UNIVERSITY OF KWAZULU-NATAL

RISK INFLUENCES FOR SMOKING AMONG THE YOUTH IN SOUTHERN

NIGERIA

CATHERINE O. EGBE

MARCH 2013

RISK INFLUENCES FOR SMOKING AMONG THE YOUTH IN SOUTHERN

NIGERIA

CATHERINE O. EGBE

SUPERVISOR: PROF. INGE PETERSEN

CO-SUPERVISOR: PROF. ANNA MEYER-WEITZ

RISK INFLUENCES FOR SMOKING AMONG THE YOUTH IN SOUTHERN

NIGERIA

CATHERINE ORITSEBEMIGHO EGBE

Submitted in fulfilment of the degree of

Doctor of Philosophy (Psychology)

At the University of KwaZulu-Natal

Howard College

DEDICATION

I dedicate this work to God Almighty; He who makes all things possible.

To my Mum who first taught me how to read, and

to the efforts of all those working for a tobacco-free world.

ACKNOWLEDGEMENT

Table of Contents

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Introduction: Tobacco smoking continues to raise serious concerns for health promotion practitioners and health bodies globally. It has been tagged the single largest cause of all premature deaths globally. Efforts at discouraging tobacco use especially among the youth are not only aimed at reducing smoking prevalence in the short term but at disrupting the chain of supply for the tobacco marketers who see the youth population as their source of replacement smokers. Measures to curb smoking prevalence currently rely heavily on policy regulation but there is need to have a holistic approach towards finding out what influences the youth to smoke in order to have relevant context-specific interventions to further tobacco control efforts. This study is aimed at ascertaining the risk influences for smoking behaviour amongst the youth in Southern Nigeria with specific focus on cultural/environmental, interpersonal and intrapersonal factors serving to increase smoking initiation and perpetuation as guided by the Theory of Triadic Influence (TTI).

Method: Exploratory mixed methods research design was employed in carrying out this study. Qualitative interviews were conducted with 27 persons in 24 individual interviews (comprising of 18 young smokers aged 18 to 24 years, 4 political analysts and 2 community leaders) and 1 focus group discussion with 3 community leaders. A total of 550 youth aged between 18 and 24 years participated in the survey (quantitative) phase of this research. Non-probability sampling was used in recruiting participants for this study. Purposive sampling was used for the qualitative phase while multi-staged convenience sampling was used in the survey phase. Interpretative phenomenological analysis (IPA) with the aid of the software Nvivo 9 was used in analyzing the qualitative data while the software Statistical Package for the Social Sciences (SPSS) version 19 was used in the analysis of the quantitative data.
Results: Qualitative and survey results show that there are an array of factors at various

levels influencing the youth in southern Nigeria to view cigarettes as attractive and less harmful. At the cultural environmental level, there exist traditional practices in some parts of Southern Nigeria that make cigarettes easily accessible to the youth. Contact with cigarettes as a minor was found to be the best predictor of smoking among other cultural factors involving tobacco use while exposure to second hand smoke was the best predictor of smoking. With an absence of a functional national tobacco control law presently, cigarette is cheap, easily accessible to young people and tobacco manufacturers and marketers still promote their businesses in many ways which target the youth. At the interpersonal level, youth were influenced majorly by their peers to initiate smoking but indirectly by parents, older sibling and role models who smoke. At the intrapersonal level, youth were found to smoke for a variety of reasons ranging from wading off depression, coping with social stress and wanting to live up to the expectations of friends. Youth's knowledge about the effect of smoking on health and well-being did not translate to a desire to quit smoking.

Conclusion/recommendations: The Nigerian government needs to take urgent steps to address the tobacco question in the country through policy formulation and implementation. There is need to raise more awareness in the population on the dangers of smoking. Cessation clinics are also needed to help those who desire to quit smoking. Cultural activities involving the use of cigarettes and other tobacco products need to be properly addressed through the right channel to ensure this practice is stopped. A theoretical model explaining the risk influences for smoking among the youth is presented and suggestions are made with regards to a re-categorization of constructs in the theory of triadic influence which guided this study.

OPERATIONAL DEFINITION OF TERMS

College students: Students attending other tertiary institutions which are not universities. Such institutions (as obtainable in Nigeria) include Colleges of Education, Polytechnics, Colleges of Agriculture, Training institutes which award national diploma, higher national diploma certificates and certificates of education.

Culture: This encompasses social norms, traditional practices, primordial traditions and hybridised cultures.

Cultural practices: Practices that are linked to cultural norms and traditions and in which members of a community are culturally obliged or allowed to participate in.

Geopolitical zone (GPZ): A region in Nigeria made up of a few States and grouped mainly for political purpose but which basically comprises of people within a geographical region.

Kolanut: Shortened as *Kola.* This is the nut of the plants *Cola acuminata* and *Cola nitida*. It is used as a traditional item for welcoming guests and formally opening ceremonies in Nigeria.

Political analysts: Respected Nigerians who are either working in Non-Governmental Organisations (NGOs) or have a political background and are often called upon to analyze topical political issues in the media.

Risk factors/influences: Any phenomenon which can serve to stimulate or encourage someone to carry out a specific behaviour.

Smoking: Smoking is the intake of the smoke which results from the burning of tobacco leaves whether raw or processed in the form of cigarettes, cigars, cigarillos, pipes etc. In this study, it majorly refers to the consumption of cigarettes.

Southern Nigeria: A total of 17 states make up this region but these are further regrouped to three (3) GPZs: South-east, South-south and South-west.

South-eastern Nigeria: This GPZ is mainly comprised of people of the Igbo ethnic nationality. It is made of five (5) States and *Igbo* is the prevalent local language spoken.

South-southern Nigeria: This GPZ has a number of smaller ethnic nationalities the largest group being the Ijaws. Other smaller ethnic groups include the Urhobos, Itsekiris, Isokos, Aniomas, Edos, Esans, Esakos, Efiks, Ibibios, Calabaris and many other smaller groups. It is made up of six (6) States.

South-western Nigeria: This GPZ is mainly comprised of people from the Yoruba ethnic nationality. It is comprised of six (6) States and the prevalent language spoken is *Yoruba*.

ACRONYMS

BAT(N) – British American Tobacco (Nigeria)

CSR – Corporate Social Responsibility

ETS – Environmental Tobacco Smoke

FCTC – Framework Convention for Tobacco Control

FDI – Foreign Direct Investment

GPZ – Geopolitical Zone

GYTS – Global Youth Tobacco Survey

IDRC – International Development Research Centre

LMICs – Low and middle-income countries

NGOs – Non-Governmental Organisations

NTCB – National Tobacco Control Bill

PA – Political analyst (or NGO executives)

PAHO – Pan American Health Organisation

SECL – South-east community leader

SHS – Second-hand Smoking

SSCL – South-south community leader

SWCL – South-west community leader

THS – Third-hand Smoking

TTI – Theory of Triadic Influence

WHO – World Health Organisation

YS-OS – Young smoker-other student (College students)

YS-SW – Young smoker-skilled worker

YS-US – Young smoker-undergraduate student

YS-USW – Young smoker-unskilled worker

CHAPTER ONE

INTRODUCTION

Background to the study

Tobacco smoking continues to be a global scourge having been implicated in many chronic diseases which affect vital organs of the human body like the heart, brain and lungs as well as the gastrointestinal, cardiovascular, respiratory, immune and metabolic systems (*Campaign for Tobacco free kids*, 2009).

