at greater risk. Light smoking is still a health risk. Likewise, smoking "light" cigarettes does not reduce the risks.The data regarding smoking to date focuses primarily on cigarette smoking, which increases mortality rates by 40% in those who smoke less than 10 cigarettes a day, by 70% in those who smoke 10–19 a day, by 90% in those who smoke 20–39 a day, and by 120% in those smoking two packs a day or more. Pipe smoking has also been researched and found to increase the risk of various cancers by 33%.

Several negative health effects are linked to hookah smoking and studies indicate that it is likely to be more harmful than cigarettes, due in part to the volume of smoke inhaled. In addition to the cancer risk, there is some risk of infectious disease resulting from pipe sharing, and other risks associated with the common addition of other psychoactive drugs to the tobacco.Diseases caused by tobacco smoking are significant hazards to public health. According to the Canadian Lung Association, tobacco kills between 40,000–45,000 Canadians per year, more than the total number of deaths from AIDS, traffic accidents, suicide, murder, fires and accidental poisoning. The United States Centers for Disease Control and Prevention describes tobacco use as "the single most important preventable risk to human health in developed countries and an important cause of premature death worldwide."

Carcinogenicity

The incidence of lung cancer is highly correlated with smoking. Smoke, or any partially burnt organic matter, is carcinogenic (cancer-causing). The damage a continuing smoker does to his/her lungs can take up to 20 years before its physical manifestation in lung cancer. Women began smoking later than men, so the rise in death rate amongst women did not appear until later. The male lung cancer death rate decreased in 1975 — roughly 20 years after the fall in cigarette

consumption in men. A fall in consumption in women also began in 1975 but by 1991 had not manifested in a decrease in lung cancer related mortalities amongst women.

Smoke contains several carcinogenic pyrolysis products, particularly the polynuclear aromatic hydrocarbons (PAH), which are toxicated to mutagenic epoxides. The first PAH to be identified as a carcinogen in tobacco smoke was benzopyrene, which was shown to toxicate into a diol epoxide and then permanently attach to nuclear DNA, which may either kill the cell or cause a genetic mutation. If the mutation inhibits programmed cell death, the cell can survive to become a cancer cell. The carcinogenity of tobacco smoke is not explained by nicotine per se, which is not carcinogenic or mutagenic. However, it inhibits apoptosis, therefore accelerating existing cancers. Also, NNK, a nicotine derivative converted from nicotine, can be carcinogenic. Thus, to reduce cancer risk but to deliver nicotine, there are tobacco products where the tobacco is not pyrolysed, but the nicotine is vaporized with solvent such as glycerol.

Abdu (2008) further explained that fresh tobacco, processed tobacco, and tobacco smoke contains carcinogens. The current view on cancer is that carcinogenicity is a stochastic effect, where various environmental factors trigger the development of cancer. While exposure to a carcinogen increases the probability of cancer, the process remains random. For example, smoking tobacco is known to cause cancer in humans, but not all humans who smoke necessarily develop smoking-related cancer. In studies on human, the large number of confounding variables makes it challenging to statistically distinguish their effects.

Abdu (2008) pipe smoking has also been found to increase the risk of various cancers by 33%. In addition to the cancer risk, there is some risk of infectious disease resulting from pipe sharing, and other risk associated with the common addition of other psychoactive drugs o the

tobacco. Cigarette smoke is a complex mixture of chemicals produce by the burning of tobacco and its additives. The smoke contains tar, which is made up of more 4,000 chemicals, including over60 known to cause cancer. Some of this substances cause heart and lung diseases, and all of them can be deadly.

Lung dysfunction

Chronic obstructive pulmonary disease (COPD) caused by smoking, known as tobacco disease, is a permanent, incurable reduction of pulmonary capacity characterized by shortness of breath, wheezing, persistent cough with sputum, and damage to the lungs, including emphysema and chronic bronchitis.

- **Effects on the heart**

Smoking contributes to the risk of developing heart disease. All smoke contains very fine particles that are able to penetrate the alveolar wall into the blood and exert their effects on the heart in a short time. Inhalation of tobacco smoke causes several immediate responses within the heart and blood vessels. Within one minute the heart rate begins to rise, increasing by as much as 30 percent during the first 10 minutes of smoking. Carbon monoxide in tobacco smoke exerts its negative effects by reducing the blood's ability to carry oxygen.

The United States Surgeon General's Report on Smoking and Health likewise began suggesting the relationship between smoking and cancer, which confirmed its suggestions 20 years later in the 1980s. As scientific evidence mounted in the 1980s, tobacco companies claimed contributory negligence as the adverse health effects were previously unknown or lacked substantial credibility. Health authorities sided with these claims up until 1998, from which they reversed their position. The Tobacco Master Settlement Agreement, originally between the four largest US tobacco companies and the Attorneys General of 46 states, restricted certain types of tobacco

advertisement and required payments for health compensation; which later amounted to the largest civil settlement in United States history. From 1965 to 2006, rates of smoking in the United States have declined from 42% to 20.8%. A significant majority of those who quit were professional, affluent men. Despite this decrease in the prevalence of consumption, the average number of cigarettes consumed per person per day increased from 22 in 1954 to 30 in 1978. This paradoxical event suggests that those who quit smoked less, while those who continued to smoke moved to smoke more light cigarettes. This trend has been paralleled by many industrialized nations as rates have either leveled-off or declined. In the developing world, however, tobacco consumption continues to rise at 3.4% in 2002. In Africa, smoking is in most areas considered to be modern, and many of the strong adverse opinions that prevail in the West receive much less attention. Today Russia leads as the top consumer of tobacco followed by Indonesia, Laos, Ukraine, Belarus, Greece, Jordan, and China. The World Health Organization has begun a program known as the Tobacco Free Initiative (TFI) in order to reduce rates of consumption in the developing world.

Smoking tends to increase blood cholesterol levels. Furthermore, the ratio of high-density lipoprotein (the “good” cholesterol) to low-density lipoprotein (the “bad” cholesterol) tends to be lower in smokers compared to non-smokers. Smoking also raises the levels of fibrinogen and increases platelet production (both involved in blood clotting) which makes the blood viscous. Carbon monoxide binds to haemoglobin (the oxygen-carrying component in red blood cells), resulting in a much stable complex than haemoglobin bound with oxygen or carbon dioxide -- the result is permanent loss of blood cell functionality. Blood cells are naturally recycled after a certain period of time, allowing for the creation of new, functional erythrocytes. However, if carbon monoxide exposure reaches a certain point before they can be recycled, hypoxia (and

later death) occurs. All these factors make smokers more at risk of developing various forms of arteriosclerosis. As the arteriosclerosis progresses, blood flows less easily through rigid and narrowed blood vessels, making the blood more likely to form a thrombosis (clot). Sudden blockage of a blood vessel may lead to an infarction (e.g. stroke). However, it is also worth noting that the effects of smoking on the heart may be more subtle.These conditions may develop gradually given the smoking-healing cycle (the human body heals itself between periods of smoking), and therefore a smoker may develop less significant disorders such as worsening or maintenance of unpleasant dermatological conditions, e.g. eczema, due to reduced blood supply. Smoking also increases blood pressure and weakens blood vessels.

Odebunmi (2008) presented a list of problems related to tobacco smoking:

- Tobacco smoke contains nicotine, which forms a strong physical and psychological chemical dependence (addiction).
- A person's increased risk of contracting disease is directly proportional to the length of time that a person continues to smoke as well as the amount smoked. However, if someone stops smoking, then these chances steadily although gradually decrease as the damage to there is repaired.
- The United States centers for Disease control and prevention describes tobacco use as "the single most important preventable risk to human health in developed counties and an important cause of premature death worldwide".
- The main health risk in tobacco smoking pertain to diseases of the cardiovascular system, in particular smoking being a major risk factor for a myocardial infarction (heart attack), diseases of the respiratory tract such as chronic obstructive pulmonary Diseases (COPD)

and emphysema, and cancer, particularly lung cancer and cancers of the larynx and tongue.

- A number of studies have shown that tobacco use is significant factors in spontaneous abortions among pregnant smokers, and that it contributes to a number of other threats to the fetus.
- Second –hand smoke appear to be an equal danger to the fetus, as one study noted that "heavy paternal smoking increased the risk of early pregnancy loss".
- In addition to chemical, nonradioactive carcinogens, tobacco and tobacco smoke contains small amount of lead-210(210pb) and polonium -210 (210po) both of which are radioactive carcinogens.
- An indirect public health problem posed by cigarettes is that of accidental fires, usually linked with consumption of alcohol. Numerous cigarette designs have been proposed, some by tobacco companies themselves, which would extinguish a cigarette left unattended more than a minute or two, thereby reducing the risk of fire.

The Effects of Nicotine

According to Abdu, (2008) Nicotine act both as stimulant and depressant on the body. It increases the bowel activity, saliva, and bronchial secretions. It stimulates the nervous system and may cause tremors in the inexperienced user, or even convulsion with high dose. Abdu, (2008) further explained the effects below;

- After stimulation, there's a phase that depresses the muscles in the airways. As a euphoric agent, nicotine causes relaxation from stressful situations.
- On average, tobacco increases the heart rate 10 to 20 beats per minute, and it increases the blood pressure reading by 5 to 10mmhg (because it constricts the blood vessels).

- Nicotine may also cause sweating; nausea, and diarrhoea, nicotine elevates the blood level of glucose (blood sugar) and increases insulin production. Nicotine also tends to enhance platelet aggregation, which may leads to blood clots.
- Nicotine temporarily stimulates memory and alertness. People who use tobacco frequently depend on it to help them accomplish certain task at specific levels of performance. Nicotine also tends to be an appetite suppressant. (For this reason, fear of weight again also influences the willingness of some of some people to stop smoking.)
- The nicotine in cigarette smoke causes an addiction to smoking. Nicotine is an addictive drug just like heroin and cocaine:
- When taken in small amounts, nicotine creates pleasant feelings that make the smoker want to smoke more. It acts on the chemistry of the brain and the central nervous system, affecting the smoker's mood. Nicotine works very well like other addicting drugs, by flooding the brain's reward circuit with dopamine (a chemical messenger). Nicotine also gives a little bit of adrenaline-not enough to notice, but enough to speed up the heart and raise the blood pressure.
- Nicotine reaches the brain within seconds after taken a puff, but it effects start to wear off within a few minutes. This often leads to the smoker to get another cigarette. If the smoker doesn't smoke again soon, withdrawal symptoms kick in and get worse over time.
- The typical smoker takes about 10 puffs from each cigarette. A person smoking a pack per day gets about 200 "hits" of nicotine each day.
- Smokers usually become dependent on nicotine and suffer physical and emotional (psychological) withdrawal symptoms when they stop smoking. These symptoms include

irritability, nervousness, headaches, and trouble sleeping. The true marker for addiction, though, is that people still smoke even though they know smoking is bad for them – affecting their lives, their health, and their families in unhealthy ways. Most people who smoke want to quit.

- **Effectson economy**

In countries where there is a public health system, society covers the cost of medical care for smokers who become ill through in the form of increased taxes. Two arguments exist on this front, the "pro-smoking" argument suggesting that heavy smokers generally don't live long enough to develop the costly and chronic illnesses which affect the elderly, reducing society's healthcare burden. The "anti-smoking" argument suggests that the healthcare burden is increased because smokers get chronic illnesses younger and at a higher rate than the general population.

Data on both positions is limited. The Centers for Disease Control and Prevention published research in 2002 claiming that the cost of each pack of cigarettes sold in the United States was more than $7 in medical care and lost productivity. The cost may be higher, with another study putting it as high as $41 per pack, most of which however is on the individual and his/her family. This is how one author of that study puts it when he explains the very low cost for others: "The reason the number is low is that for private pensions, Social Security, and Medicare — the biggest factors in calculating costs to society — smoking actually saves money. Smokers die at a younger age and don't draw on the funds they've paid into those systems."

By contrast, some non-scientific studies, including one conducted by Philip Morris in the Czech Republic and another by the Cato Institute, support the opposite position. Neither study was peer-reviewed nor published in a scientific journal, nor have the Cato Institute received funding from tobacco companies in the past. Philip Morris has explicitly apologised for the

former study, saying: "The funding and public release of this study which, among other things, detailed purported cost savings to the Czech Republic due to premature deaths of smokers, exhibited terrible judgment as well as a complete and unacceptable disregard of basic human values. For one of our tobacco companies to commission this study was not just a terrible mistake, it was wrong. All of us at Philip Morris, no matter where we work, are extremely sorry for this. No one benefits from the very real, serious and significant diseases caused by smoking."

Between 1970 and 1995, per-capita cigarette consumption in poorer developing countries increased by 67 percent, while it dropped by 10 percent in the richer developed world. Eighty percent of smokers now live in less developed countries. By 2030, the World Health Organization (WHO) forecasts that 10 million people a year will die of smoking-related illness, making it the single biggest cause of death worldwide, with the largest increase to be among women. WHO forecasts' the 21st century's death rate from smoking to be ten times the 20th century's rate. ("Washingtonian" magazine, December 2007).

Nicotine Addiction

According to Abdu (2008) addiction is marked by the repeated, compulsive seeking or use of a substance despite its harmful effects and unwanted consequences. Addiction is defined as physical and psychological (mental and emotional) dependence on the substance. Nicotine is the addictive drug in tobacco. Regular use of tobacco products leads to addiction in a high percentage of users. According to Abdu, (2008) in 1988, the U S surgeon General concluded the following:

Cigarettes and other forms of tobacco are addictive.

Nicotine is the addictive drug in tobacco.

The ways people become addicted to tobacco are much like those that leads to addiction to other drugs such as heroin and cocaine.

These statements are as true today as they were 20 years ago. All forms of tobacco have a lot of nicotine. It is easily absorbed through the lungs with smoking and through the mouth or nose with oral tobacco (spit, snuff, 0r smokeless tobacco). From these entry points, nicotine quickly spread throughout the body.

When products made from tobacco leaves are smoked or chewed, nicotine chemically attached to the brain receptor to causing relaxing effect. The continued intake of nicotine causes addiction when the nicotine user become dependent on it and its effects on the addicted person's body and mind become a necessity.

Tobacco companies are required by law to report the nicotine level in cigarette to the Federal Trade commission (FTC). But in most states they are not required to show the amount of nicotine on the cigarette package label. The actual amount of nicotine available to the smoker in a given brand of cigarette is often different from the level reported to the FTC. In one regular cigarette, the average amount of nicotine the smoker gets ranges about 1mg and 2mg. But the cigarette itself contains more than 1 or 2mg. the amount people actually take in depends on how they smoke, how many puffs they take, how deeply they inhale, and other factors.

Only about half of the deaths related to smoking are from cancer. Smoking is also a major cause of heart disease, aneurysms, bronchitis, emphysema, and stroke, and it makes pneumonia and asthma worse. Using tobacco can damage a women's reproductive health and hurt babies. Tobacco use is linked with reduced fertility and a higher risk of miscarriage, early delivery (premature birth), stillbirth, infant death syndrome (SIDS).

Nicotine is an addictive stimulant and is one of the main factors leading to continued tobacco smoking. Although the percentage of the nicotine inhaled with tobacco smoke is quite small (most of the substance is destroyed by the heat) it is still sufficient to cause physical and/or psychological dependence. Prior to habituation, tobacco smokers often focus on the reinforcing properties of smoking rather than the associated health risks. The diseases caused by smoking surface relatively later in life, so they do not serve to deter smoking.

- **Effects on Environment**

A common complaint from those concerned with passive smoking. Smoking in public places has now been banned in the United Kingdom, As of July 1st 2007. Passive or involuntary smoking occurs when the exhaled and ambient smoke (otherwise known as environmental or secondhand smoke) from one person's cigarette is inhaled by other people. Passive smoking involves inhaling carcinogens, as well as other toxic components, that are present in secondhand tobacco smoke. Passive smoking refers to breathing environmental tobacco smoke breathed out by a smoker or coming from the end of a burning cigarette. Exposure is most likely to occur in the home or car but can also occur in public and social meeting places. The National Drug Strategy Household Survey (2001) reported that 19.7% of households with dependent children allowed smoking in the home. Children are at higher risk of damage from passive smoking than adults because of their smaller bodies, higher breathing rates and less well-developed respiratory and immune systems.Passive smoking results tonegative health outcomes for children. There is considerable evidence to suggest an association between parental smoking and an increased risk of health problems in children.Children of smokers are four times more likely to end up as smokers themselves, due to nicotine inhalation in childhood.

Passive or second hand smoke is known to harm children, infants and reproductive health through acute lower respiratory tract illness, asthma induction and exacerbation, chronic respiratory symptoms, middle ear infection, lower birth weight babies, and Sudden Infant Death Syndrome. In a study published on August 25, 2004 smoke-free policies were linked to a short-term reduction in admissions for acute myocardial infarction. In a study released on February 12, 2006 warning signs for cardiovascular disease are higher in people exposed to secondhand tobacco smoke, adding to the link between "passive smoke" and heart disease. "Our study provides further evidence to suggest low-level exposure to secondhand smoke has a clinically important effect on susceptibility to cardiovascular disease," said Dr. Andrea Venn of University of Nottingham in Britain, lead author of the study.

According to the U.S. Surgeon General's Report secondhand smoke is connected to SIDS. Infants who die from SIDS tend to have higher concentrations of nicotine and cotinine (a biological marker for secondhand smoke exposure) in their lungs than those who die from other causes. Infants exposed to secondhand smoke after birth are also at a greater risk of SIDS.Passive smoking, or secondhand smoking, which affects people in the immediate vicinity of smokers, is a major reason for the enforcement of smoking bans. This is a law enforced to stop individuals smoking in indoor public places, such as bars, pubs and restaurants. The idea behind this is to discourage smoking by making it more inconvenient, and to stop harmful smoke being present in enclosed public spaces. A common concern among legislators is to discourage smoking among minors and many states have passed laws against selling tobacco products to underage customers. Many developing countries have not adopted anti-smoking policies, leading some to call for anti-smoking campaigns and further education to explain the negative effects of ETS (Environmental Tobacco Smoke) in developing countries. Despite the many bans, European

countries still hold 18 of the top 20 spots, and according to the ERC, a market research company, the heaviest smokers are from Greece, averaging 3,000 cigarettes per person in 2007. Rates of smoking have leveled off or declined in the developed world but continue to rise in developing countries. Smoking rates in the United States have dropped by half from 1965 to 2006, falling from 42% to 20.8% in adults. The effects of addiction on society vary considerably between different substances that can be smoked and the indirect social problems that they cause, in great part because of the differences in legislation and the enforcement of narcotics legislation around the world. Though nicotine is a highly addictive drug, its effects on cognition are not as intense, noticeable or debilitating as cannabis, cocaine, amphetamines or any of the opiates. As tobacco is also not an illegal drug, there is no black market with high risks and high prices for consumers.According to earlier studies the smoking ban led to significant improvements regarding respiratory symptoms and lung function in people visiting bars and restaurants. Previously scientists stated that environmental tobacco smoke leads to coronary heart disease, lung cancer and premature death.

- **Somatic and Psychological Effects**

Most smokers begin during adolescence or early adulthood. Smoking has elements of risk-taking and rebellion, which often appeal to young people. The presence of high-status models and peers may also encourage smoking. Because teenagers are influenced more by their peers than by adults, attempts by parents, schools, and health professionals at preventing people from trying cigarettes are often unsuccessful. Psychologists such as Hans Eysenck have developed a personality profile for the typical smoker. Extraversion is the trait that is most associated with smoking, and smokers tend to be sociable, impulsive, risk taking, and excitement seeking individuals. Although, personality and social factors may make people likely to smoke, the actual

habit is a function of operant conditioning. During the early stages, smoking provides pleasurable sensations (because of its action on the dopamine system) and thus serves as a source of positive reinforcement. After an individual has smoked for many years, the avoidance of withdrawal symptoms and negative reinforcement become the key motivations. Because they are engaging in an activity that has negative effects on health, people who smoke tend to rationalize their behavior. In other words, they develop convincing, if not necessarily logical reasons why smoking is acceptable for them to do. For example, a smoker could justify his or her behavior by concluding that everyone dies and so cigarettes do not actually change anything. Or a person could believe that smoking relieves stress or has other benefits that justify its risks. These types of beliefs prevent anxiety and keep people smoking.

Nicotine is a highly addictive psychoactive chemical. When tobacco is smoked, most of the nicotine is pyrolyzed; a dose sufficient to cause mild somatic dependency and mild to strong psychological dependency remains. There is also a formation of harmane (a MAO inhibitor) from the acetaldehyde in cigarette smoke, which seems to play an important role in nicotine addiction probably by facilitating dopamine release in the nucleus accumbens in response to nicotine stimuli. According to studies by Henningfield and Benowitz, overall nicotine is more addictive than cannabis, caffeine, ethanol, cocaine, and heroin when considering both somatic and psychological dependence. However, due to the stronger withdrawal effects of ethanol, cocaine and heroin, nicotine may have a lower potential for somatic dependence than these substances. A study by Perrine concludes that nicotine's potential for psychological dependency exceeds all other studied drugs - even ethanol, an extremely physically addictive substance with severe withdrawal symptoms that can be fatal. About half of Canadians who currently smoke

have tried to quit. McGill University health professor Jennifer O'Loughlin stated that nicotine addiction can occur as soon as five months after the start of smoking.

Recent evidence has shown that smoking tobacco increases the release of dopamine in the brain, specifically in the mesolimbic pathway, the same neuro-reward circuit activated by drugs of abuse such as heroin and cocaine. This suggests nicotine use has a pleasurable effect that triggers positive reinforcement. One study found that smokers exhibit better reaction-time and memory performance compared to non-smokers, which is consistent with increased activation of dopamine receptors. Neurologically, rodent studies have found that nicotine self-administration causes lowering of reward thresholds--a finding opposite that of most other drugs of abuse (e.g. cocaine and heroin). This increase in reward circuit sensitivity persisted months after the self-administration ended; suggesting that nicotine's alteration of brain reward function is either long lasting or permanent. Furthermore, it has been found that nicotine can activate long term potentiation *in vivo* and *in vitro*. This study suggests nicotine's "trace memory" may contribute to difficulties in nicotine abstinence.

Mood and Anxiety Disorders

Recent studies have linked smoking to anxiety disorders, suggesting the correlation (and possibly mechanism) may be related to the broad class of anxiety disorders, and not limited to just depression. Current ongoing research is attempting to explore the addiction-anxiety relationship.Data from multiple studies suggest that anxiety disorders such as depression play a role in cigarette smoking. A history of regular smoking was observed more frequently among individuals who had experienced a major depressive disorder at some time in their lives than among individuals who had never experienced major depression or among individuals with no psychiatric diagnosis. People with major depression are also much less likely to quit due to the

increased risk of experiencing mild to severe states of depression, including a major depressive episode. Depressed smokers appear to experience more withdrawal symptoms on quitting, are less likely to be successful at quitting, and are more likely to relapse.

- **Social Effects**

Smoking, primarily of tobacco, is an activity that is practiced by some 1.1 billion people, and up to 1/3 of the adult population. The image of the smoker can vary considerably, but is very often associated, especially in fiction, with individuality and aloofness. Even so, smoking of both tobacco and cannabis can be a social activity which serves as a reinforcement of social structures and is part of the cultural rituals of many and diverse social and ethnic groups. Many smokers begin smoking in social settings and the offering and sharing of a cigarette is often an important rite of initiation or simply a good excuse to start a conversation with strangers in many settings; in bars, night clubs, at work or on the street. Lighting a cigarette is often seen as an effective way of avoiding the appearance of idleness or mere loitering. For adolescents, it can function as a first step out of childhood or as an act of rebellion against the adult world. Other than recreational drug use, it can be used to construct identity and a development of self-image by associating it with personal experiences connected with smoking. The rise of the modern anti-smoking movement in the late 19th century did more than create awareness of the hazards of smoking; it provoked reactions of smokers against what was, and often still is, perceived as an assault on personal freedom and has created an identity among smokers as rebels or outcasts, apart from non-smokers:

Health Benefits of Smoking

According to Tamra (2013) There is a lot of confusion and conflict about the role smoking plays in the lives of some smokers. Despite the hazards associated with smoking, smokers claim that they derive some benefits from their smoking habit.

Some smokers argue that the depressant effect of smoking allows them to calm their nerves, often allowing for increased concentration. However, according to the Imperial College London, "Nicotine seems to provide both a stimulant and a depressant effect, and it is likely that the effect it has at any time is determined by the mood of the user, the environment and the circumstances of use. Studies have suggested that low doses have a depressant effect, whilst higher doses have stimulant effect." However, it is impossible to differentiate a drug effect brought on by nicotine use, and the alleviation of nicotine withdrawal.

Studies suggest that smoking decreases appetite, but did not conclude that overweight people should smoke or that their health would improve by smoking. Several types of "Smoker's Paradoxes", (cases where smoking appears to have specific beneficial effects), have been observed; often the actual mechanism remains undetermined. Risk of ulcerative colitis has been frequently shown to be reduced by smokers on a dose-dependent basis; the effect is eliminated if the individual stops smoking. Smoking appears to interfere with development of Kaposi's sarcoma, breast cancer among women carrying the very high risk BRCA gene, preeclampsia, and atopic disorders such as allergic asthma. A plausible mechanism of action in these cases may be the nicotine in tobacco smoke acting as an anti-inflammatory agent and interfering with the disease process.

Evidence suggests that non-smokers are up to twice as likely as smokers to develop Parkinson's disease or Alzheimer's disease. A plausible explanation for these cases may be

the effect of nicotine, a cholinergic stimulant, decreasing the levels of acetylcholine in the smoker's brain; Parkinson's disease occurs when the effect of dopamine is less than that of acetylcholine. In addition, nicotine stimulates the mesolimbic dopamine pathway (as do other drugs of abuse), causing an effective increase in dopamine levels. Opponents counter by noting that consumption of pure nicotine may be as beneficial as smoking without the risks associated with smoking (as in CO poisoning).

It has been hypothesized that schizophrenics smoke for self-medication. Considering the high rates of physical sickness and deaths among persons suffering from schizophrenia, one of smoking's short term benefits is its temporary effect to improve alertness and cognitive functioning in that disease. It has been postulated that the mechanism of this effect is that schizophrenics have a disturbance of nicotinic receptor functioning. Rates of smoking have been found to be much higher in schizophrenics.

2.2.4 Causes of Tobacco Smoking

Smoking is a behavior, as such we may think of it having causes and effects in the same manner as other human activities. Behaviour problem has been variously defined by both laymen and professionals. It is simply defined as an action taken where it is not needed. This action is not regarded as normal, rather it is said to be deviating from what is socially acceptable. These behaviours are deemed deviant by teachers, parents, counselors and others (Odoemelam2006). There are many causes underlying tobacco smoking among students. Some of the possible causes according to Okon (1984) include;

- **Parental Imitation:**

As individuals we often do things as a result of our background or feelings about our knowledge of things around us. Most importantly is our understanding of things. The son or daughter of a smoker might consider smoking as a pleasurable thing. He or she might not see anything wrong with it since his or her parent or at least one of them or an admired relation smokes.

Children of smoking parents are more likely to smoke than children with non-smoking parents. One study found that parental smoking cessation was associated with less adolescent smoking, except when the other parent currently smoked. A current study tested the relation of adolescent smoking to rules regulating where adults are allowed to smoke in the home. Results showed that restrictive home smoking policies were associated with lower likelihood of trying smoking for both middle and high school students.

- **Advertisement**

Before the 1970s, most tobacco advertising was legal in the United States and most European nations. In the United States, in the 1950s and 1960s, cigarette brands were frequently sponsors of television shows—most notably shows such as To Tell the Truth and I've Got a Secret. One of the most famous television jingles of the era came from an advertisement for Winston cigarettes. The slogan " Winston tastes good like a cigarette should!" proved to be catchy, and is still quoted today. Other popular slogans from the 1960s were " Us Tareyton smokers would rather fight than switch!," which was used to advertise Tareyton cigarettes, and "I'd Walk a Mile for a Camel".

In the 1950s, manufacturers began adding filter tips to cigarettes to remove some of the tar and nicotine as they were smoked. "Safer", "less potent" cigarette brands were also introduced. Light cigarettes became so popular that, as of 2004, half of American smokers preferred them

over regular cigarettes , in spite the fact that the idea of a "safer" cigarette is a myth. Cigarettes that offer "low tar and nicotine" cause the smoker to smoke more or to inhale more deeply to get the same level of nicotine. According to The Federal Government's National Cancer Institute (NCI), light cigarettes provide no benefit to smoker's health.

In the United States, it was believed by many that tobacco companies are marketing tobacco smoking to minors. For example, Reynolds American Inc. used the Joe Camel cartoon character to advertise Camel cigarettes. Other brands such as Virginia Slims targeted women with slogans like "You've come a Long Way Baby".

In 1964, the Surgeon General of the United States released the Surgeon General's Advisory Committee Report on Smoking and Health. It was based on over 7000 scientific articles that linked tobacco use with cancer and other diseases. This report led to laws requiring warning labels on tobacco products and to restrictions on tobacco advertisements. As these began to come into force, tobacco marketing became more subtle, with sweets shaped like cigarettes put on the market, and a number of advertisements designed to appeal to children, particularly those featuring Joe Camel resulting in increased awareness and uptake of smoking among children. However, restrictions did have an effect on adult quit rates, with its use declining to the point that by 2004, nearly half of all Americans who had ever smoked had quit.

Many nations, including Russia and Greece, still allow billboards advertising tobacco use. Tobacco smoking is still advertised in special magazines, during sporting events, in gas stations and stores, and in more rare cases on television. Some nations, including the UK and Australia, have begun anti-smoking advertisements to counter the effects of tobacco advertising.