Tobacco smoking still continues to be a challenge to world health bodies and statistics from the World Health Organisation (WHO) on the health consequences of smoking are staggering. There are about 1.3 billion smokers globally (Parkinson et al., 2009) and the WHO estimates that tobacco causes 8.8% of deaths globally with nearly six million people dying of tobacco related diseases annually around the world (WHO Factsheets, 2011; 2012a). In 2011, nearly 80% of the six million deaths related to tobacco use were said to occur in low and middle-income countries (LMICs) [*Tobacco killing in LMICs*, 2012]. Every eight seconds, someone is said to die from tobacco use (WHO, 2002). Unfortunately, of the nearly six million annual global deaths resulting from tobacco smoke, more than half a million are non-smokers who are exposed to second hand smoke [SHS] (WHO Factsheet, 2012). The WHO describes tobacco as the single leading cause of preventable death and disease globally (WHO, 2002). Yet, this habit continues to be entertained by individuals especially the youth globally. Young adults between aged 18 to 25 years have been noted as the highest risk group for smoking (Song & Ling, 2011).

Fortunately, efforts aimed at curbing the prevalence of smoking in many regions of the world are yielding good fruits in the developed countries but the same cannot be said of regions like

Africa and Asia (Parkinson et al., 2009; WHO Factsheet, 2011; WHO, 2008). The WHO also reports that nearly 80% of all those who smoke globally are residing in LMICs (WHO Factsheet, 2012).

Africa currently accounts for 2% of the world's population of smokers with more than 21% of the adult population in Africa being smokers (Corrao, Guidon, Cokkinides & Sharma, 2000; Iyiola, 2008). The question one might be quick to ask is; what is responsible for the increasing prevalence of smoking in developing countries in Asian and African (Esson & Leeder, 2004)? Evidence from research and literature (including documents from tobacco companies) has pointed to the fact that some of the factors responsible for this phenomenon is due to aggressive marketing and weak tobacco control legislation in many of these developing countries (Coombs, Bond, Van & Daube, 2011; Esson & Leeder, 2004; Holden, 2000; Iyiola, 2008). Tobacco companies have been found to use diverse means to penetrate the markets in developing countries focusing their attention on the youth especially following the increasing impracticability of doing business in the West as a result of increasing constraints and shrinking markets in Western countries. The sales of cigarettes in the developing world is said to have increased by 80% since 1990 (Holden, 2000). Countries in the developing world are therefore seen as emerging markets which could make up for the loss the tobacco companies suffer in developed countries.

As mentioned earlier, tobacco companies have targeted the youth especially in the developing countries in their effort to continue staying in business (Harbour, 2011). Research has shown that about 80% of smokers began smoking as teenagers (Centers for Disease Control and prevention [CDC], 2012; US Dept of Health and Human Services [USDHHS], 2012). Among young teens aged 13-15 all over the world, one in every five smokes while 80,000 to 100,000 children worldwide initiate tobacco use annually (WHO, 2002).

In Nigeria, smoking prevalence has been found to be as high as 31.9% among adults in the North-Eastern region (Desalu, Olokoba, Danburam, Salawu, & Isa, 2008). This prevalence rate is higher when compared with the 8.6% obtained from the national survey carried out in 2002 (Shafey, Dolwick & Guindon, 2003) and the 17.6% obtained among rural dwellers in the South-west region (Ayankogbe, Inem, Bamgbala & Robert, 2003).

Nigeria is Africa's most populous country (Drope, 2011) and the youth aged between 15 and 24 years make up about 20.57% of the country's population (US Bureau of Census, 2010). This means that youth within this age group number about 30.92 million according to current estimates (US Bureau of Census, 2010). Various research carried out to ascertain smoking prevalence among the youth in Nigeria have found the rate to be on the increase. The Global Youth Tobacco Survey carried out among secondary school students (aged 12-18yrs) in Cross River State (South-South, Nigeria) in 2001 showed a smoking prevalence rate of 9.7% among males and 5.7% among females. In a study carried out by Aghaji, Ekwueme and Omotowo (2007) on behalf of the International Development Research Centre (IDRC), the smoking prevalence rate among secondary school students (aged 12-18yrs) was found to be 15.7% for males and 9.8% for females. A report of the Nigeria Demographic and Health Survey conducted in 2008 shows a prevalence of 7.4% among males and 0.1% among females within the 15 and 24yrs age bracket (National Population Commission, 2009). The World Report on the Global Tobacco Epidemic (WHO, 2009) shows smoking prevalence among Nigerian youth to be 3.5% as at 2008 but this could be an underestimation of current trends as Abuja where the study was carried out, is one of the only two states where tobacco smoking ban is currently operational in Nigeria. However, Salawu, Danburam, Isa and Agbo, (2010) found a prevalence of 32.8% among adolescents in North-Eastern Nigeria. To corroborate this, a recent publication of Nigeria's Tobacco Situational Analysis made

available by the International Development Research Centre and Drope (2011) states the following:

> With adult prevalence rates approaching at least 20% and
>
> increasing (and likely higher for youth), there is a clear need to
>
> address tobacco issues in the near term, especially in such a
>
> populous (>150M), varied (hundreds of distinct ethnic and/or
>
> linguistic groups)...country. (p. 201)

Based on the above statistical figures, there is an increase in the smoking prevalence rate of the youth in Nigeria.

The reasons for the increasing prevalence of smoking in Nigeria may not be different from those in other developing countries. It is however important to investigate context specific factors which may be fuelling the increasing prevalence. It is also important to know whether the manufacturers and marketers of tobacco products are using these contextual factors to enhance the appeal of cigarettes to the Nigerian youth. This is of significance because efforts aimed at curbing the increasing prevalence among this group of individuals need to be targeted and context specific, in order to boost their success.

One major issue developing countries have been found wanting in the global fight to reduce tobacco use is with regards to tobacco control policies. Tobacco companies are capitalizing on this shortfall by shifting their marketing focus from developed countries which have stringent regulations to the largely unregulated developing countries with their largely youthful populations (Delamothe, 2012). The youth are therefore seen by tobacco multinationals as the sole source of replacement smokers (Coombs et al., 2011) hence it is not surprising that research has shown that most smokers start off as teenagers (*Campaign for*

Tobacco free kids, 2009). In order to capture these youth, tobacco companies through various marketing strategies make smoking attractive to this segment of the population (Coombs et al., 2011). One major way through which these marketing activities can be curtailed in order to reduce smoking prevalence is in the formulation and implementation of regulatory laws like the WHO-FCTC (Delamothe, 2012; Koh et al., 2011; Tumwine, 2011). It has however been reported that many developing countries have not matched words with the necessary actions on this issue. For example, Tumwine (2011) reports that African countries which showed great enthusiasm in the signing of the World Health Organisation- Framework Convention on Tobacco Control (WHO-FCTC), have only showed modest progress in tobacco control six years after this document came into force on 27 February 2005 (*Nigeria: Report card on the WHO-FCTC*, n.d.). This slow response to the full implementation of the WHO-FCTC has made it conducive for tobacco multinationals to operate without much resistance from the governments of these countries.