The actual effectiveness of tobacco advertisement is widely documented. According to an opinion piece by Henry Saffer, public health experts say that tobacco advertising increases cigarette consumption and there is much empirical literature that finds a significant effect of tobacco advertising on smoking, especially in children. A Dutch tobacco company manufactures "Pink Elephant" vanilla-flavored cigarettes, and "Black Devil" chocolate-flavored cigarettes.

- **Movies and Television**

Exposure to smoking in movies has been linked with adolescent smoking initiation in cross-sectional studies. Films tend to have a high incidence of smoking behaviour vis-a-vis the general population. According to a study of movies created between 1988 and 1997, eighty-seven percent of these movies portrayed various tobacco use, with an average of 5 occurrences per film. R-rated movies had the greatest number of occurrences and were most likely to feature major characters using tobacco. Despite the declining tobacco use in the society, the incidence of smoking in 2002 movies was nearly the same as in 1950 movies.

There have been moves to reduce the depiction of protagonists smoking in television shows, especially those aimed at children. For example, Ted Turner took steps to remove or edit scenes that depict characters smoking in cartoons such as Tom and Jerry, The Flintstones and Scooby-Doo, which are shown on his Cartoon Network and Boomerang television channels.

- **Smoking to Project an Image**

Famous smokers used cigarettes or pipes as part of their images. Writers in particular seemed to be known for smoking. The popular author Kurt Vonnegut addressed his addiction to cigarettes within his novels. British Prime Minister Harold Wilson was well known for smoking a pipe in public as was Winston Churchill for his cigars. Sherlock Holmes, the fictional detective

created by Sir Arthur Conan Doyle smoked a pipe, cigarettes, and cigars, besides injecting himself with cocaine, "to keep his overactive brain occupied during the dull London days, when nothing happened". The DC Vertigo comic book character, John Constantine, created by Alan Moore, is synonymous with smoking, so much so that the first storyline by Preacher creator, Garth Ennis, centred around John Constantine contracting lung cancer. Professional wrestler James Fullington, while in character as "The Sandman", is a chronic smoker in order to appear "tough".

- **Religious Views on Smoking**

Communal smoking of a sacred tobacco pipe is a common ritual of many Native American tribes, and was considered a sacred part of their religion. Sema, the Anishinaabe word for tobacco, was grown for ceremonial use and considered the ultimate sacred plant since its smoke was believed to carry prayers to the heavens. The tobacco used during these rituals varies widely in potency — the Nicotiana rustica species used in South America, for instance, has up to twice the nicotine content of the common North American Nicotiana tabacum.

Early smoking evolved in association with religious ceremonies; as offerings to deities, in cleansing rituals or to allow shamans and priests to alter their minds for purposes of divination or spiritual enlightenment. After the European exploration and conquest of the Americas, the practice of smoking tobacco quickly spread to the rest of the world. In regions like India and Subsaharan Africa, it merged with existing practices of smoking (mostly of cannabis).

Before the health risks of smoking were identified through controlled study, smoking was considered an immoral habit by certain Christian preachers and social reformers. The founder of the Latter Day Saint movement, Joseph Smith, Jr, recorded that he received a revelation which

addressed tobacco use. Eventually accepted as a commandment, faithful Mormons do not smoke. Jehovah's Witnesses earthwide, based their stand against smoking on the Bible's command to "clean ourselves of every defilement of flesh" (2 Corinthians 7:1) The Jewish Rabbi Yisrael Meir Kagan (1838–1933) was one of the first Jewish authorities to speak out on smoking.

- **Early Exposures**

Many smokers have recalled taking their first decision to try smoking when they were exposed to cigarette stubs. Many have also confessed that they took their first decision when they were exposed to cigarette which their fathers, uncles, or relations were smoking. The question of whether to accept or reject at that time did not arise, since they did not choose to be born in such family.

- **Provision at Ceremonies**

The use of cigarette at ceremonies and meetings has become an acceptable norm since they are made available and free for consumption, there could be some temptations of one to be actively involved. There is the belief that smoking reduces stress, it aids thinking, it is a cure for boredom and also associated with achievements by those who indulge in the habit of smoking.

- **Over pampering**

Over pampering or over protection of adolescents sometimes lead them to indulge in excessive tobacco smoking, even lead to trying hard drugs as well. When they are given huge amount of money they may likely mess up in finding ways to spend the money.

- **Bleak Future**

Nicotine directly affects, alter and takes control of specialized receptor cells in the brain which is responsible for regulating wellbeing, mood and memory, many disadvantaged

adolescents face the future without hope and are confronted with economic, social, and different forms of discrimination, sometimes with impossible living conditions. They resort to smoking in order to modify their moods and cope with the challenges life.

- **Peer pressure**

This is the mark of maturity and sociability, some adolescent smoke just to show to the adult world that they have arrived and this is characterized by becoming a big person by doing what the seniors are doing; they want to impress other people that smoking is a sign of arrival to higher status in life.

Many anti-smoking organizations claim that teenagers begin their smoking habits due to peer pressure, and cultural influence portrayed by friends. However, one study found that direct pressure to smoke cigarettes did not play a significant part in adolescent smoking. In that study, adolescents also reported low levels of both normative and direct pressure to smoke cigarettes. A similar study showed that individuals play a more active role in starting to smoke than has previously been acknowledged and that social processes other than peer pressure need to be taken into account. Another study's results revealed that peer pressure was significantly associated with smoking behavior across all age and gender cohorts, but that intrapersonal factors were significantly more important to the smoking behaviour of 12–13 year-old girls than same-age boys. Within the 14–15 year-old age group, one peer pressure variable emerged as a significantly more important predictor of girls' than boys' smoking. It is debated whether peer pressure or self-selection is a greater cause of adolescent smoking. It is arguable that the reverse of peer-pressure is true, when the majorities of peers do not smoke and ostracize those who do.

- **Emotional Problem**

Often when people are disturbed emotionally, they do things on spur of the moment to comfort the emotional problems. Many smokers have been known to smoke as a result of their wish to forget or eradicate a problem. These categories of people consider smoking as a drug that could help them to forget tackle an emotional problem.

- **Poor Parental Supervision**

It has been identified that parent who stay in 3-4 room apartment especially in cities or in communities where boys are given a room or two at the outskirt of the family find it difficult to effect control over their youths as they go out and come in any time unchecked. The youths capitalize on this to engage in taking hemp, cigarettes, alcohol or other dangerous substances especially at night, quite unknown to parents.

- **The Mass Media**

The youth who will identify nothing regarding the names, taste and the use of tobacco are exposed to this information by the mass media like the newspaper, magazine, radio, television and video houses. For example the mass media has often times advertised cigarettes in such an attractive manner that youths who are itchy, explorative, and volatile always falls prey to it. The television presentations are always so glamorous that the adolescents are mostly likely to try them, and eventually go on using them.(Okon1984)

2.2.5 Ways of Minimizing Tobacco Smoking

Many of tobacco's health effects can be minimized through smoking cessation. The British doctors' study showed that those who stopped smoking before they reached 30 years of age lived almost as long as those who never smoked. It is also possible to reduce the risks by reducing the

frequency of smoking and by proper diet and exercise. Some research has indicated that some of the damage caused by smoking tobacco can be moderated with the use of antioxidants.

Smokers wanting to quit or to temporarily abstain from smoking can use a variety of nicotine-containing tobacco substitutes, or nicotine replacement therapy (NRT) products to temporarily lessen the physical withdrawal symptoms, the most popular being nicotine gum and lozenges. Nicotine patches are also used for smoking cessation. Medications that do not contain nicotine can also be used, such as bupropion (Zyban or Wellbutrin) and varenicline (Chantix).Peer support can be helpful, such as that provided by support groups and telephone quitlines.

- **Counselling**

Alao (cited in Bello, 2007) views counseling as a helping relationship between the counselor and the client goes a step forward to specify the function of the counselor in the relationship. According to him, the counselor functions as a provider of facilitative conditions necessary for change in the client's mode of thinking, feeling and behavior. Therefore counseling can be used to minimize tobacco smoking.

- **Legal Issues and Regulation**

On 27 February 2005 the World Health Organization Framework Convention on Tobacco Control, took effect. The convention is the world's first public health treaty. Countries that sign on as parties agree to a set of common goals, minimum standards for tobacco control policy, and to cooperate in dealing with cross-border challenges such as cigarette smuggling. Currently the World Health Organization declares that 4 billion people will be covered by the treaty, which includes 168 signatories. Among other steps, signatories are to put together legislation that will

eliminate secondhand smoke in indoor workplaces, public transport, indoor public places and, as appropriate, other public places.

- **Age Restrictions**

Many countries have a smoking age, In many countries, including the United States, most European Union member states, New Zealand, Canada, South Africa, Israel, India, Brazil, Chile, Costa Rica and Australia, it is illegal to sell tobacco products to minors and in the Netherlands, Austria,Belgium,Denmark and South Africa it is illegal to sell tobacco products to people under the age of 16. On 1 September 2007 the minimum age to buy tobacco products in Germany rose from 16 to 18, as well as in Great Britain on 1 October 2007. In 46 of the 50 United States, the minimum age is 18, except for Alabama, Alaska, New Jersey, and Utah where the legal age is 19 (also in Onondaga County in upstate New York, as well as Suffolk and Nassau Counties of Long Island, New York). Some countries have also legislated against giving tobacco products to (i.e. buying for) minors, and even against minors engaging in the act of smoking. Underlying such laws is the belief that people should make an informed decision regarding the risks of tobacco use. These laws have a lax enforcement in some nations and states. In other regions, cigarettes are still sold to minors because the fines for the violation are lower or comparable to the profit made from the sales to minors. However in China, Turkey, and many countries children have little problems buying tobacco products, because they are often told to go to the store to buy tobacco for their parents.

Taxation

Cigarettes have become very expensive in places that want to reduce the amount of smoking in public.Many governments introduced excise taxes on cigarettes in order to reduce the

consumption of cigarettes. Money collected from the cigarette taxes are frequently used to pay for tobacco use prevention programs, therefore making it a method of internalizing external costs.

In 2002, the Centers for Disease Control and Prevention said that each pack of cigarettes sold in the United States costs the nation more than $7 in medical care and lost productivity. That's over $2000 per year/smoker. Another study by a team of health economists finds the combined price paid by their families and society is about $41 per pack of cigarettes.

Substantial scientific evidence shows that higher cigarette prices result in lower overall cigarette consumption. Most studies indicate that a 10% increase in price will reduce overall cigarette consumption by 3% to 5%. Youth, minorities, and low-income smokers are two to three times more likely to quit or smoke less than other smokers in response to price increases. Smoking is often cited as an example of an inelastic good; however, i.e. a large rise in price will only result in a small decrease in consumption.Many nations have implemented some form of tobacco taxation. As of 1997, Denmark had the highest cigarette tax burden of $4.02 per pack. Taiwan only had a tax burden of $0.62 per pack. Currently, the average price and excise tax on cigarettes in the United States is well below those in many other industrialized nations.

Cigarette taxes vary widely from state to state in the United States. For example, South Carolina has a cigarette tax of only 7 cents per pack, the nation lowest, while New Jersey has the highest cigarette tax in the U.S.: $2.575 per pack. In Alabama, Illinois, Missouri, New York City, Tennessee, and Virginia, counties and cities may impose an additional limited tax on the price of cigarettes. Due to the high tax rate, the price of an average pack of cigarettes in New Jersey is

$6.45, which is still less than the approximated external cost of a pack of cigarettes. In Canada, cigarette taxes have raised prices of the more expensive brands to upwards of ten CAD$.

In the United Kingdom, a packet of cigarettes typically costs between £4.25 and £5.50 ($8.50/$11.00) depending on the brand purchased and where the purchase was made. The UK has a strong black market for cigarettes which have formed as a result of the high taxation and it is estimated that 25-30% of all cigarettes smoked in the country avoid UK taxes.

- **Restrictions on Cigarette Advertisement**

Several Western countries have also put restrictions on cigarette advertising. In the United States, all television advertising of tobacco products has been prohibited since 1971. In Australia, the Tobacco Advertising Prohibition Act 1992 prohibits tobacco advertising in any form, with a very small number of exceptions (some international sporting events were accepted, but these exceptions were revoked in 2006). Other countries have legislated particularly against advertising that appears to target minors.

- **Package Warnings**

Some countries like Nigeria also imposed legal requirements on the packaging of tobacco products. For example in the countries of the European Union, Turkey, Australia and South Africa, cigarette packs must be prominently labeled with the health risks associated with smoking. Canada, Australia, Thailand, Iceland and Brazil have also imposed labels upon cigarette packs warning smokers of the effects, and they include graphic images of the potential health effects of smoking. Cards are also inserted into cigarette packs in Canada. There are sixteen of them, and only one comes in a pack. They explain different methods of quitting smoking. Also, in the United Kingdom, there have been a number of graphic NHS

advertisements, one showing a cigarette filled with fatty deposits, as if the cigarette is symbolising the artery of a smoker.

Currently in Australia, almost 70% of the cigarette packet (including 1/3 of the front, the whole back and both sides) are covered in either graphic imagery or health factoids. These warnings depict graphic images of the effects of smoking as well as information about the names and numbers of chemicals and annual death rates. Television ads accompany them, including video of smokers struggling to breathe in hospital. Since then, the number of smokers has been reduced by one quarter. Singapore similarly requires cigarette manufacturers to print images of mouths, feet and blood vessels adversely affected by smoking.

France has the additional requirement of listing on the side of all packaging the percentages of tobacco present, compared to the weight of the paper and additives present. For one U.S. manufacturer of cigarettes sold in France, the side list indicates only 85.0% is tobacco, 9.0% are the additives, and paper constitutes another 6.0% of the total weight of a cigarette. Filters are not part of the formula. The additives are syrup sprayed on the chopped tobacco leaf on the conveyor belt and is a combination of the 599 additive ingredients as submitted to Member of Congress Henry Waxman in a 50 page list by the five major U.S. tobacco companies during his Congressional Hearings on April 14, 1994.

- **Smoking Bans**

With no laws or norms to ban Nigerians from tobacco consumption, its usage continued to be a matter of individual choice. Hence adults in families and the general society abuse the substance unrestrictedly and publicity thereby becoming model tobacco users for the younger Nigerian. This coupled with the enticing advertisements depicting tobacco use as a social grace and other

developmental psycho-social circumstances may push adolescent to tobacco substance abuse. Thus, the substance is abused by the youth as much as it's available because they are too young to picture the long term consequences of tobacco abuse and addiction.