Nigeria signed the WHO-FCTC on June 28, 2004 and this was ratified on October 20, 2005. This document was expected to enter into force in the country on 18 January 2006 (*Nigeria: Report card on the WHO-FCTC*, n.d.; WHO, 2012b). However, six years after the entry into force, there is no approved domesticated version of this document which would officially confirm the government's renewed effort towards regulating tobacco consumption and marketing in Nigeria after the defunct 1990 decree banning smoking in public places. The youth are therefore exposed to the many devious strategies put in place by tobacco multinationals to continue recruiting replacement smokers (Coombs et al., 2011) within the country. Some of these strategies have skilfully linked smoking to youth and traditional cultures through sponsorships of films, music and fashion shows (Coombs et al., 2011) as well as traditional festivals like the Osun Oshogbo International festival in Nigeria (Ilevbare,

2006). These strategies by the tobacco companies may be partly responsible for the persistence of tobacco and the increasing prevalence of smoking in Nigeria and other developing countries.

Studies have shown that over the years and in some parts of the world, smoking has been associated with various cultures (Bush, White, Kai, Rankin and Bhopal, 2003; Foldes & Schillo, 2003; Roediger, Capaldi, Paris, Polivy & Herman, 1996). Tobacco has also been said to possess a cultural and social value and is used therapeutically in Nigeria (Ehikhamenor, 2005). It is believed that a better understanding of these values and practices might explain why tobacco use persists in the society (Feinhandler, 1986; Nichter, 2003). In Nichter's view, this aspect of tobacco research has not received the desired attention.

Statement of the problem

The weak tobacco control legislative framework in Nigeria which enables marketing activities by multinational tobacco companies are likely to render the Nigerian youth vulnerable to the uptake of tobacco use. In addition, socio-cultural contexts supportive of tobacco use may also facilitate positive attitudes towards tobacco products and its use. This study is directed to better understand the influences of various factors at the intrapersonal, interpersonal and cultural/environmental levels on the smoking behaviour of southern Nigerian youth. This is with a view of providing data that will illustrate the present realities on the tobacco question in the country as well as serve to inform policy makers of the urgency needed in tobacco control in the country. With such a large population, and a dwindling health care system, it is expedient that efforts be made to prevent Nigeria from slipping into a stage where the population will be faced with the epidemic stage of tobacco related diseases. Also, there is the need for policy formulation to take into account traditional

practices which support tobacco use so as to cater for such context specific factors which may be fuelling smoking prevalence in the population.

Following the aggressive marketing activities of the tobacco companies in developing countries (Esson & Leeder, 2004) and the attendant increase in smoking prevalence especially among her youth, there is need to broaden attempts at counteracting the strategies employed by these companies. To do this however, tobacco research also has to be able to look beyond popular perspectives of tobacco use in the community so as to embrace a more broadened approach towards understanding why the youth continue to initiate and perpetuate smoking. Griesbach, Amos and Currie (2003) assert that:

> What has been given less consideration [in understanding the
>
> increasing prevalence of smoking among young people around the
>
> world] is the influence that wider social and cultural trends may
>
> have had on young people's decisions to start, and then continue
>
> to smoke. (p. 41)

The socio-cultural risk influences on young people's smoking behaviour seem not to have received the necessary research attention. In Nigeria no known study has been carried out to explore the role socio-cultural factors play in influencing the smoking behaviour of Nigerian youth at different levels and in various ways. Previous studies in Nigeria have dwelt on individual and interpersonal factors influencing smoking behaviour (Desalu et al., 2008; Owie, 1986, Madu, Onya, & Okafor, 1998; Oshodin, 1983); tobacco consumption behaviour (Iyiola, 2008) and smoking prevalence among segments of the population (Abdulmalik, Omigbodun, Beida & Adedokun, 2009; Adelekan, Abiodun, Obatan & Oni, 1992) and the use of the tobacco for therapeutic purposes (Ehikhamenor, 2005).

With state-formulated tobacco policy functional in only one of Nigeria's thirty-six states and the Federal capital territory (precisely in Osun State and Abuja) [Akinroye, 2009], a lot is likely to be going on with regards to the activities of tobacco manufacturers and marketers in many parts of Nigeria. Research is also lacking on the effect of the activities of tobacco multinationals on the increasing prevalence of smoking among Nigerian youth. Though tobacco advertising was banned by the Advertising Practitioners Promotion Control of Nigeria (APCON), the country has no national ban on direct tobacco advertising (*Nigeria: Report card on the WHO-FCTC,* n.d.). Tobacco advertising is therefore largely unmonitored since tobacco companies can still sponsor social events and assist students and farmers (especially within the zone where they do business) as part of their 'Corporate Social Responsibilities' (BATN, 2012). The effect of these 'subtle' adverts facilitated by the 'big capital' of these companies has also received little attention from researchers especially in Nigeria. Nichter (2003) suggests that future research investigating 'culture' and tobacco use should:

> continue to look at interactions between culture and social and
> economic contexts, and to consider 'culture' on two fronts: (a) culture
> as it is commonly regarded in relation to ethnic differences, and (b)
> popular culture as an ongoing project subject to both the identity needs
> of youth and the influence of an advertising industry that manipulates
> these needs to sell cigarettes and develop market niches. (p. 139)

This doctoral research therefore aims to provide a comprehensive approach towards understanding risk influences for smoking behaviour amongst the youth in Southern Nigeria especially against the backdrop of their socio-cultural and socio-political environment. It is hoped that this will serve to add to the body of knowledge on needed tobacco control

strategies especially in a country where this has not received enough attention from government and policy makers. It is also expected that knowledge on the cultural influences on smoking prevalence will help to inform targeted interventions in regions where tobacco products still serve a cultural purpose.

Objective of the study

This study is aimed at understanding the risk influences for smoking behaviour amongst the youth in Southern Nigeria with specific focus on how socio-political and socio-cultural factors as well as intrapersonal and interpersonal factors serve to increase smoking initiation and perpetuation among the youth. It also aimed at finding out the strongest predictors of smoking within this group of individuals.

Research questions

This study attempts to explore and answer the following questions:

1. How does the current policy environment on tobacco control in Nigeria influence smoking initiation and perpetuation among southern Nigerian youth?

2. What cultural practices serve to influence smoking among the youth of Southern Nigeria?

3. How do interpersonal factors (such as family members, friends and role models) serve as risk influences for smoking among southern Nigerian youth?

4. What are the intrapersonal risk factors influencing smoking among the youth in southern Nigeria?

5. What influences are the best predictors of smoking among southern Nigeria youth?

Structure of the dissertation

This dissertation comprises of eight chapters. The structure of the dissertation is as follows:

Chapter one – Introduction

This chapter presents the background to this study, statement of the problem, objectives of the study and the research questions which guided the study.

Chapter two – Theoretical Framework

In Chapter two the principal theory upon which the study is based and which guided this research; the Theory of Triadic Influence (TTI) by Flay, Petraitis and Hu (1999) and updated by Flay, Snyder and Petraitis (2009) is presented.