Several countries such as the Republic of Ireland, Latvia, Estonia, France, Finland, Norway, Canada, Australia, Sweden, Singapore, Italy, Indonesia, India, Lithuania, Chile, Spain, Iceland, United Kingdom, Slovenia and Malta have legislated against smoking in public places, often including bars and restaurants. Restauranteurs have been permitted in some jurisdictions to build designated smoking areas (or to prohibit smoking). In the United States, many states prohibit smoking in restaurants, and some also prohibit smoking in bars. In provinces of Canada, smoking is illegal in indoor workplaces and public places, including bars and restaurants. In Australia, smoking bans vary from state to state. Currently, Queensland has total bans within all public interiors (including workplaces, bars, pubs and eateries) as well as patrolled beaches and some outdoor public areas. There are, however, exceptions for designated smoking areas. In Victoria, smoking is banned in train stations, bus stops and tram stops as these are public locations where second hand smoke can affect non-smokers waiting for public transport, and since July 1st 2007 is now extended to all indoor public places. In New Zealand and Brazil, smoking is banned in enclosed public places mainly bars, restaurants and pubs. Hong Kong banned smoking on 1 January 2007 in the workplace, public spaces such as restaurants, karaoke rooms, buildings, and public parks. Bars serving alcohol who do not admit under-18s have been exempted till 2009. In Romania smoking is illegal in trains, metro stations, public institutions (except where designated, usually outside) and public transportation.

According to Adenijo, (2001) "tobacco is a major industrial crop and is fast coming a major source of cash income for some peasant farmers in West Africa ". He added that Niger and Ivory

Coast are leading in the producer of tobacco in West Africa.According to the international cancer congress (as cited in Folawiyo,1998) wild claims are made by anti- tobacco people, some alleged that insanity was inherited from parents who used tobacco. Judge blamed cigarettes for corrupting the morals deadening the sense of young people. As scientist began to look more closely at the physiological effects of smoking, it was noted by one cancer authority that the increase in the incidence of pulmonary carcinoma is due largely to the increase in cigarette smoking. In the United Kingdom the Health Education Authority, in its 1995 report confirmed that cigarettes smoke contained more than 4,000 chemicals of which many are known to be toxic, carcinogenic or magnetic. Then report estimates that 121,000 people per year die prematurely as a result of smoking. The causes of death were divided as 38 percent cancer of which two third are lung cancers, 34 percent heart and circulatory disease and, 28 percent respiratory illness. This physiological effect of smoking was supported by Nigerian Television authority (NTA) News reported of 31st may, 2000 which stated that tobacco constitutes 70% of cancer causative agents. According to Kuti 2001(3) "over 9 million Nigerian smoke and over 3.5 million smoke more than 20 sticks a day". He added that the chemicals in cigarette damage the eyes, nose and throat with infections. Carbon dioxide, a component of the smoke, he said, enters the blood stream and combines with haemoglobin to form carbon haemoglobin, a substance which interferes with the body's ability to obtain and use oxygen from blood.

2.3 Counselling

Counseling according to Denga (1986) is designed to help an individual to achieve awareness of his or her strengths, weaknesses, skills, knowledge, values and feelings. It seeks to help an individual learn how to make viable decisions, become self- directing and realize his maximum potentialities.Shertzer and Stone (1980) defined counselling as the process of helping individuals

with troubles as psychological problems. It is the process of helping people to learn how to solve certain interpersonal, emotional and decision problems.

Okon (1984) in Bello (2007) defined counseling as 'a learning process in which individuals learn about themselves (the personal characteristics) their interpersonal relationships, their attitudes, values and behaviours that will help them in their development'. To Denga (1988) in Bello (2007) counseling is a personalized dialogue or interview between the counselor and the client during which the client seeks assistance regarding the resolution to his problems. Shertzer and Stone (1980) defined counselling as the process of helping individuals with troubles as psychological problems. It is the process of helping people to learn how to solve certain interpersonal, emotional and decision problems. They imply that counselors help students to achieve their own educational and vocational goals and fulfillment. Counseling thus focuses on individual needs and problems of students which help them learn what is required to solve these problems. In this case the student becomes independently able to handle future problems.

Shetzer and Stone (1980) describe counseling as an applied art that seeks deliberately to change the behavior of an individual. They define it as the learning process which individuals learn about themselves, their personal relationships and their behavior that advance their personal development. Counseling is an assistance given to individuals to attain a sense of identity. It focuses on helping the individual to cope with developmental tasks such self-definition, independence and so on. Attention is given to clarify the individual's assets, skills, strength and personal resources as well as weaknesses.

Woolfe, Murgatroyd &Rhys (as cited in Kolo,1997)defined counseling as a process of helping people to help them live their lives more effectively. The authors further stated that counseling is

about life and about how to choose to live within the constraint of the personal limitations and those of social structure and physical environment in which we are placed. It is about ups and downs of human existence, about people as thinking, feeling and doing beings.

Furthermore, Nelson-Jones(as cited in Kolo, 1997) states that counselling can be defined as the process that aims to help the clients, who are mainly seen outside medical settings, to help themselves make better choices and by becoming better choosers. The helper's repertoire of skills includes those of forming and understanding relationship, as well as interventions focused on helping the clients change specific aspects of their feeling, thinking and acting.

Gesinde (as citedin Kolo (1997) explain that counselling is more than advice giving which the word guidance connotes and that "counselling involves something more than a solution to an immediate problem. Therefore in Gesinde's (1991) and Kolo's (1997) view counselling as an in depthinteraction between two or few individuals with the intent of assisting the client to better understand himself in a relationship to his or her present and further problems. The interaction that takes place between the client and the counsellor is so intense and of high quality that the end product is a change in behaviour due to the learning process that had taken place during interaction. This is why Gesinde (1991) in Kolo (1997) further explained that "counselling deals with affective realm, which involves feelings, emotions, attitudes and not simple ideas".

Okon (1984) in Kolo (1997) defined counselling as "a learning process in which an individual learn about their attitudes, values and behaviour that help them in their development". This definition implies that a client entering into a counselling process learns through the process his personal attributes that are assets to his development in any area of understanding. For such

learning to take place there must be what Rogers in Kolo (1997) called a positive regards towards each other and the relationship must be cordial enough to warrant such facilitative learning.

Another dimension of seeing the definition of counselling is presented by Alao (1991) in Kolo (1997). To him counselling is a helping relationship between the counsellor and client. The basic function of the counsellor in helping relationship is to provide the facilitative and action conditions necessary for change in the client's mode of thinking, feeling and behaviour. He also as other already cited emphasized in his meaning of counselling that mutual respects is essential between the client(s) and the counsellor(s).

Saka, (1987) maintained that counselling is a personalized and usually intimate interview between the client and the counsellor in which the client has a problem and seeks the counsellor's help to solve. Counselling is subsumed in guidance and it is the heart of the guidance programmes in the sense that all other guidance services end up in counselling.Though various definitions have been given to counseling, there seems to be some communality in such definitions. One of such communalities is that counseling is a special helping relationship. The special nature of the relationship that exists between the counselor and client is that which produce growth in the client. For this fact, Maclean and Gould (1988) in Kolo (1997) said that three elements are important in the counseling relationship. These are client who seek the help, the counselor who offers the help and an interaction between client and the counselor. The major counselling aim is to change behaviour and change of behaviour involves behaviour modification. Counselling is a process of modifying individual behaviour in terms of needs/concerns or problems.

Akinade (2005) defined psychotherapy as a social and professional interaction in which the laws and principles that apply in other interpersonal situations apply. It often practiced in hospital settings. The therapist is an active partner in the process, applying, eg learning principles to help clients achieve better ways of dealing with problems of life.

According to Uba, (1989) psychotherapy is based on the planned use of the human relationship as agent of change. Psychotherapeutic intervention aims at providing useful ways for further change and growth. Through psychotherapeutic process, each person is tactfully and cautiously guided to find his or her own way, device his or her own life style and discover how he can best make use of his or her God given inherent abilities, resources and opportunities.

Psychotherapy is the treatment of individuals with emotional problems, behavioral problems, or mental illness primarily through verbal communication. In most types of psychotherapy, a person discusses his or her problems one-on-one with a therapist. The therapist tries to understand the person's problems and to help the individual change distressing thoughts, feelings, or behaviors,(Microsoft Encarta 2008).

People often seek psychotherapy when they have tried other approaches to solving a personal problem. For example, people who are depressed, anxious, or have drug or alcohol problems may find that talking to friends or family members is not enough to resolve their problems. Sometimes people may want to talk to a therapist about problems they would feel uncomfortable discussing with friends or family, such as being sexually abused as a child. Finding a therapist to talk to who is knowledgeable about emotional problems, has patients' best interests at heart, and is relatively objective can be extremely helpful, (Microsoft Encarta 2008).

Psychotherapy differs in two ways from the informal help or advice that one person may give another. First, psychotherapy is conducted by a trained, certified, or licensed therapist. In addition, treatment methods in psychotherapy are guided by well-developed theories about the sources of personal problems.(Microsoft Encarta 2008).

2.4 Theoretical framework

2.4.1 Social learning Theory (Albert Bandura)

Many theories have been advanced over the years to explain why people behave as they are. Until recently the most common view popularized by various personality docrine depicted behavior as needs, drives and impulses often operating below the level of consciousness. Since the principal causes of behavior resides in forces within the individual, that is where one looked for explanations of man's actions.

Both operant conditioning and social learning theories assume whether or not people choose to perform what they have learned observationally is strongly influenced by the consequences of such activities in social learning theory however, behavior is regulated not only by directly experienced consequences from external sources but by vicarious reinforcement and self reinforcement.An important factor in social learning theory is the concept of reciprocal determinism. This notion states that just as an individual's behavior is influenced by the environment, the environment is also influenced by the individual's behavior (Bandura, 2002). In other words, a person's behavior, environment, and personal qualities all reciprocally influence each other. For example, a child who plays violent video games will likely influence their peers to play as well, which then encourages the child to play more often. This could lead to the child becoming desensitized to violence, which in turn will likely affect the child's real life behaviors.

In the social learning view man is neither driven by inner forces nor buffeted helplessly by environmental enfluences. Rather, psychological functioning is best understood in terms of continuous reciprocal interractions between behaviour and its controlling conditions. In the social learning system new pattern of behaviours can be acquired through direct experience or by observing the behaviour of others. The more redumentary form of learning rooted in direct experience is largely governed by the rewarding and punishing consequences that follow a given action. People are repeatedly comfronted with situations with which they must dealed in one way or another. Some of the responses they try proved unsuccessful, while others produced more favourable effects. Through this process of differential reinforcement successfully made of behaviuors are eventual selected from exploratory activities while ineffectual ones are discarded.

It is commonly believed that responses are automatically and unconsciously stengthened by their immediate consequences. Simple performance can be altered to some degree through reinforcement without awareness of the relationship between ones actions and their outcomes. However, man's cognitve skills enable him to profit more intensively from experience than if he were an unthinking organism. Within the frame work of social learning theory, reinforcement primarily serves informative and incentive functions though it also has response strengthening capability.

2.5 BehaviourModification Theory

Behaviour is of concern to everybody; to teachers, parents, professionals and significant others who guide and counsel children, adolescents and adults. Each one's behaviour is a determinant of his achievement. This fact necessitates the definition of behaviour, which is how we behave, act and conduct ourselves. Essuman (1990) technically defined behaviuor therapy as a practical application of the principles of psychology especially learning, it is a systematic scientific way of

changing an undesirable behaviuor to a desirable one and it is attained through learning and other psychological principles. Collins (1999) defines behaviour in the following words; conduct, actions, bearing, carriage, comportment, demeanour, manner etc. Behaviuor is a vital component of somebody's personality which teachers and counselors measure to assist the person determine that his typology and dispositions. For example, people and client's usual behaviour and problem are tested by observing his or her behaviuoral characteristics, which will enable the counsellor or therapist ascertain her personality type and traits.

According to Odeomelam (2006) behavioural problem has been variously defined by both laymen and professionals. It is simply defined as an action taken where it is not wanted. This action is not regarded as normal. Rather it is said to be deviating what is socially acceptable. Thus this behaviour is deemed deviant by teachers, parents and others. These inappropriate and disruptive behaviours of people create problems for teacher in schools, parents at home, persons at political meetings, and even for counselors at their conferences and seminars. When the misbehaviours persist; increase in frequency, intensity and severity they pervade into other areas of activity, inhibiting, determined or retarding the progress of such activities.

Behavioral therapy is a treatment that helps change potentially self-destructing behaviors like tobacco smokings. It is also called behavioral modification or cognitive behavioral therapy. Medical professionals use this type of therapy to replace bad habits with good ones. The therapy also helps you cope with difficult situations. It is most often used to treat anxiety disorders. However, you don't have to be diagnosed with a mental health disorder to benefit.Behavioral therapy is a form of therapy rooted in the principles of behaviorism. The school of thought known as behaviorism is focused on the idea that we learn from our environment. In behavioral therapy, the goal is to reinforce desirable behaviors and eliminate unwanted or maladaptive ones.

The techniques used in this type of treatment are based on the theories of classical conditioning and operant conditioning.

One important thing to note about the various behavioral therapies is that unlike some other types of therapy that are rooted on insight (such as psychoanalytic and humanistic therapies), behavioral therapy is action based. Behavioral therapists are focused on using the same learning strategies that led to the formation of unwanted behaviors as well as other new behaviors. Because of this, behavioral therapy tends to be highly focused. The behavior itself is the problem, and the goal is to teach clients new behaviors to minimize or eliminate the issue. Old learning led to the development of a problem, and so the idea is that new learning can fix it. It is the believe of the researcher that this technique can be effective in treatment of tobacco smoking. The behavior is learnt and according to the behavior therapy, behaviours learnt can be unlearned.

Behavioral therapy is used by psychotherapists, psychiatrists, and other qualified medical professionals. It is usually used to help treat anxiety and mood disorders. Behavior therapy is focused on helping an individual understand how changing their behavior can lead to changes in how they are feeling. The goal of behavior therapy is usually focused on increasing the person's engagement in positive or socially reinforcing activities. Behavior therapy is a structured approach that carefully measures what the person is doing and then seeks to increase chances for positive experience.The nature of human by the Beavioural counselling according to Achebe (1988) are as follows ';

1. At birth the human infant has a neutral character. Its behaviour cannot be said to be good or bad. No individual is born with tobacco smoking

2. An individual interacts with his environment, be it physical or social environment. The individual is an active organism. He influences his environment, the environment also influences him. Tobacco smoking is leant in the course of interaction with others in the environment.
3. Apart from behaviours due to innate characteristics of the individual and maturation, all behaviours of the individual are due to his interaction with his environment that is they are learned. Tobacco smoking could be learnt at home or through peer influence.
4. This interaction with the environment is brought about by the interplay of heredity and experiences the individual is confronted with.
5. Even though an individual's behaviour is greatly determined by the frequency and types of reinforcement he has experienced in his life situations, each person has the potential to almost always evaluate and plan to modify his behaviour and seek ways of implementing the modification. Thus human behaviour to some extent is predictableand to some extent unpredictable. Interaction of the tomacco smoker with the environment reinforces the habit, the more encouragement the smoker gets from the peers the more he indulges in the act.
6. The views that the human being is a complex machine which behaves according to laid down laws and also that the human being is controlled by the social environment, no longer hold in a behavioural counselling framework. The latter recognizes the human being as an active organism which can decide, think, create and influence his environment even though the environment can as well influence him.The smoker could be assisted to unlearn the habit. Positive reinforcement could be very effective in unlearning the habit just like it had influence in learning the habit.

Anwana and Lannap (2002) identified the followings as basic assumptions of behavior therapy:

- That all behavior exhibited by man is learned
- That since man's behavior is learned it can also be unlearned.
- That man enters the world with the potential for either good or bad.
- Those maladaptive behaviors are product of negative learning rather than problems generated by the internal condition of the maladaptive individuals
- That man reacts to stimulus as they presented to him by his environment
- That man's behavior is determined by goals he set for himself and those imposed by the society

2.5.1Goals of Behaviour Therapy

Anwana (2005) opined that the goal of behavioural therapy is "to help the individual reach a state of happiness and pleasure". Bulus (1998) referring to counselling goals in behavioural therapy suggested these goals:

- Assisting clients to change their behaviour in order to solve whatever problem they manifest or select for presentation to the counsellor. The goal here is to assist the client change tobacco smoking beahviour.
- Altering maladaptive behavior; the maladaptive behavior is tobacco smoking
- Learning the decision-making process; changing tobacco smoking habit is a learning process, requiring some decision making on the part of the client.
- Preventing problems and helping them solve interpersonal, emotional and decision problems. Tobacco smoking has health and financial implications, unlearning the habit helps in reducing the problems associated with tobacco smoking

Whatever may be the goals of the therapy in behavioural counselling, counselors and clients must mutually agree upon them, collectively pull their energies and resources together to achieve them. Sometimes as counselling progresses the goals can be altered and new ones established.

2.6Process of Counselling in Behavioural Therapy

Attempts to identify basic stages or steps in the counselling process have resulted in a number of different divisions, the devised frameworks have a varied number of steps. However,Lafleur (1979) observed that four basic steps or storage are held in common,they are assessment, goal setting, technique implementation and evaluation –termination.

Assessment: the purpose of assessment in behavioural counselling is to determine what the client is doing presently. Overt activities, feelings, values and thoughts of client at the present are the items are the main consideration during assessment phase.

Goal setting: Based on the information collected and analyzed in the assessment phase, the counsellor and client set mutually acceptable goals for counselling. Goals are important in behavioural counselling because they direct the learning activity. The goals established targets for the actions of the counsellor and client in counselling. Similarly goals often serve to motive client to achieve change in their behaviour in addition to providing guides for techniques choice and formulation.

Techniques implementation: after the establishment of mutually acceptable counselling goals, the counsellor and the client must decide what are the best learning strategies or counselling techniques in order to help the client to achieve the desired behaviour change.

Evaluation: Termination, evaluation in behavioural counselling is a constant process rather than one that occurs only at the end of counselling. The evaluation is made in terms of what the client

is doing. The specific client actions that form the basis for evaluation are detailed in the goal statement for each client.

2.7Reinforcement Counselling Technique

Reinforcement was first derived from operant conditioning theory. Thorndike's (as in Achebe, 1988) indicated that earlier principles of law and effect established the basis of the operant conditioning. This law states that any act which produces a satisfying effect in a given situation will tend to be repeated in that situation, but the person generally credited to be responsible for developing this concept is B F Skinner1953.

Reinforcement is the presentation of a positive reinforcer or the removal of a negative reinforce. It tends to increase the frequency of occurrence of a bahaviour. It is said to be contingent on behaviour (Essuman, 1990). It is a behaviour management system in which renforcers are dispensed for a variety of classrooms or school behaviours. The consequences brought about by a particular behaviuor can be pleasant or unpleasant for the individual and others. In other words, it is a concept that determines the increase and frequency of behaviour. Reinforcement may take the form of comments, money (eg salaries), smile, handshakes, clap, a nod, provision of sweets among others. This is technically different from every day conversation when people use the term 'reinforcement' to mean a reward. Usually a reward is something given in return for service, merit or achievement. Sometimes both terms are used interchangeably; therefore reinforcement is the process of using a reinforcer to increase the frequency of behaviour (Microsoft Encarta ,2008)

Techniques in general have been defined by Rao (as in Kolo 1997) as 'specific procedures and skills employed by counsellor in securing his counselling goals or objectives'. They are therefore methods used in a counselling process to actualize the counselling goals. Techniques

are essentially methods of interacting with the client. According to Akinade (2005) techniques are methods or specific procedures and skills employed by counsellors in securing their goals or objectives of counselling relationship. Techniques often used include reinforcement, confrontation, avoidance of punishment, use of skillful questioning, humour, paradox and designing action plans. He further defined techniques of counselling which involved establishing rapport, cultivating self-understanding, planning a program of action, carrying out the plans and referrals to other personnel workers.

Types of Reinforcement and Reinforcers

There are two types of reinforcement: positive reinforcement and negative reinforcement.

1. Positive reinforcement according to Woolfolk and Mccuneicolish(1984) means an increase in the likelihood of behaviour due to the addition of a reinforcer after behaviour. For example adding praise will increase the chances of your child cleaning his/her room. The most common type of positive reinforcement is: praise, token, remark, approval, handshakes, sweets, money (eg salaries) and so forth. Generally, anything one does or gives to increase the probability of behaviour is positive reinforcement. According to Akinade (2005) positive reinforcement is a very common type of reinforcement. It involves the use of pleasantstimuli or reinforcers to assist clients to improve their performance or modify their behaviours.

According to Akinboye (1988) positive reinforcement is the presentation of a positive reinforcer. It is used to strengthen a weakly emitted behaviour.Positive reinforcement or intrinsic or extrinsic reinforcement in counselling is meant to praise a well behaved client as a recommendation from counselor.

2. Negative reinforcement according to Akinboye (1988) is the presentation of negative reinforcers and the removal of positive reinforcers. Continuous reinforcement implies that every instance of behaviour whether emitted or exhibited is reinforced. It is used to acquire new behaviour as a result of continuous emission of such desired behavioural patterns. Schertzer and Stone (1980) defined negative reinforcement as behaviour that precedes the removal of a stimulus event. Such behaviour has good chance of occurring under similar conditions in future. Stimuli are usually painful unpleasant and include disapproval criticism and nagging. A negative reinforce is a noxious stimulus, which terminate contingent upon the occurrence of a particular response.

Akinade (2005) affirms that in negative reinforcement probability is increased because something is removed or withdrawn (Skinner in Akinade, 2005). Stoppage of any aversive stimulus after a response to it, typically act as a negative reinforce. It produces its effect by removing a host of aversive stimuli.

There are primary and secondary reinforcers. A primary reinforcer is sometimes called an unconditional reinforcer. They are stimuli that are naturally reinforcing individual and are necessary for species survival such as food, water, air, warmth, sleep, and sex. While the secondary reinforcer is sometimes called condition reinforcer, they are stimuli that are naturally reinforcing; their values have been learned or conditioned. They are also stimulus or situations that have acquired reinforcing power after been associated with a primary reinforcer or an earlier condition reinforcer such as money. Some of the secondary reinforcement is social reinforcers such as attention, praise, sweets, token, smiling and so forth. Rolland (1985). In the classroom, teacher and counselors should adopt the use of secondary reinforcers while shaping behaviour.

2.8 Gender Difference among Students Smokers

There seems to be significance differences in the way men and women acquire and use cigarette. Body differences in physiology make women more vulnerable to the men to the effect of nicotine. Males are usually introduced to cigarette smoking by some of the same sex, while females by some one of the opposite sex (stephens, 1991).

Lokadang (2000) reported that there is high rate of tobacco and cannabis abuse and that of men were found to be more common in the use than women. Ajar (1999) stated that "men cite nicotine; women say social intangibles are behind urge to smoke". This finding was supported by Perkins (1999) who stated that 'nicotine clearly drives a man's desire to smoke, but if may be less of catalyst for women'. He however added that it does not mean nicotine is not important for women but that the external, pleasure of smoking such as holding smelling of a cigarette seem to be more important to them which he said is in contrast to men, nicotine seems to influence men's smoking most than the external factors. He added "women appear to be less sensitive to different doses of nicotine than men.

2.9 Influence of Social Drugs on Hard Drugs

According to Adenijo (2001) nicotine, alcohol, kola nuts and marijuana are gateway drugs, or point of entrance which is substances people tends to try first when they start using drugs, they can lead to the use of other substances. In other words, people who use these drugs increase their risk of using harder substances.

In our society, the use if certain substances to modify mood or behavior under certain circumstances are generally regarded as normal and appropriate; such use include the recreational smoking of cigarette which majority of our youths participate, and the uses of alcohol, caffeine in form of coffee, tea, or kolanuts as stimulants. There are however, wide

cultural variations, while in some group the recreational use of alcohol and cigarette are frowned upon, the use of illegal substances for mood-altering effects has become widely acceptable in other groups, they are: alcohol, nicotine (cigarette) and kolanuts which are referred to as social drugs.

According to Abdu (2008) Social drugs are natural or synthetic substances which by law are acceptable for consumption. They are socially acceptable and such readily available for consumption. While the consumption and selling of these drugs is not illegal in Nigerian society the basis for not identifying them as illegal and dangerous drugs has been criticized because of their health and social hazards. Though, like in cigarette advertisement, there is always the warning that "tobacco smoking is dangerous to health". This means that whoever ignores the warning is taking the tobacco at his/her own risk. This probably form the basis of Odumodu (as cited in Odebunmi 2008) saying that there is no need to classify drugs as "hard" or "soft" because of its acceptance as social drugs have the same effect as other which are classified as "hard" drug. He gave example with alcohol and nicotine in tobacco product. The truth he said is that "there is hardly youth who will smoke marijuana abuse barbiturate or indeed any other "hard" drug if he/she has never smoked cigarette or taken alcohol before".

2.9.1Influence of Peer Group on the Use of Tobacco.

Everything the individual experiences contribute to the formation of self-concept, but certain experience, especially interpersonal contact, plays more fundamental part than other. Through the acts and attitudes of other, individual learn how they are influence to perceive them in the same way. For example of youth's belief that he or she unruly, smart, or silly is to a considerable extent formulated through labels applied by others.

The need to belong, be accepted and love each other is a strong pull that can drag even a saint in to the evil world. The professed attitudes or desire may say, do not take drug but the number of friends who use drugs override such desire. This explain while well brought up children at home may end up "rotten" in school for example. Seeking attention and love (e.g. from peers) has been identified as one of the consequence of child abuse (Denga 2002).

Peer group describe the various ways in which people of similar group, sometimes similar height, class and status relate and adjust to each other. For the adolescent this is an extremely important group when they formulate and revise the way they perceive themselves for years, the peer group has a role of emancipation, this is because their exposure to other group is often made into the peer group, having a number of things in common (age, class, thinking, feeling, reaction, and problems), the adolescent tend to be more loyal to this group then even their family group. The peer group is therefore very powerful in the determination of the adolescent's personality and lifestyle. They tend to conform more to the peer standards, rules, values, and aspiration in many ways. The friendship is often very intimate than with any other member of the society.

Most adolescents that were victims of tobacco smoking have always attributed the case to the influence of their friends. According to Duncan (1996), "peer group has been known to be one of the most important determinants of tobacco smoking and other forms of behavior problems". Barnabas (1988) pointed out that peer group is one of strongest social reason to smoke tobacco; this he said normally start at home, parties and school. The adolescent believed that cigarette are used to solve emotional problems hence, they smoke initially to enjoy relaxation and to become more sociable until they become drug (nicotine) oriented. Mustapha (1989) said "when you are involved with drug and drug scene every friend you have is a user. To get off you have to be able to break away from that scene and those friends, it takes real courage,

support and cooperation to achieve this". Folawiyo (1998) on his part stated that youth are more likely than adults to engage in irresponsible and unstructured drug using behavior. He concluded that adolescent time is generally the time of experimentation as well as the time when peer group pressure is great.

Peer group influence has very strong effect on attitude formation especially in the youth. Generally learning to be dependent puts to youth at higher risk of identifying with a group. This makes identifying with such strategy for survival and becoming independent to some people.

2.10 Review of Empirical Studies

Several large prospective studies have been undertaken where young adolescents were monitored regularly for several years. These studies have repeatedly demonstrated that the uptake of smoking is psychologically damaging. Wu and Anthony (1999) prospectively investigated the effects of tobacco initiation in 8–14-year-old schoolchildren, and found that tobacco uptake led to a modest increase in subsequent feelings of depression. Johnson et al. (2000) found that regular cigarette smoking at the age of 16 was associated with more generalized anxiety and panic disorder, at subsequent assessments 5 years later. Steuber and Danner (2005) prospectively monitored over 14 000 adolescents and found that cigarette smoking led to higher rates of depression. They also noted a gender difference, in that female adolescents in particular showed 'increases in depression around the onset of smoking and decreases around the time of quitting'.

Behavioural Reinforcement Counselling Technique has been found to be effective in the treatment of many behavioural problems. A study conducted by Adeusi,Gesinde,Alao,Adejumo and Adekeye, (2015) titled Differential effect of behavioural strategies on the management of conduct disorder among adolescents in correctional centres in Lagos State, The design utilized is

a 3 x 2 factorial design. The population for this study was one hundred and eighty six (186). The sample size employed for this study is 90 adolescents. Two correctional centres (male only and female only) were purposively selected because they have similar features where adolescents that meet the research diagnostic criteria for conduct disorder are found. Among the 90 participants, 15 were randomly assigned into each of the two experimental groups (Positive Reinforcement Counselling Technique and Behavioural Rehearsal) and the control group. A sum total of 45 participants were involved at each of the Special Correctional Centres. The descriptions of participants are as follows: 45 girls and 45 boys; the age range is between 10 to 17years (10-13 years was 35 constituting 38.9% while participants between 14-17 years were 55 constituting 61.1% of the sample. Analysis of data and test of hypothesis revealed that Hypothesis one which states that there is a significant difference in the treatment of conduct disorder of participants exposed to Positive Reinforcement Counselling Technique and behavioural rehearsal when compared with participants in the control groups was accepted because the result of the findings was significant. The hypothesis was tested using analysis of variance and the result of the analysis revealed $F\ (2,\ 87) = 46.622$, $p < 0.05$. The findings indicated that Positive Reinforcement Counselling Technique and behavioural rehearsal are both effective in the treatment of conduct disorder among adolescents. The reason for this result is as a result of the eight weeks exposure of the participants to their respective treatments. This study is in agreement with the findings of Shobola (2007) and Aderanti and Hassan (2011) that Positive Reinforcement Counselling Technique is an effective intervention in the treatment of all forms of antisocial behaviours such as smoking, stealing, rebelliousness, and socially undesirable behaviours among others.