Chapter three – Literature Review

Chapter three discusses related literature and previous research on the phenomenon of smoking, policy regulations on tobacco use informed by the global document on tobacco control (WHO-FCTC), culture and tobacco use as well as psychosocial influences for smoking.

Chapter four – Methodology

This chapter presents details of the following: the research design, the study setting, sample and sampling techniques, instruments for data collection, data collection procedure and the analysis of qualitative and survey data.

Chapter five – Qualitative findings

Chapter five presents the results from the first phase of this research. Qualitative findings are reported supported by verbatim quotes from participants.

Chapter six – Quantitative (survey) findings

The results from the second phase of this study which was a cross-sectional survey are presented in this chapter.

Chapter seven – Discussion of qualitative and quantitative findings

Results from the qualitative and quantitative phases of this study are discussed in the light of previous research and literature in the various subjects of tobacco research.

Chapter eight - Summary of findings, conclusion and recommendations

A summary of the results obtained in this study showing points of convergence and divergence of qualitative and survey findings are presented. Recommendations based on findings, conclusion and suggestions for further research are also made. The challenges encountered during the field work as well as the limitations of the study are also discussed.

CHAPTER TWO

UNDERSTANDING SMOKING BEHAVIOUR: THE ROLE OF THEORIES

Introduction

> *By provoking ideas about what is presently unknown, theories provide*
>
> *the impetus for research. As living entities, they are also developed*
>
> *and modified by good research.... A theory provides a framework for*
>
> *critically understanding phenomena. (Silverman, 2001, p. 3)*

This study explores the phenomenon of smoking amongst southern Nigerian youth with particular attention on the risk influences for their smoking behaviour. The Theory of Triadic Influence (TTI) is used as the theoretical framework of choice based on the need to understand youth's smoking behaviour holistically. Before discussing this theory further, it is important to understand why researchers need to look at the context within which an individual carries out different behaviours because in most cases the meaning of such behaviours can best be derived from it. A critique of the TTI is also presented at the end of this chapter.

The African society and the individual in context

It has been noted that the differences in the health behaviours of individuals are often the function of culture (Airhihenbuwa & Obregon, 2000). There have also been advocates for cultural sensitivity to be central to health communication as well as health promotion theory and practice (Airhihenbuwa & Obregon, 2000). Since the tobacco has diverse representations in many cultures of the world as pointed out by Feinhandler (1986), it is essential that culture forms part of the important vehicle for understanding this health risk behaviour as well as the

development, implementation and communication of health promotion programmes around smoking.

To carry out a research of this nature that takes into cognisance the context of an individual, it is important to understand how the individual derives his/her identity in collectivist societies especially as it pertains to Africans. The ecological framework by Bronfenbrenner (1986, 1995, Bronfenbrenner & Morris, 1998) provides an appropriate perspective with which to view how an individual derives his/her identity within collectivist societies. Diagrammatic representation of this framework is presented below.
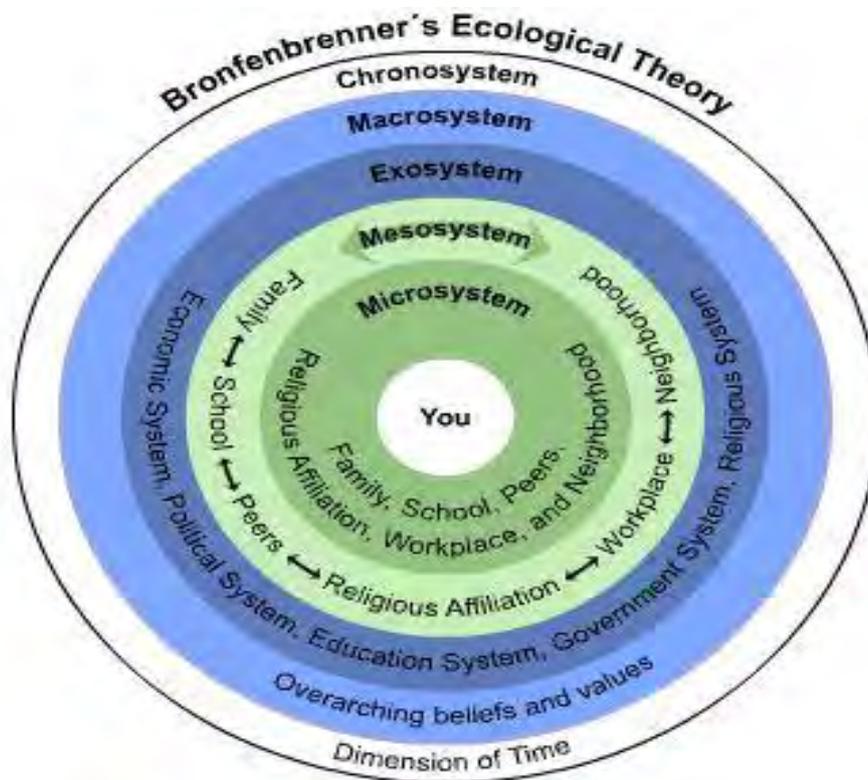
Figure 1: Bronfenbrenner's ecological theory retrieved from
http://faculty.weber.edu/tlday/human.development/ecological.htm

Bronfenbrenner's ecological theory consists of five environmental systems (Santrock, Mackenzie-rivers, Leung & Malcomson, 2003) and the individual is said to be influenced by these environmental systems which include the microsystem (e.g. family, peers, schools);

mesosystem (relations between any two microsystem elements e.g. family and school); exosystem (e.g. parent's workplace); macrosystem (e.g. cultural contexts) and chronosystem (e.g. events over the life course) (Santrock et al., 2003). In the researcher's opinion, a closer examination of this framework shows that the individual's socio-cultural identity can be derived from the microsystem and macrosystem environments with the other systems serving as reinforcers of this culturally derived identity.

Individuals in the African context are not necessarily separate entities from their environment. Their decision and attitudes to issues are greatly shaped by influences that can be classified as interpersonal and cultural. Nwoye (2006) rightly asserts that;

> …unlike the Western view, which sees the self essentially as a substantive inner agency capable of choosing its own values, charting its own directions and commenting on itself in the manner of a self-governor, the African perspective, among other things, consists of multiple aspects of the relationship between the individual and the community. (P. 119)

Community norms therefore play a significant role in determining the way of life of individuals. Ayittey (2006) explains that in traditional Africa, the community is paramount and preservation of what the community stands for usually supersedes that of the individual. The individual, as opined by Airhihenbuwa and Obregon (2000), is viewed as a production of the family, community and other environmental influences for which he/she does not have, nor desire, total control. These attitude-changing influences cannot be ignored if we have to understand the individual's complex behaviour. The individual is therefore better understood through a 'communal lens' in a collectivist orientation such as that which obtains in Nigeria. This communal derivation of an individual is also in line with the assertion by Ayittey

(2006), that "an individual's existence and well-being is meaningless without that of the community" (p. 42). Group solidarity and loyalty is very important in this context and the individual though s/he alone defines the person s/he wants to be, strives to live by what is defined by the group and what will strengthen the group in the long run. Though the limits set by the community varies from one ethnic nationality to another and the degree of individuality or independence varies from one community to the other, the overall interest of the society always remains paramount in such collectivist settings (Ayittey, 2006)

Explaining the place of the individual's freedom of behaviour in the African context, Ayittey (2006) notes that "unlimited freedom" could only be approved by "bioevolutionary necessity, the cultural norm, and religious practices of the community" (p. 45). These norms, according to him, also result from the need to preserve harmony between the cosmic forces and the people as well as to conform to behavioural rules required by the ancestors and the supernatural forces. He thus concludes that "the philosophical beliefs, social mores, obligations and value systems merely set the parameters within which the individual could operate freely" (p. 45) in a collectivist society.

The Theory of Triadic Influence (TTI)

The Theory of Triadic Influence (TTI) is an ecological approach to the study of health behaviour which provides a meta-theoretical orientation that suggests higher-order descriptions and explanations of health-related behaviours (Flay, Snyder & Petraitis, 2009).

This theory has great potential for unravelling the inherent causes of tobacco use among youth and this has been testified by its proponents (Flay, 1999; Flay, Petraitis & Hu, 1995). The TTI integrates theories from sociology and psychology (Flay, 1999) as well as other theories of health behaviour which include among others: the social cognitive theory,

problem behaviour theory, theory of reasoned action and theory of planned behaviour (Flay et al., 2009). The TTI therefore covers a wider scope of influences (Flay et al., 2009). It has particularly been used to study health behaviours like smoking and alcohol use (Flay et al., 1995; Flay et al., 1999; Flay, 1999; Flay, Petriatis & Miller, 1995) and many of its levels and streams of influence have been justified by research (Flay et al., 1995).

Further, the Theory of Triadic Influence is organised along two dimensions: levels of causations and streams of influence (Bhana, McKay, Mellins, Petersen & Bell, 2010; Flay et al., 2009). The TTI is similar to the theory of planned behaviour by Ajzen (Petersen & Govender, 2010), for it incorporates individual and interpersonal influences of health behaviours. Individual level theories of health promotion like the theory of planned behaviour by (Ajzen, 1985) and the theory of reasoned Action by Ajzen and Fishbein (1980) assume that people weigh perceived benefits and costs of their actions and behave according to the outcome of their analysis (Sarafino, 2002). This assumption cannot explain why people still pick up the habit of smoking when there are mounting evidences of its negative consequences. This calls for a redirection of the search for answers to the question of rising smoking prevalence especially among young people. Further, Social Cognitive Theory (Bandura, 1986) has been used in explaining the risk influences of smoking especially at the interpersonal level. Factors like peer influence and family members' smoking behaviour have been found to influence individual's smoking behaviour (Madu, Onya & Okafor, 1998; Oshodin, 1983). However, theories such as these seem inadequate for explaining in a holistic fashion the influences present in the individual's cultural context especially with research findings indicating ethnic and cultural patterns in smoking prevalence within and outside Nigeria (Desalu et al., 2008; Mermelstein et al., 1999). In addition to these factors identified

in these theories, the TTI recognizes socio-cultural and socio-political influences and causes of health behaviours (Flay, 1999).

According to the TTI, there are three streams or factors which influence or cause behaviour. These factors include *Cultural environment, social situation and biological/personal influences*. These factors act through mediated chains of *ultimate, distal and proximal influences* (levels of influence) with some influences moderating the effects of others (Flay, Petraitis & Hu, 1999; Flay, Snyder & Petriatis, 2009). Flay, Petraitis and Hu (1995) suggest that a comprehensive understanding of any behaviour must look at what they termed the "big picture" which they say must be based on an all-inclusive and integrative analysis of the following:

a) the broad social environment or cultural milieu surrounding the behaviour,

b) the more immediate social situation or context in which the behaviour occurs,

c) the characteristics or dispositions of the person performing the behaviour

d) the behaviour itself and closely related behaviours, and

e) The interaction among all of these.

The above "big picture" which forms the basics of the TTI is represented in the Figure 2.
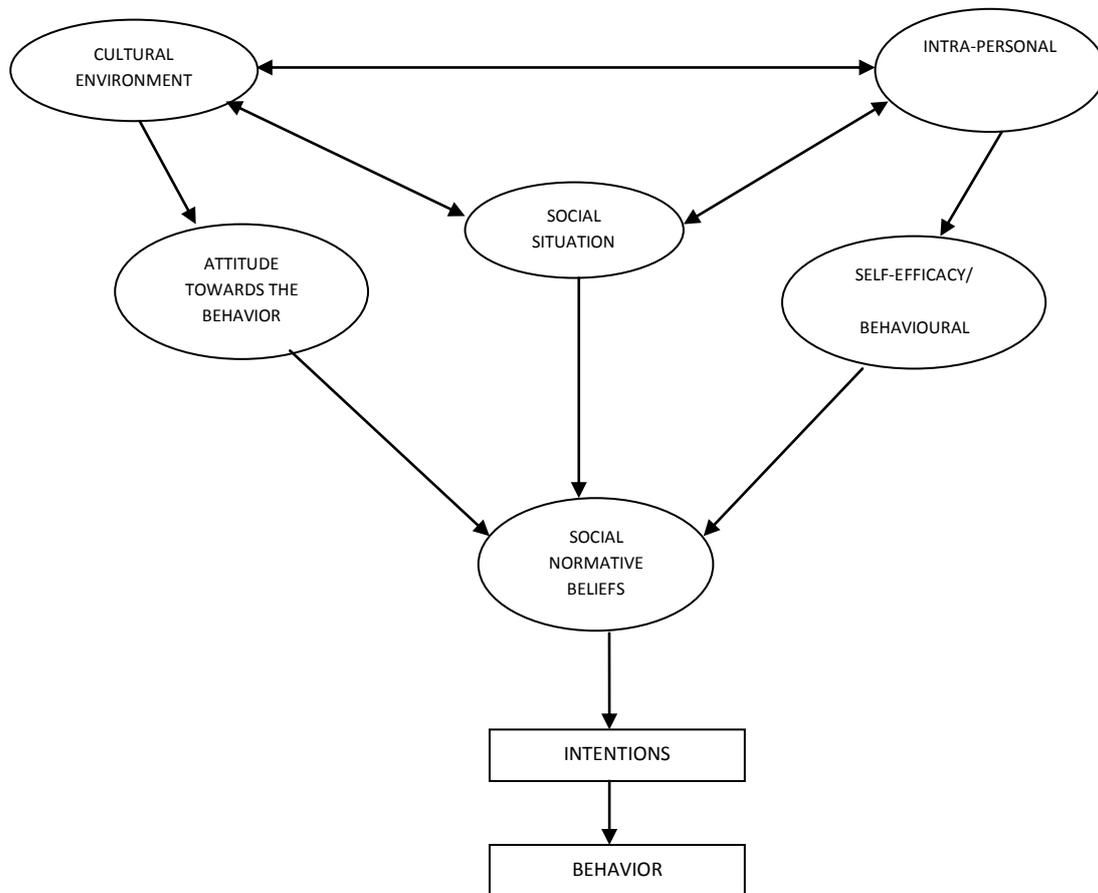
Figure 2: Basics of the theory of triadic influence: ultimate causes and proximal predictors (adopted from Flay, Petraitis & Hu, 1995, p. 4)