Although the second hypothesis states that there is a significant difference in conduct disorder of participants exposed to Positive Reinforcement Counselling Techniqueand behavioural rehearsal, the result of the analysis was not significant; therefore, the hypothesis was rejected. The mean scores indicated that the participants in Positive Reinforcement Counselling Techniquegroup displayed a higher conduct disorder level (66.033) after exposure to the technique compared to the participants in the behavioural rehearsal group (65.433). The result implies that both interventions were effective and again the result of the hypothesis is an affirmation of the theory and previous studies that are carried out on Positive Reinforcement Counselling Techniqueand behavioural rehearsal (Baker and Scarth, 2002; Aderanti and Hassan, 2011).

McGee. (2000) undertook a large prospective study in New Zealand, monitoring a range of behavioural and mental health measures. Many factors were related to the initial uptake of smoking, including early socio-economic disadvantage. However, those adolescents who took up regular smoking reported an increased risk of psychological problems 3 years later, including more anxiety depressive disorders. Oquendo et al. (2004) investigated the factors associated with suicides and attempted suicides in major depression. Cigarette smoking was found to be a strong predictor of suicidal acts, along with the clinical severity of depression. Other prospective studies, which found that smoking could exacerbate stress and/or depression, are outlined in an earlier review (Parrott, 2006). However, it should be emphasised that these relationships are complex and multi-factorial. Hence, numerous co-factors can modulate the adverse effects of smoking on mood, including psychosocial, genetic and biological influences.

Berlin. (2010) undertook an empirical study with 82 cigarettesmokers, in the age range 19–64 years, whose meancigarette consumption was 15.9 cigarettes/day. Twoleaflets were prepared, the stress information leaflet and the matched control leaflet thatdescribed the adverse effects of

tobacco smoking onoral health—using similar phrases and sentences.The unpaid volunteers were randomly split into twoequivalent groups for each leaflet, with similar genderdistribution, age range and daily cigarette consumption.Beliefs about smoking were measured on a seriesof self-rating questions. Several questions were unrelatedto the study aims, such as 'Cigarette smoking is auseful activity at a party', whereas others coveredbeliefs about stress and smoking, that is; 'Adolescents whostart smoking will show greater levels of stress one yearlater'.The questionnaire was completed on three occasions:pre-intervention baseline, immediately afterreading the information leaflet, and 1week later.The findings from two of the stress questions aresummarised. They showed that beliefs aboutstress and smoking were similar between groups atbaseline and remained unchanged in the control groupwho had read the leaflet about smoking and oral health.In the positive intervention group, beliefs about smokingand stress were significantly changed after readingthe explanatory leaflet and remained at thesenew values one week later. The other stressquestions showed a similar pattern of changes. Hence,the leaflet helped explain how smoking can causestress, and this level of understanding remainedafterwards. This shows that normal smokers couldunderstand the leaflet, and that this attitudinal changeremained for at least 1 week. Further studies could beundertaken. The leaflet might be employed with adultsintending to quit, to investigate if the leaflet helpedthem initiate cessation or maintain it over time. Theleaflet could also be used with health educationpackages for school children and adolescents.

Cohen and Lichtenstein (1990), assessed over 200 smokers intending to quit. Those who failed to quit reported high stress levels at baseline, and this continued at the same high stress level over the subsequent 1, 3 and 6 month test periods. In contrast, the small group of successful quitters reported steadily reducing levels of stress over time, so that after 6 months they had

become significantly less stressed. Crucially, their stress levels at pre-quit baseline were identical to those of non-quitters; hence, it was not just the less stressed individuals who managed to quit. A similar pattern was reported by Parrott (1995) in a smoking cessation study undertaken at two London health centres. Significantly, reduced levels of stress were found after 3 and 6 months of confirmed smoking cessation, despite stress levels at baseline being almost identical for successful and non-successful quitters. Hence, a significant reduction in stress after quitting was not an artefact of lower stress at baseline, while stressful life events were also unchanged for both groups over the study period (Carey., 1993).

Chassin . (2002) found that the significant mood gains of cessation were maintained over time, with decreased levels of stress 6 years after quitting. Furthermore, when they had been active smokers, their stress levels were significantly higher than nonsmokers, but after enduring cessation, their stress levels were at the same levels as non-smokers. Berlin (2010) assessed a cohort of 133 adults with a history of clinical depression who were attempting toquit smoking. Three groups emerged: the successful or 'continuous' abstainers, the intermittent or 'point prevalence' abstainers and unsuccessful quitters. These three groups did not differ in baseline stress values, but following attempted cessation, the continuous and point prevalent abstainer groups reported significantly less anxiety-psychic than non-abstainers. More specifically, during the 8-week period following target cessation, stress levels increased in the unsuccessful quitters and decreased in the successful quitters. The increased daily stress of their failed quitters may be due to partially cutting down—because this would increase daily stress (Parrott, 2006).

There may also be similar benefits of cessation to the cardiac system, because regular smoking also causes fluctuations in cardiac activity over the day. Adan and Sanchez-Turet (1995) found that the adverse deprivation reversal explanation of how smoking causes stress was published in

the American Psychologist (Parrott, 1999). The article was the placed on a number of American smoking-cessation websites, and over the next few years I received a number of positive emails from former smokers. In personal testimonies, they stated that the article had helped them understand the rationale for their nicotine dependency. The model had also helped them to maintain cessation and withstand their tobacco cravings. In a subsequent article, he expanded the model to include other moods states such as depression (Parrott, 2003). Later, he debated the methodological and theoretical issues around these contrasting models and their implicationsfor nicotine researchers (Parrott, 2006).

Bello (2007), observed that in our immediate environment, oncology and Radiotherapy centre, Ahmadu Bello University Teaching Hospital (Nigeria), the incidence of tobacco related cancers especially laryngeal, or pharyngeal and oral cavity cancers is on the rise especially in males. Head and neck cancers are the commonest among male patients in the centre and it accounted for 26.72% of all cancer cases brought to the centre from its inception to June 2003. 65.96% of cancers in males and 13.01% of cancers in females are head and neck cancers. This may not be unconnected with the proliferation of "smoking shelters" in especially Nigerian urban areas inviting more people into smoking.

It is important to note that research studies reveal that smokers' risk of developing disabling illness particularly cancer of the lung is more strongly affected by the amount of cigarette he/she smokes daily. This is to say a smoker who starts early, smoke regularly and continue to smoke faces the biggest rise of serious health hazards than one who quits smoking while still young.

According to Bello (2007) Research evidence has shown that many smokers got into the habit at teenage (adolescence) although some started before the age of 10years. A study conducted by the National Drug Law Enforcement Agency (NDLEA, 1991) shows those students who smoke cigarette began early in life. 91 out of 279 students found to be smokers started before the age of 10 while the remaining greatest source of influence among students. 55.6% indicated friends as their smoking source of influence.

Akinboye (1987) considered juvenile smoking behaviours as difficult to explain. He, however, opined that many people believe that many youngsters are initiated into smoking by advertisement on the radio, newspaper, or television. After an initial visual stimulation through the mass media, the adolescent may explain further that none of the adolescence he studied was able to give convincing reason for getting into the practice though in most cases, peer group and invitation of significant source was the cause.

While social influences are indispensable factors in tobacco smoking among the adolescents are cogent and central reason why adolescent go into smoking which is often not realized by the adolescent smokers themselves as well as the "lay-people" is the stressful nature of the adolescent period. Adolescence is a period of transition from childhood to adulthood. The period is more than any period of human growth is characterized by spurts of physical, mental, social and emotional development with changes in the individual. Adolescence is also a marginal position where the youngsters are neither children nor adults and as such a time of confusion and conflict. This is why adolescence is often described as period of storm, strain and emotional tension. When developing problems of the adolescents are not handled with proper caution, and expertise to cushion the effects of their stressful situation, they are prone to delinquent and undesirable destructive behaviours such as tobacco smoking as a source of relief

from tension. Little wonder, therefore, many adolescents smoke just to feel good, excited, be like friends or feel like adults or stars.

Tobacco addiction remains the leading cause of preventable death and is responsible for over five million premature deaths annually worldwide (CDC, 2008). Of the 45 million current smokers in the U.S., 70% desire to quit; however, only approximately 5% will succeed per year (CDC, 2010). The currently available first-line medications used to treat tobacco addiction can increase the success rate of quitting smoking by 2- to 3-fold (Fiore , 2008; Herman and Sofuoglu, 2010).A combination of behavioral treatments with medications can further increase these success rates (Fiore., 2008). However, even with the most effective treatments available, a vast majority of smokers fail to quit. Because the efficacy of current smoking cessation therapies is limited and because most smokers are not actively attempting to quit despite their desire to, a significant reduction in the mortality and morbidity attributed to smoking will require effective tobacco control policies.

Although many factors contribute to the initiation and maintenance of tobacco use, nicotine is considered to be the main addictive ingredient in tobacco (Corrigall 1991; Harvey., 2004; Rose and Corrigall, 1997). Therefore, the nicotine content of tobacco products may serve as a logical target in the development of effective tobacco-control policies. Accordingly, the United States Food and Drug Administration (FDA) formally began considering approaches to control the levels of nicotine in tobacco products in 1994 (Kessler, 1994). Benowitz and Henningfield (1994) introduced an influential proposal that same year for a nicotine reduction strategy to prevent the initiation of smoking in adolescents, increase smoking cessation in adults, and, thus, reduce the overall public health burden of tobacco addiction. The recent approval of the United States Family Smoking Prevention and Tobacco Control Act (FSPTCA) (Lundeen, 2009;

Waxman, 2007) provides an important framework for the implementation of a nicotine reduction policy.

The FSPTCA gives the FDA the authority to regulate, but not eliminate, the nicotine content of tobacco products. While nicotine reduction policies might ultimately have a significant impact on public health (Tengs, 2005), there are many factors to consider in determining the viability and desirability of such approaches. As discussed in previous reviews (Parascandola 2011; Warner 2002), "reduced harm" products may provide a false sense of safety to consumers, serve as a gateway to more harmful nicotine products, and ultimately prevent individuals from quitting smoking. For example, "low-nicotine yield" or "light" cigarettes were promoted by tobacco companies as "safer" products and such claims were accepted by both consumers and government agencies (Parascandola, 2011). It is important to distinguish low-nicotine-yield cigarettes from low-nicotine-content cigarettes. The low-nicotine-content or "denicotinized" cigarettes are produced by either extracting nicotine from tobacco or using genetically engineered tobacco that has very low nicotine levels. In contrast, the low-nicotine-yield cigarettes contain as much nicotine as regular cigarettes but yield reduced nicotine delivery primarily through addition of ventilation holes to the filter. The low-nicotine-yield of these cigarettes, as measured by machine-smoking, has little bearing on nicotine intake and grossly underestimates the amount of nicotine delivered to smokers. In reality, smokers can easily increase their nicotine and tar intake by covering the ventilation holes or taking longer, deeper, and more frequent puffs. (Pollay., 2002; Scherer, 1999).

On the other hand, other authors note that the current tobacco control policies, including the prevention of smoking in workplaces and public areas and the increases in prices and taxes, have had limited effectiveness, leading to a small reduction in smoking rates of 1 % per year, at best,

in countries where smoking is common (Britton., 2008). Based on these figures, some authors argue for more drastic policies to reduce rates of smoking (Britton., 2008; Gartner and Hall, 2010).

Many recent reviews have discussed the scientific and political issues related to a nicotine reduction approach (Hatsukami., 2007; 2010). In these proposed strategies for reducing the nicotine content in tobacco products, the putative target has been the nicotine addiction threshold. Accordingly, reducing the nicotine content in tobacco products below this threshold would presumably curtail the initiation and maintenance of tobacco addiction as well as alleviate the harm associated with tobacco use. However, previous reviews have not critically examined the concept of a nicotine addiction threshold as a measurable outcome in nicotine reduction strategies. Given the growing interest in developing new science-based regulations for tobacco, it may be judicious to scrutinize the concept of an addiction threshold for nicotine in relation to a nicotine reduction approach, which is the main purpose of our review. We also discuss the reinforcement threshold, a related concept, as an alternative to the addiction threshold. We start with a brief summary of the nicotine reduction proposal (Benowitz and Henningfield, 1994), followed by a comparison of addiction and reinforcement thresholds as behavioral targets for nicotine reduction approaches; finally, we conclude with suggestions for future research. Our review will not address issues related to the rationale and potential adverse consequences of nicotine reduction policies, which are extensively discussed in other recent reviews (Gartner and Hall, 2010; Hatsukami. 2007; 2010; Parascandola, 2011).

Researchers have observed that ingredients besides nicotine in tobacco or tobacco smoke (e.g., nornicotine and acetaldehyde) have either synergistic effects with nicotine or reinforcing effects of their own. Several pharmacologically active metabolites of nicotine were observed in

the central nervous system (CNS) after acute administration of nicotine (Crooks and Dwoskin 1997). Nornicotine is both a metabolite of nicotine and a minor tobacco alkaloid. According to a review by Crooks and Dwoskin (1997), S(−)-nornicotine evokes concentration-dependent and calcium-ion (Ca2+)-dependent increases in endogenous release of dopamine from rat striatal slices and from mouse striatal synaptosomes.

At low nornicotine concentrations, nicotinic receptor antagonists, such as mecamyl-amine and [3H]-dihydro-β-erythroidine (DHβE), inhibit dopamine release evoked by S(−)-nornicotine. At high nornicotine doses, this inhibition is not observed, thereby indicating that at high doses, nonselective mechanisms may be associated with the release of dopamine. In addition, S(−)-nornicotine, R(+)-nornicotine, and nicotine appear to activate the neural mechanisms responsible for behavioral sensitization. For example, administration of S(−)-nornicotine desensitized nicotine receptors, but at a potency 12-fold lower than that of nicotine. S(−)-nornicotine also showed cross-desensitization with nicotine; that is, receptors desensitized by nicotine were also desensitized by S(−)-nornicotine. This result suggests the involvement of common subtypes of nicotinic receptors (Dwoskin, 2001).

Researchers have observed similar behavioral effects from nicotine and nornicotine. In one study examining acute or chronic (repeated) administration of S(−)-nicotine, R(+)-nornicotine, and S(−)-nornicotine on locomotor activity, the effects of both nornicotine enantiomers were qualitatively different from that of the S(−)-nicotine enantiomer after acute administration (Dwoskin 1999). Unlike S(−)-nicotine, neither nornicotine enantiomer produced hyperactivity following acute injection with the doses used in the study. However, long-term administration of a nornicotine enantiomer, specifically S(−)-nornicotine, showed patterns of effects similar to

those of nicotine. Furthermore, long-term pretreatment with either nornicotine enantiomer produced cross- sensitization to the locomotor stimulant effects after a nicotine challenge.