Figure 3 shows a comprehensive model of the TTI showing many mediated pathways. The TTI therefore presents a 3X3+1 matrix comprising the three types or streams of influences and 3+1 levels or tiers of influence (Flay, Petraitis & Hu, 1999). It suggests that causal processes can occur through mediation, moderation or feedback (reciprocal causation). These have been represented by the coloured arrows in Figure 3. Mediation occurs where one variable mediates the effects of another variable while moderation occurs where one variable modifies the effects of another (Flay, Petraitis & Hu, 1999).
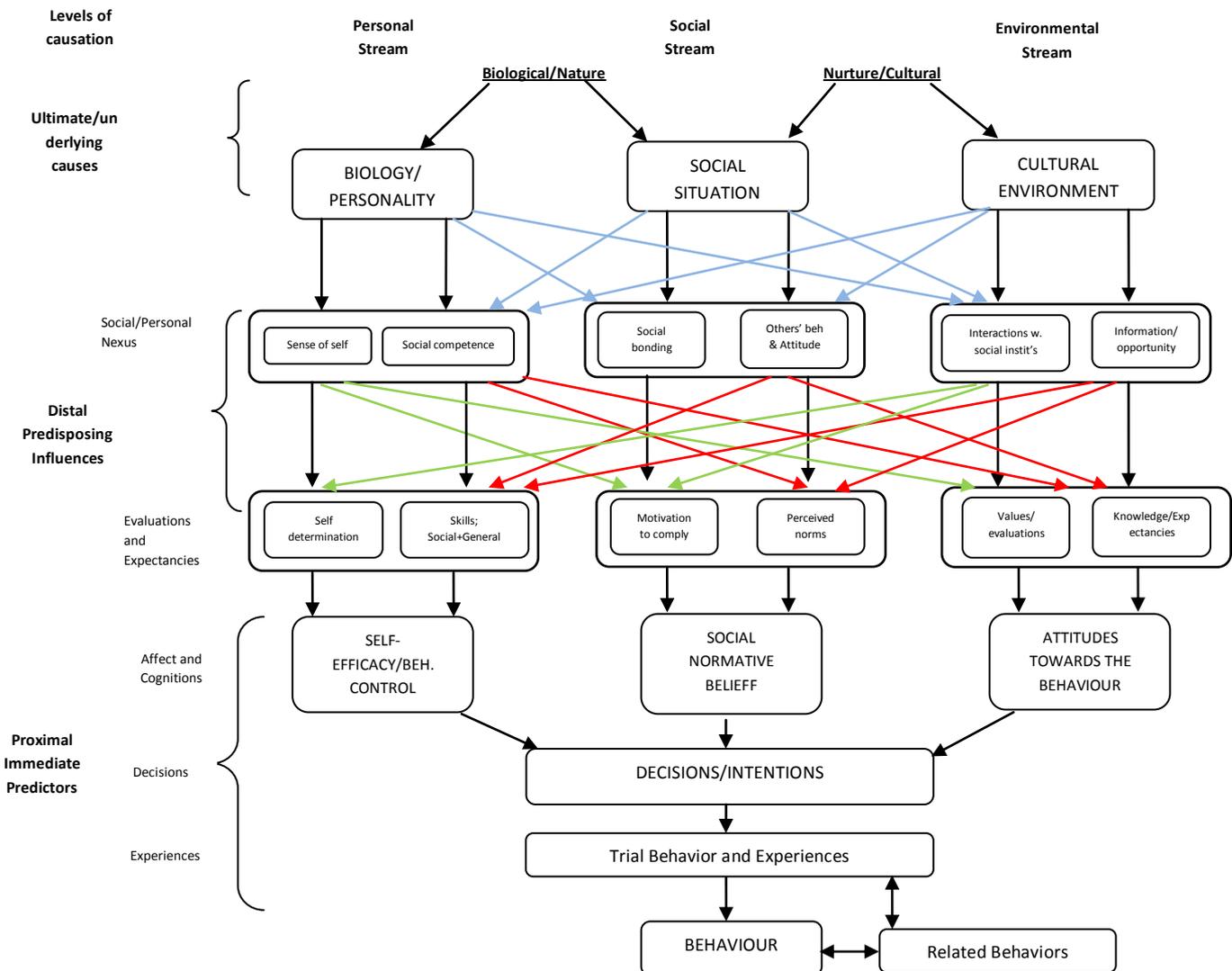
Figure 3: Theory of Triadic Influence showing many mediated pathways (adapted from Flay, 1999, p. S 112; Flay, Snyder & Petraitis, 2009, p. 455)

In addition to the streams and influences is a group of influences of behaviour: the decision/behavioural intentions, trial behaviour, and related behaviour (e.g. drinking alcohol as it relates to smoking). Flay, Petraitis and Hu (1999) assert that factors in this additional level are immediate predictors of smoking behaviour. An analysis of the definitions and constructs in the 3X3+1 matrix of types and levels of influence on smoking is presented in Table 1.

Table 1: Matrix of types and levels of influence on smoking (adapted from Flay, Petraitis & Hu, 1999, p. S60)

Levels of influence	Types of influence		
	Intra-personal (biology/personality)	**Interpersonal (Social)**	**Cultural (Environmental)**
Ultimate	**Definitions:** Personality traits and intrapersonal characteristics that although beyond the easy control of adolescents, might promote some internal motivation to smoke cigarettes or make them susceptible to the physiological effects of tobacco. **Constructs:** Genetic susceptibility to nicotine; lack of impulse control; external locus of control: aggressiveness; extraversion; sociability; risk-taking; sensation seeking; neuroticism or emotional instability.	**Definitions:** Characteristics of the people who make up adolescents' most intimate social support system. These characteristics are not specific to smoking and are beyond the personal control of adolescents but nonetheless put them at risk for succumbing to social pressure to smoke. **Constructs:** Infrequent opportunities for rewards from family members; lack of parental warmth, support, or supervision; negative evaluations from parents; home strain; parental divorce or separation; unconventional values of parents; unconventional values among peers.	**Definitions:** Aspects of adolescents' surroundings, neighbourhoods, social institutions, and culture that, although beyond the personal control of adolescents, put them at risk for developing positive attitudes towards tobacco use. **Constructs:** Local crime and employment rates; inadequate schools; poor career and academic options; infrequent opportunities for rewards at school; negative evaluations from teachers; media and advertising depictions of smoking; weak public smoking ordinances; low tobacco taxes; cigarette availability; weak school-level policies on smoking.
Distal	**Definitions:** Affective states and general behavioural skills of adolescents that promote some internal motivation to smoke and that undermine their refusal skills. **Constructs:** Low self-esteem; temporary anxiety, stress, or depressed mood; poor coping skills; inadequate social skills; weak academic skills.	**Definitions:** Emotional attachments of adolescents and the tobacco-specific attitudes and behaviours of influential role models who encourage smoking. **Constructs:** Weak attachments to and weak desire to please family members; strong attachment to and strong desire to please peers; greater influence by peers than parents; smoking-specific attitudes and behaviours of role models.	**Definitions:** General values and behaviours of adolescents that contribute to their attitudes toward tobacco use. **Constructs:** Weak commitment to conventional values, school, and religion; social alienation and criticism; weak desire for success and achievement; hedonic values and short-term gratification; rebelliousness; desire for independence from parents; tolerance of deviance.
Proximal **Immediate predictors**	**Definitions:** Beliefs about one's ability to smoke cigarettes and to avoid smoking. **Constructs:** Refusal skills; determination to smoke; use self-efficacy; refuse self-efficacy. Decision/intentions Trial behaviour Related behaviours	**Definitions:** Beliefs about the normative nature of smoking and pressures to smoke. **Constructs:** Prevalence estimates; motivation to comply with other smokers; beliefs that important others (friends, parents and other role models) encourage smoking.	**Definitions:** Beliefs and evaluations about the costs and benefits of smoking. **Constructs:** Expected costs and benefits of not smoking; evaluation of costs and benefits of not smoking; expected costs and benefits of smoking; attitudes towards smoking by others; attitudes toward smoking by self.