2.11Summary

This chapter reviewed the nature and related factors to cigarette smoking; concept of tobacco smoking, types and methods of tobacco smoking, possible causes of tobacco smoking, the health hazards resulting from smoking has also been highlighted, the theoretical framework adopted for this study are the social learning theory and Behavioral theory. Both operant conditioning and social learning theories assume whether or not people choose to perform what they have learned observationally is strongly influenced by the consequences of such activities in social learning theory however, behavior is regulated not only by directly experienced consequences from external sources but by vicarious reinforcement and self reinforcement. An important factor in social learning theory is the concept of reciprocal determinism. This notion states that just as an individual's behavior is influenced by the environment, the environment is also influenced by the individual's behavior (Bandura, 2002). In other words, a person's behavior, environment, and personal qualities all reciprocally influence each other. For example, a child who plays violent video games will likely influence their peers to play as well, which then encourages the child to play more often. while behavioural therapy is a treatment that helps change potentially self-destructing behaviors like tobacco smokings. It is also called behavioral modification or cognitive behavioral therapy. Medical professionals use this type of therapy to replace bad habits with good ones.

The therapy also helps you cope with difficult situations. It is most often used to treat anxiety disorders. However, you don't have to be diagnosed with a mental health disorder to benefit. Behavioral therapy is a form of therapy rooted in the principles of behaviorism. The school of thought known as behaviorism is focused on the idea that we learn from our environment. In behavioral therapy, the goal is to reinforce desirable behaviors and eliminate unwanted or maladaptive ones. The techniques used in this type of treatment are based on the theories of classical conditioning and operant conditioning. and some empirical studies were highlighted. The gap in the literature review and which this study intends to fill is the fact that despite all efforts put in place to reduce the incidences of tobacco smoking especially by the adolescents, the effect of positive reinforcement has not been explored. This study therefore intends to examine the effect of positive reinforcement on tobacco smoking among secondary school students in Katagum, Bauchi state

HAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter discussed the methodology and procedure used in carrying out the study which includes research design, population of the study, sample and sampling technique, instrumentation, pilot testing, validity, reliability, procedure for data collection, method of scoring and procedure for data analysis.

3.2 Research Design

The research design adopted for this study was a quasi-experimental involving a pre-test and post-test research design. In quasi-experimentaldesigns participants are not randomly assigned.In the Pre-test, Post-test design participants are studied before and after the experimental manipulation. In a pretest-posttest design, there is only one group and all of them are in the experimental condition. The design involves a researcher administering a pretest, implement a treatment manipulation, and then measured the same variable, as was measured with the pretest, with a posttest (Cohen, Manion, & Morrison, 2007).

This design is often represented as:

O1 X O2

Where: O1represents the pretest,
X represents the treatment implemented, and
O2 represents the posttest

The reason why a researcher run a pretest-posttest experiment is to see if the manipulation, the thing the researcher is looking at, has caused a change in the participants. Since everyone is being manipulated in the same way, any changes one see across the group of participants is likely from the manipulation. This implies that the researcher test the subjects before doing the experiment, then run an experimental manipulation, and then test the subjects again to see if there are changes.

3.3 Population of the study.

Table 3.2 Population of the Study

S/N	SCHOOLS	TYPE OF SCHOOL	MALE	FEMALE	TOTAL
1	Government Girls College Azare	Boarding Girls	-	260	260

2	Government Comprehensive Secondary School Azare	Day and co-Education	240	60	300
3	Government Day Secondary school Matsango	Day and co-Education	100	30	130
4	Government Day Secondary School Madara	Day and co-Education	60	20	80
5	Government Day Secondary School Chinade	Day and co-Education	80	20	100
6	Government Day Science Secondary school Azare	Day	132	40	172
7	Umar Faruq Government Secondary School Azare	Day and co-education	120	38	158
8	Women Secondary School Azare	Day Women	-	30	30
9	Government Day Secondary School Isawa	Day and co-education	98	22	120
10	Government Technical College Azare	Day Boys	146	Nil	146
11	Government Day Secondary School Azare	Day and co-education	170	88	258
12	Government Day Secondary School Sakwa	Day	100	20	120
	Total		**1246**	**628**	**1874**

Source: Principals of the Schools (2015)

There are twelve senior secondary schools in Katagum local government with population of one thousand seven hundred and seventy two (1772) SS2 students. This category of students were targeted for the study because at this stage they are prone to many behaviour problems (between 16 to 17 years) among which tobacco smoking is one. They were also not busy preparing for any external examination and therefore would co-operate with the researcher.

3.4 Sample and Sampling Procedure

Twoschools were selected within the local government area using purpose sampling technique. The purposive sampling technique, also called judgment sampling, is the deliberate choice of an informant due to the qualities the informant possesses. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Bernard 2002, Lewis & Sheppard 2006). The rationale for the choice of this technique is due to the fact that the researcher is only interested in students that smokes hence will have to identify them with the help of school counsellor or career master/mistress, then involve them in the study. Thirtystudents smokers were purposively selected from the target school; that is, fifteen females from Government Girls College Azare, fifteen male and female students from Government Secondary School Matsango. The selection was based on getting one or two known smokers to bring their peers, when they came to the counsellor, the counselor or career master/mistress requested thatwho ever want to quit the habit of smoking should write his/her name on a paper given by the counsellor. The treatment groups were thus selected..

3.5 Instrumentation

The instrument used for this study Tobacco smoking Assessment Scale (TSAS) was constructed by the researcher. It has 2 sections; section A has 4 items on the bio-data of the respondent. Section B contains 15 items that may likely be the reasons of tobacco smoking and possible ways of reducing it among students and the feelings derived by the smoker. The rating is based on YES or NO, by ticking the right box as it relates to the respondent. There was also the daily records, which were given to the students during every session in order to monitor the rate of student's smoking habit.

3.5.1 Method of Scoring

The instrument is based on the YES or NO rating scale. The respondents were expected to respond by putting a tick (√) in the column provided that best described their behaviours or opinions. The researcher tallied the marks on each of the two columns, total the marks under each column, summed up all of them and record on the space for the totals. The researcherthen interpreted the marks as the higher the score the more problem of the tests, while the lower the scores, the lower tendency towards tobacco smoking.

3.6 Validity

The drafted content of the instrument was assessed by four lecturers in the Department of Educational Psychology and Counselling. They examined and assessed the contents of the instrument with reference to the followings;

- Is the content of the instrument correct and appropriate for the research?
- Are the items clear, precise and standard?
- What general criticisms and suggestions could they give to improve on the instrument?

3.6.1 Reliability

Data collected from the pre-test were subjected to the split half method and the score's collected were correlated in order to establish its reliability index. Data collected were analyzed using Spearman's coefficient correlation. A coefficient correlation of 0.778 was obtained. This according to Ali (2009)any instrument that produces a coofeicient correlation of 0.70 and above is reliablefor conducting a research.

3.7 Procedure for Data Collection

The researcher collected a letter of introduction from the Department of Educational Psychology and Counselling to principals of the schools. When approval of the Principals were given, the instrument was administered twice to the students on pre-test and post- test. Administration of the instrument was carried out by the researcher with the assistance of the school counsellor or career master/mistress. The researcher read out the instrument carefully and advised the students to be honest in responding to the items.The procedure for data collection in this study was in three stages, the pre-test, treatment session and post-test.In the pre-test the researcher admistered the instrument on all the participants, the data collected was then analysed and kept to be compared with the results of post test.The second stage was treatment stage, subjectsin the group were exposed to treatment for six weeks; each session lasted for about 25 to 30 . During this time the effect of positive reinforcement counselling technique was tested.

The third stage was the post test. At the end of the six weeks treatment, the two groups were post-tested to determine the effect of positive reinforcement counselling technique on minimizing tobacco smoking among secondary school students.

3.8Procedure for Data Analysis

The three research questions were analyzed using the descriptive statistics of means, standard deviations while Null hypothesis one was tested using the inferential statistics of paired sample t test, null hypothesis two and three with the independent t test .

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The study aims at assessing the effect of positive reinforcement technique in reducing tobacco smoking of secondary school students. A total of 30 students were used for this study. The analysis is presented in sections. The first section presents the distribution of the respondents in frequencies and percentages of their bio data variables of location of schools, sex, and ages.

The second section present the three research questions using the descriptive statistics of means, standard deviations and standard errors. The third section test the three null hypotheses,Null hypothesis one was tested using the inferential statistics of paired sample t test, null hypothesis two and three with the independent t test.. All the hypotheses are tested at 0.0-5 level of significance.The summary of major findings as well as conclusions and recommendations were also presented in this chapter.

4.2 Demographic Characteristics of Respondents

Table 4.1 Demographic Characteristics

Variable	Frequency (N)	Percentage (%)
1. School Location		
Urban	15	50.00
Rural	15	50.00
2. Gender		
Male	10	33.30
Female	20	66.70
Total	**30**	**100.00**

According to the table above, 15 of the respondents representing 50.0% are from urban located schools in Azare town, while the rest 15 representing 50.0% are from rural located schools at Matsango village. This shows that urban and rural schools were considered in this study. When sorted according to their gender, 20 respondents corresponding to 66.70 were female while 10 respondents corresponding to 33.30 were male students making a total of 30 respondents corresponding to 100 %.

4.3 Research Questions

The three research questions were analyzed using the descriptive statistics of means, standard deviations and standard errors

Research Question One:

What is the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students?

Table 4.2: Descriptive statistics on the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students.

Tests	**Scores**	**N**	**Mean**
Pre Test	26.00	30	1.86
Post test	16.43	30	1.74

*Outcome of the descriptive*statistic in table 4.2 above revealed thatthe respondents calculated mean were 26.00 and 16.43 before and after the reinforcement counselling technique implying that there is positive effect of positive reinforcement counselling technique on tobacco smoking among secondary school students.. This is so because their mean scores on tobacco smoking

was reduced from 26.00 to 16.43 as a result of the effect of the positive reinforcement counselling technique on tobacco smoking among secondary school students,

Research Question Two:

What is the effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group?

Table 4.3: Descriptive statistics on the effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group.

Variable	Gender	N	Mean	Std.dev	***Descriptive***
Post test scores on smoking	Male	10	14.00	2.00	***statistics***
	Female	20	14.65	2.11	

on table 4.3 above showed thatthe respondents calculated mean were there is no different of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group. The positive reinforcement counselling technique is good for both male and female students. Their calculated mean scores on smoking tobacco were 14.00 and 14.65 by Male and Female respectively .

Research Question Three:

What is the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area?

Table 4.4: Descriptive statistics on effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area.

Variable	School location	N	Mean	Std.dev
Post test scores on smoking	Urban Azare	15	16.67	2.41
	Rural Matsango	15	16.20	.56

According to the result of the descriptive t statistics on table 4.4 aboveshows thatthe respondents' calculated mean on smoking tobacco were 16.67 and 16.20 by urban and rural students respectively implying there is no differences in the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area. The positive reinforcement counselling technique is good for both urban and rural students.

4.4 Hypotheses Testing

Null hypothesis one was tested using the inferential statistics of paired sample t test, null hypothesis two with the independent t test and null hypothesis three with the Analysis of Covariance

Null Hypothesis One:

There is no significant effect of positive reinforcement counselling technique on tobacco smoking among secondary school students.

Table 4.5: Paired sample t test on the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students.

Tests	Scores	N	Mean	Std.dev	Df	t-cal	P
Pre Test	26.00	30	1.86	.34			
					29	23.09	0.00
Post test	16.43	30	1.74	.32			

Calculated t > 1.96, calculated p < 0.05 at df 29

Outcome of the paired statistic on table 4.5 above revealed that is because the calculated p value of 0.00 was found to be lower than the 0.05 alpha level of significance and the calculated t value of 23.09 was found to be higher than the 1.96 t critical at df 29. There calculated mean were 26.00 and 16.43 before and after the reinforcement counselling technique, implying that there is significant effect of positive reinforcement counselling technique on tobacco smoking among secondary school students. This is because their mean scores on tobacco smoking was reduced from 26.00 to 16.43 as a result of the effect of the positive reinforcement counselling technique on tobacco smoking among secondary school students, the null hypothesis which state that there is no significant effect of positive reinforcement counselling technique on tobacco smoking among secondary school students, is hereby rejected,.

Null Hypothesis Two:

There is no significant effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group.

Table 4.6: Independent t test statistics on effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group.

Variable	Gender	N	Mean	Std.dev	Std. Err	Df	t cal	Sig (p)	
Post test scores on smoking	Male	10	14.00	2.00	.43	28	0.97	0.34	***C***
	Female	20	14.65	2.12	.48				***alc***

ula

ted t < 1.96, calculated p > 0.05 at df 28

Results of the independent t-test statistics on table 4.6 showedthat the calculated p value of 0.34 is greater than the 0.05 alpha level of significance while the t-calculated value of 0.966 is less than the t-critical value of 1.96, at df 28. The positive reinforcement counselling technique is good for both male and female students. Their calculated mean scores on smoking tobacco were 14.00 and 14.65 by Male and Female respectively that there is no significant different of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group. Consequently the null hypothesis which state that there is no significant different of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group, is hereby accepted and retained.

Null Hypothesis Three:

There is no significant effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area.

Table 4.7: independent t test statistics on effect of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area.

Variable	School location	N	Mean	Std.dev	Std. Err	Df	t cal	Sig (p)
Post test scores on smoking	Urban	15	16.67	2.41	.62	28	0.73	0.47
	Rural	15	16.20	.56	.15			

Calculated t < 1.96, calculated p > 0.05 at df 28

Results of the independent t-test statistics on table 4.7 showed thatcalculated mean scores on smoking tobacco were 16.67 and 16.20 by urban and rural students,the calculated p value of 0.47 is greater than the 0.05 alpha level of significance while the t-calculated value of 0.73 is less than the t-critical value of 1.96, at df 28. Implying that there is no significant different of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area. The positive reinforcement counselling technique is good for both urban and rural students. spectively Consequently the null hypothesis which state that there is no significant different of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area, is hereby accepted and retained.

4.5 Summary of Major Findings

The followings are the summary of major findings of the study

1. Positive reinforcement counselling technique had effect on tobacco smoking among secondary school students.
2. Male and female students exposed to positive reinforcement counselling technique had a reduction in tobacco smoking.
3. Students located in urban and rural secondary schools had similar effects in the reduction of tobacco smoking.

4.6 Discussions

Null hypothesis one sought to find out the effect of positive reinforcement counselling technique on tobacco smoking among secondary school students, it was found out that Positive reinforcement counselling technique has significant effect on tobacco smoking among secondary

school students.This finding is not surprising asBehavioural Reinforcement Counselling Technique has been found to be effective in the treatment of many behavioural problems. A study conducted by Adeusi,Gesinde,Alao,Adejumo and Adekeye, (2015) titled Differential effect of behavioural strategies on the management of conduct disorder among adolescents in correctional centres in Lagos State, The design utilized is a 3 x 2 factorial design.

The population for this study was one hundred and eighty six (186). The sample size employed for this study is 90 adolescents. Two correctional centres (male only and female only) were purposively selected because they have similar features where adolescents that meet the research diagnostic criteria for conduct disorder are found. Among the 90 participants, 15 were randomly assigned into each of the two experimental groups (Positive Reinforcement Counselling Technique and Behavioural Rehearsal) and the control group. A sum total of 45 participants were involved at each of the Special Correctional Centres. The descriptions of participants are as follows: 45 girls and 45 boys; the age range is between 10 to 17years (10-13 years was 35 constituting 38.9% while participants between 14-17 years were 55 constituting 61.1% of the sample. Analysis of data and test of hypothesis revealed that Hypothesis one which states that there is a significant difference in the treatment of conduct disorder of participants exposed to Positive Reinforcement Counselling Technique and behavioural rehearsal when compared with participants in the control groups was accepted because the result of the findings was significant.