The streams and levels of influence shown in the matrix are explained by Flay, Petraitis and Hu (1995) and Flay et al. (2009) as follows:

a) Three streams or types of influences on smoking behaviour

1. Socio-cultural (environmental) stream

These represent characteristics of broad cultural environment and general social values that contribute to adolescents' personal attitudes concerning smoking (attitude towards a specific behaviour). The influences or constructs under this stream are also presented in Table 1.

Each of these three streams acts through three levels of causation (Flay et al., 2009) as discussed overleaf.

2. Social/interpersonal stream

This represents adolescents' more *immediate* social situations and more *intimate* social support systems, which contribute to the social pressure adolescents feel to smoke tobacco (social normative beliefs about a specific behaviour). The influences under this stream are presented in Table 1.

3. Intrapersonal (biology/personality) stream

This type of influence represents characteristics of individual adolescent's biological makeup and basic personality that undermine their ability to resist pressures to smoke cigarettes (self efficacy towards a specific behaviour). The influences or constructs covered by this stream can be seen in Table 1.

b) Three tiers or levels of influence

The three tiers or levels of influence include proximal, distal or intermediate and ultimate levels.

1. Ultimate level

This level has factors that are beyond the mastery of the individual and are not *per se* inherently tied to tobacco use, but being broader in scope, they are more deeply rooted in the individual's environment, personality or biological makeup. These factors include information/opportunity, in the cultural environment; behaviour and attitude of significant others and social bonding, in the social situation of the individual; social competence and sense of self, within the biology/personality of the individual.

2. Distal (intermediate) level

This level comprises influences that contribute indirectly to smoking behaviour by contributing directly to tobacco specific attitudes, normative beliefs and self efficacy. It includes several factors: knowledge/expectations and values/evaluation, which contribute directly to tobacco specific attitudes; perceived norms and motivation to comply, which contribute directly to social normative beliefs; social skills and self determination, which contribute directly to self efficacy.

3. Proximal level

The proponents of the TTI describe the proximal level as having the most immediate causes and strongest predictors of smoking. There are four factors at this level (i.e. 3+1) which include (i) attitude towards smoking, (ii) social normative beliefs and (iii) self efficacy as well as (iv) intention/ decision to smoke which together with trial behaviour and related behaviour make up

the fourth sublevel here. Flay et al. (2009) explain that variables like 'intention' have direct effects on behaviour and so are causally proximal or immediate.

Flay et al. (2009) summarise the TTI as a theory which "consists of multiple tiers/levels of causation, three major streams each with two sub-streams of influence, dozens of predictions about direct and indirect (mediated) pathways and interactions (moderation) between variables and feedback loops" (p. 456).

Reviewing research findings from causal process studies, Flay, Petraitis and Hu (1999) assert that "etiological processes of tobacco use do not follow a single causal path. Instead, various pathways are interwoven with each other and no single pathway by itself dominates the aetiology of tobacco use" (p. S62). They however note that some pathways have received less support in terms of research and theories and notable among these is the dearth of research on the effects of ethnicity and gender on the causal process of tobacco use. The effect of ethnicity on smoking has also been noted by many researchers like Nichter (2003), Feinhandler (1986) and Foldes & Schillo (2003). Smoking has long been known to be a male-dominated behaviour going by global statistics (WHO fact sheet, 2011), though this gap is closing fast especially in many developed countries (Eriksen, Mackay & Ross, 2012; Ali et al., 2009).

It should be noted however that in this doctoral study, only the three streams of influence and the immediate predictors of the TTI have been used. The specific constructs identified by the proponents of the TTI under the streams and levels of influence have not also been strictly followed. The results from the study guided the final categorization of constructs into the various streams of influence (see chapter five and six).

The theory of triadic influence – A critique

The use of the theory of triadic influence (TTI) in this study was particularly informed by the need to have a theory with a broad and comprehensive perspective towards exploring the risk influences for smoking among the youth in Nigeria. Health psychology theories like the theory of reasoned action (TRA) by Fishbein and Ajzen (1975) and the theory of planned behaviour (TPB) by Ajzen and colleagues (Ajzen, 1985) are theories used to investigate the relationship between attitudes and behaviour (Ogden, 2000). These theories lay emphasis on the individual's beliefs about his social world and the evaluation of these beliefs, placing the individual within the social context where the behaviour is carried out (Ogden, 2000). However, these theories do not include such factors like health policy and cultural settings which form part of environmental influences for health risking behaviours in the TTI. These theories also do not include the role of past and related behaviours in influencing the intention or actual behaviour of individuals. Like the Theory of planned behaviour and the theory of reasoned action, other individual levels theories like the health belief model by Rosenstock (1966), health action process approach by Schwarzer (1992), protection motivation theory by Rogers (1975, 1983, 1985) and social cognition theory (SCT) by Bandura (1977, 1986) are mostly concerned with predicting behavioural intentions and behaviour based on factors which consider the individual as central information processors (Ogden, 2000). However, the SCT goes further to recognise the place of other people and the broader social world as parts of the context within which an individual carries out specific behaviours. In addition to the individual's subjective norms of the TRA and the TPB, the SCT brings in normative beliefs (of the individual's significant others and broader social world) [Ogden, 2000]. However, all these theories do not accentuate the role of other

environmental and cultural factors which can and do influence the pattern in which the individual processes information especially in the African context.

Strengths of the TTI

Airhihenbuwa and Obregon (2000) advocate that theories and models used in health promotion in collectivist societies should take into cognizance the cultural factors which seem to have a strong influence on individuals in these societies. In studying smoking behaviour among youth in a collectivist society such as Nigeria, the TTI provides a comprehensive model which does not only address the issue of cultural influences but also considers other socio-political influences as well as other factors which mediate and moderate the effects of these influences on one another.

According to Flay, Petraitis and Hu (1999), the TTI provides a good representation of the complete picture that would be obtained if the results of reviewed studies and research are to be mapped. Flay (1999) describes it as a "theory that integrates variables and processes from many sociological and psychological theories of behaviour onset and change providing a unifying theoretical framework with which to consider influences on, or the causes of, the behaviour of youth" (p. S 111).