The hypothesis was tested using analysis of variance and the result of the analysis revealed $F(2, 87) = 46.622$, $p < 0.05$. The findings indicated that Positive Reinforcement Counselling Technique and behavioural rehearsal are both effective in the treatment of conduct disorder among adolescents. The reason for this result is as a result of the eight weeks exposure of the participants to their respective treatments. This study is in agreement with the findings of

Shobola (2007) and Aderanti and Hassan (2011) that Positive Reinforcement Counselling Technique is an effective intervention in the treatment of all forms of antisocial behaviours such as smoking, stealing, rebelliousness, and socially undesirable behaviours among others.

Although the second hypothesis states that there is a significant difference in conduct disorder of participants exposed to Positive Reinforcement Counselling Techniqueand behavioural rehearsal, the result of the analysis was not significant; therefore, the hypothesis was rejected. The mean scores indicated that the participants in Positive Reinforcement Counselling Techniquegroup displayed a higher conduct disorder level (66.033) after exposure to the technique compared to the participants in the behavioural rehearsal group (65.433). The result implies that both interventions were effective and again the result of the hypothesis is an affirmation of the theory and previous studies that are carried out on Positive Reinforcement Counselling Techniqueand behavioural rehearsal (Baker and Scarth, 2002; Aderanti and Hassan, 2011).

Null hypothesis two sought to find out the effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students in the treatment group, it was found out that there was no significant difference in effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students. This finding is in agreement with that ofa study conducted by Gabriel, (2013)Tobacco Use Knowledge, Attitude and Practice Among Students in Tertiary Institutions in Kogi State, Nigeria. Nine specific objectives with nine corresponding research questions were formulated. Six null hypotheses were postulated which guided the study. Demographic variables of age and gender were also investigated. Descriptive survey research design was used for the study.

The population for the study comprised of 31,600 students drawn from the four selected tertiary institutions in Kogi State, The population for the study consisted of all undergraduate students in

the selected tertiary institutions in Kogi State, Nigeria. The t-Test statistics was used to test the null hypotheses one to four at .05 level of significance, while Chi-square statistic was employed to test the null hypotheses five and six at .05 level of significance.Results of the study indicates the calculated t-value with its corresponding p-value for tobacco use attitude of students according to gender at 393 degrees of freedom. All the individual items p-values were greater than the .05 level of significance; therefore the null hypothesis of no significant difference in tobacco use attitude of students according to gender was accepted. This shows that gender does to make any difference in the attitude of the students.

Null Hypothesis Three sought to find out theeffect of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area, it was found out that There was no significant different of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area. smoking habit is general among the smokers, individuals in the urban aeas are not better smokers than those in the rural areas.The finding is in agreement with that of Onyeonoro, et al (2015) who conducted a study on Awareness and perception of harmful effects of smoking in Abia State, Nigeria.The study was conducted in randomly selected communities in Abia State of Nigeria. There was a significant difference in the sociodemographic characteristics of respondents of both localities. Most of the respondents were female (52.1%), and were predominantly from the rural area ($P = 0.029$). The mean age of the respondents was 41.7 ± 18.5 years. The rural respondents were relatively older ($P \leq 0.001$) and had a greater proportion of those who were married ($P \leq 0.001$) than their urban counterparts. On the other hand, the urban residents had better educational status ($P \leq 0.001$) and earned more income than those in a rural area ($P \leq 0.001$). About 88% of the respondents were aware of the warning against cigarette

smoking and most common sources of this information in both urban and rural communities of the state were radio adverts (50.7%) and TV/radio program (26.3%). About 10% of them knew through cigarette packs, while fewer came to know through either their peers or relatives (5.1%) and television adverts (4.4%). Billboards and print media played a much less significant role as a source of information on warning against tobacco use. Urban dwellers were more likely to acquire the information via radio/TV program than rural dwellers, while rural dwellers were more likely to be informed through radio adverts than their urban counterparts ($P< 0.001$).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study aimed at finding out the availability and utilization of resources for counselling among para counsellors in Bauchi State. This chapter presents the summary of chapters, conclusions and recommendations.

5.2 Summary

Chapter one presented the background to the study, statement of the problem, twelve objectives that served as a guide to this study were set based onEffects of Positive Reinforcement Counselling Technique on Tobacco Smoking Among Secondary School Students In Katagum Bauchi State. Related to these are twelve research questions and twelve nul hypotheses. Significance of the study was stated, basic assumptions made and finally, the scope and delimitation of the study were highlighted.

Chapter two reviewed the nature and related factors to cigarette smoking; concept of tobacco smoking, types and methods of tobacco smoking, possible causes of tobacco smoking, and the health hazards resulting from smoking has also been highlighted, the theoretical framework and

some empirical studies were highlighted. The gap in the literature review and which this study intends to fill is the fact that despite all efforts put in place to reduce the incidences of tobacco smoking especially by the adolescents, the effect of positive reinforcement has not been explored. This study therefore intends to examine the effect of positive reinforcement on tobacco smoking among secondary school students in Katagum, Bauchi state.

The research design adopted for this study was a quasi-experimental involving a pre-test and post-test research design. Population of the study consists of 1772 SS2 students from twelve senior secondary schools in Katagum Local Government Area of Bauchi State. 30 students smokers were purposively selected from the target school; that is, 15 females from Government Girls College Azare, 15 male and female students Government Secondary School Matsango. The instrument used for this study Tobacco smoking Assessment Scale (TSAS) was constructed by the researcher. It has 2 sections; section A has 4 items on the bio-data of the respondent. Section B contains 15 items that may likely be the reasons of tobacco smoking and possible ways of reducing it among students and the feelings derived by the smoker and the responses were based on YES or NO. The drafted content of the instrument was assessed by lecturers in the Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria. Data collected from the pre-test where subjected to the split half method and the score's collected were correlated in order to establish its reliability index.

Data collected were analyzed using Spearman's coefficient correlation. A coefficient correlation of 7.78 was obtained. The procedure for data collection in this study was in three stages, the pre-test, treatment session and post-test. The researcher administered the instrument on all the participants, the data collected was then analyzed. This stage is the pre-test. The subjects were then exposed to treatment for six weeks; each session lasted for about 25 to 30 minutes. During

this time the effect of positive reinforcement counselling technique was tested. At the end of the six weeks treatment the groups were post-tested to determine the effectiveness of the treatment.

Chapter four presented data collected from the field. The three research questions were analyzed using the descriptive statistics of means, standard deviations and standard errors while Null hypothesis one was tested using the inferential statistics of paired sample t test, null hypothesis two and three with the independent t test. It was found out that Positive reinforcement counselling technique has significant effect on tobacco smoking among secondary school students ($t = 23.09$ and $p = 0.00$), There was no significant difference effect of positive reinforcement counselling technique on tobacco smoking among male and female secondary school students ($t = 0.97$ and $p = 0.34$) and There was no significant different of positive reinforcement counselling technique on tobacco smoking among secondary school students in the rural and urban area ($t = 0.73$ and $p = 0.47$).

5.3 Conclusions.

Based on the findings of this study, the following conclusions can be deduced,

1. That positive reinforcement counselling techniquecan be used to reduce and manage tobacco smoking habit among secondary school students
2. The use of positive reinforcement counselling technique has significant effect on the tobacco smoking habit of both male and female students
3. The use of positive reinforcement counselling technique has significant effect on the tobacco smoking habit of both urban and rural students

5.4 Recommendations.

The following recommendations are hereby suggested.

1. The school counsellors should make use of positive reinforcement counselling technique to reduce the tobacco smoking habit of secondary school students
2. The counsellors should not discriminate among students based on their gender in the use of positive reinforcement counselling technique to reduce the tobacco smoking habit of secondary school students
3. The school counsellors should also use positive reinforcement counselling technique to reduce the tobacco smoking habit of secondary school students both in urban and rural areas.

5.5 Suggestions for Further Studies

A single study is not enough to cover all the areas in a research, the following suggestions are made for would be researchers:

1. Another study could be undertaken to determine the difference on effect of positive reinforcement on tobacco smoking between different age groups of the students.
2. A study could also be undertaken to compare effect of the technique on employment status, educational level and level of income of the smoker's parents.

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TOBACCO SMOKING ASSESSMENT SCALE (TSAS)

SECTION A: Personal Information

Name of Institution:_____

Class_____Age_____

Sex: Male ( ) Female ( )

INSTRUCTION:

The following is a list of items concerning Tobacco smoking Among Secondary schools students. Read each statement carefully and respond by ticking the appropriate response concerning Tobacco smoking as it relates to you.

KEY

1 - Yes

2 - No

S/N	QUESTIONS	YES	NO
1.	When I have the urge to smoke, I force my self to abstain.		
2.	Know the problems of smoking and try to substitute it with sweets or chewing gum		
3.	I am making effort to reduce the number of cigarette Sticks I smoke per day		
4.	I quit smoking because of the concern about what others think of me		
5.	I am forcing my self not to smoke every day		
6.	My willingness to change to tobacco free lifestyle assists in gradually quitting the habit		
7.	I now make efforts not to smoke during school hours		
8.	When I have the craving to smoke I usually take a walk.		
9.	Its impossible for me to stop smoking		
10.	I am trying to quit smoking by reducing the number of sticks I smoke daily		
11.	Smoking makes my clothes and breaths smell, I am reducing the rate		
12.	Smoking is unpleasant to people near me, I want to stop it		
13.	I am trying to quit smoking completely		
14.	I feel I should stop smoking		
15.	Smoking causes health problems, therefore want to keep away from it		

Treatment Sessions

First Session (1st Week)

The fisrt session was mainly for creating a relationship between the counsellor and the participants.

- After selection and identification of students, the researcher grouped them in a class/ venue provided by principal of the school.
- The researcher introduced herself; the students also introduced themselves by name, class and age.
- The researcher was able to show care, warmth, understanding and a strong belief in the smokers, with establishment of a strong relationship the smokers were able to open up with the researcher.

- The reasercher explained to participants purpose of their meeting, and how the participants can benefit from the sessions. She administered the pre test.
- The session continued with students filling the daily records for the day.
- The students were assured confidentiality of whatever was discussed and their identity were also be kept confidential. Students were given assorted sweets as appreciation. Importance of attendance was emphasized.

Second Session (2nd week)

The researcher introduced the second session with motivational exercises such as what happened yesterday that made the students happy. At this session the researcher's focus is on the student's current behaviour.

The researcher asked the students for example;

- How many cigarettes did you smoke today?
- How many cigarettes do you smoke per day?
- Did you contemplate quitting smoking?
- What stopped you from quitting?
- What do you intend to do tomorrow?

Students were given the daily records to fill, which they did. Where the researcher saw improvement she gave some reinforcements in form of assorted sweets and chewing gum. The smokers were discouraged from blaming their problems on society, parents, environment, peers among others.

Third Session (3rd week)

The researcher motivated the students and review the previous session. One of the functions of positive reinforcement counselling technique is to encourage the client who in this case is the smoker to assess his personal behaviour and determine whether the personal behaviour is working to encourage the smoker's progress in life.

- The smokers were asked to examine their smoking habits and determine if smoking is beneficial to their lives progress.
- The smokers were encouraged to take decision after a thorough evaluation of the advantages and disadvantages of smoking.

- If the smokers, personally decides that smoking does not contribute to their healthy life styles. The smokers can also evaluate the amount of money spent on smoking.
- The smokers can quantify the amount of money spent on smoking and were requested to take decision on whether they continue to waste money on smoking or quit and spend the money to improve their lives.Student smokers were given the daily records to fill, which they did. Where the researcher saw improvements she gave some reinforcements in form of assorted sweets and chewing gum.

Fourth session (4th week)

The students were welcomed and the researcher appreciate their attendance. The researcher revises the previous session with them.

At this point, the smokerswere ready and willing to develop an action plan. This is the actual time when the smokers were expected to explore possible alternatives to smoking. As an individual who is concerned to assist the smoker to quit, there is need to encourage the smokers to develop an action plan to quit smoking. The smoker was assisted to make plans with the following guide lines:

- The smoker must be assisted to change failure behaviour into success behaviour;
- The smoker should be assisted to make plans that are within the smoker's capabilities;
- The smoker's plan should not be absolute; instead, the smoker's plan should focus on problem solving towards a successful healthy living;
- The smoker must be guided and assisted to make specific, concrete and measurable plans; substituting the smoking habit with sweets, chewing gum, biscuits, water etc.
- The smoker's plan should be re-evaluated if it does not work, and a substitute plan should be made.
- Upon all, the smoker's plan should be immediate, with the researcher, the smoker's plans should be the first priority;

Student smokers were given the daily records to fill, which they did. Where the researcher saw improvements she gave some reinforcements in form of assorted sweets, chewing gum and biscuits.

Fifth Session (5th week)

The researcher tried to make students feel free by asking them some questions on their previous discussions. Once the smokers were assisted to develop an action plan, the researcher refused to accept any excuses from the smokers. Instead of taking excuse, the smokers were encouraged to try the followings:

- When the smoking urge comes to a smoker, the smoker was encouraged to do something. If the smoker refuses to do something at this point the smokers' quit plan may be doomed;
- The smokers were encouraged to substitute cigarette for sweets, chewing gum, fruits etc;
- Whenever the smoker feels like smoking, the smoker remembered the consequences and harmful effects of smoking;
- The smoker is also requested to spend time in places he or she cannot smoke;
- The smoker replaced smoking with long walks or jogging;
- The smoker participated in exercises which could take the smoker's mind off the desire to smoke;
- Whenever the smoker feels like smoking, the smoker was kept busy and kept active;
- Whenever the smoker feels like smoking, the smoker avoided situation he or she associates with smoking.
- When the smoker feels like smoking, eating fruits or sweets have been found to be alternative activities.

Student smokers were given the daily records to fill, which they did. Where the researcher saw improvements she gave some reinforcements in form of assorted sweets, chewing gum fruits and biscuits.

Sixth Session (6th week)

The researcher motivated the students and asked them some questions; they were appreciated and informed that today was the last meeting with the researcher.

- In appreciation the researcher distributed packs of assorted sweets, biscuits and toilet soaps to the students.
- Students filled the daily records.
- They were encouraged to abide to what was discussed with them during the programme and quit smoking. Positive reinforcement counselling technique does not encourage the use of punishment to assist smokers quit.

- Counsellors were discouraged from putting smokers down or disgracing smokers when they fail to keep up with their action plan commitment.
- The researcher administered a post- test which helped to determine effect of the technique (positive reinforcement counselling technique) used. She appreciated the students and bade them farewell.