The use of the TTI in studying smoking behaviour is both apt and valuable because a lot of research have been carried out to explain the factors that influence the onset of smoking and notable among these are: the influence of peer pressure on smoking (Desalu et al., 2008; Clark et al., 2004; Yang et al., 2004); smoking being seen as a glamorous activity and a symbol of high status (Odigwe, 2008); a way of coping with stress, frustration and boredom [coping strategy] (Bancroft, Wiltshire, Parry & Amos, 2003; McKie, Laurier, Taylor & Lennox, 2003) and

cigarettes being used to stimulate memory (Faseru, Barenjo, Sandström & Omokhodion, 2006). However, not much attention has been paid to the influence of culture and socio-political environments in understanding how and why the youth pick up the habit of smoking. Also, focus has not really been on how all these and many more factors can interact in determining smoking behaviour especially among young people. The TTI is hence a very useful theory in this regard. Bhana, McKay, Mellins, Petersen and Bell (2010) assert that the TTI represents a theory which both seeks to explain and predict health behaviour and guide the development of health-promoting interventions. Broader approaches towards understanding health behaviours have been supported by many researchers including Burke, Joseph, Pasick and Barker (2009) who assert that "the study of health behaviour in isolation from the broader social and environmental context is incomplete and has contributed to disappointing results from experiments in behaviour change…" (p. 59S).

Limitations of the TTI

The TTI takes into consideration cultural influences of smoking behaviour, though from a Western perspective. Community socio-cultural norms which include the consumption of cigarettes as part of traditional ceremonies in some parts of the world like Argentina (Alderete, Erickson, Kaplan, & Pérez-Stable, 2010) are not explicitly part of what Flay and Petraitis tagged as cultural influence (see Table 1). The fact that smoking prevalence has been found to run along ethnic lines within and outside Nigeria (Desalu et al., 2008; Nez Henderson et al., 2005) also makes a strong case for the need for tobacco research to consider cultural factors in their investigations.

Flay, Petraitis and Hu (1999) note that more research is needed to further understand the TTI. They suggest the need for multiple methodologies including intensive interviews and exploratory studies advancing trans-disciplinary tobacco-prevention research. This current study made use of the exploratory mixed methods research design which entailed conducting qualitative interviews followed by quantitative investigations into various variables to ascertain among others, the best predictors of smoking behaviour among the youth especially within the context of socio-cultural and socio-political peculiarities. Also, Flay et al. (1999) note that:

> Cultural/attitudinal influences have attracted less theoretical attention or
>
> finding from prospective studies…. Theory, but little research …has
>
> focused on ultimate factors in adolescents' surroundings,
>
> neighbourhoods, social institutions, and culture, that although beyond
>
> their personal control, put adolescents at long term risk of developing
>
> positive attitudes towards tobacco use. (p. S61)

Conclusion

The TTI is of relevance in studying health related behaviours especially smoking because it does not only propose the usually isolated influences that have been widely researched but seeks to explain how these isolated influences, by moderating, mediating or feedback action, inter-relate in influencing smoking behaviour (Flay, 1999). The TTI seems to have successfully synthesized the constructs of other social cognitive theories of behaviour change which include among others the theory of planned behaviour, theory of reasoned action, social cognitive theory of Bandura, theory of decision making and problem behaviour theory and the health belief model (Flay et al., 2009).

According to Silverman (2001), all knowledge is theoretically saturated. The researcher therefore employed the use of the theory of triadic influence as a theory and conceptual model to guide this research. The TTI addresses in a very broad way how behaviour is influenced by various factors within and around the individual. The aim of this is to inform broader approaches to behavioural change. This is in line with Breinbauer and Maddaleno's (2005) assertion that "programme developers should not only consider theories and models focusing on individual change but also those which promote change at the interpersonal, community, and policy levels" (p. xxiii). It is hoped that the use of the TTI will help to give comprehensive explanations to many aspects and other intervening variables serving as 'push' and 'pull' factors which influence smoking behaviour of individuals especially the youth.

CHAPTER THREE

LITERATURE REVIEW

Introduction

This chapter presents an overview of tobacco smoking as well as psychosocial, policy and cultural environmental risk influences for smoking among the youth. The discussion of the aforementioned constructs is presented in three sections.

SECTION ONE

TOBACCO SMOKING

What is smoking?

Smoking has been defined as the inhalation and exhalation of the fumes of burning tobacco in cigars, cigarettes and pipes (*The Columbia Electronic Encyclopedia*, 2011). Most persons who smoke do so by drawing in the smoke produced by the burning of tobacco leaves (that have undergone curing) either in pipes or when rolled up with paper. It should be noted however that there are variants of cured tobacco products rolled in paper. The big-sized ones are preferably called 'cigars' and there are small sized ones called 'cigarettes' and the 'cigarillos' which are even smaller sized ones. Other tobacco products which are either smoked or smokeless include kreteks, bidis, roll-your-own (hand rolled) cigarette and pipes, dry or moist snuff (finely ground powdery tobacco leaves already cured), water pipes (also called hookah or shisha), chewable and dissolvable tobacco (Eriksen, Mackay & Ross, 2012). Although the use of various tobacco products varies from one region of the world to the other, the most popular tobacco product used globally still remains the cigarette (Eriksen, Mackay & Ross, 2012). Among the local folks in

Nigeria, this popular size is also called 'cigar'- used as a short name for the word 'cigarette'. Moreover, in Nigeria, snuff is more commonly used among older people who consume this tobacco product by stuffing little quantity of this powder at a time into their nostrils before sniffing it in (Desalu et al., 2008).

Smoking has been identified to be a high risk behaviour due principally to the presence of nicotine, tar and other substances numbering more than 4,000 which are present in the tobacco leaves and are released when the leaves are cured and burnt (Mitchell, Baildam, Bull, Clemonds & Marshall, 2005; Desalu et al., 2008). The nicotine, tar and many other components of the cigarette apart from being health hazards to smokers are also inhaled by non smokers when they are around those smoking. This smoke inhaled by non-smokers has been tagged 'second-hand smoke' (SHS) or 'environmental tobacco smoke' (ETS). Environmental tobacco smoke is a mixture of the smoke which emerges from the cigarette when it is lit and the one exhaled by smokers when they smoke. According to Narkowicz, Polkowska and Namieśnik (2012), the ETS when diffused into the atmosphere, undergoes various chemical and physical changes and reacts with other chemicals in the atmosphere. Persons who take in second-hand smoke are therefore called second-hand or passive smokers (Sarafino, 2002).

Apart from active smoking and second-hand smoking, there is a most recently categorised third category of cigarette smoking; third-hand smoking - THS which is presently receiving attention from researchers (Winickoff et al., 2009). Third-hand smoke describes the contamination and smoke from tobacco that continues to linger in a smoking site or on the smoker long after a cigarette is smoked (Winickoff et al., 2009). Many of the substances contained in the cigarette

are usually deposited on the wall, furniture, hair and clothing of active smokers when they smoke (Winickoff et al., 2009). These substances could also remain as gaseous substances in the environment (*Science Daily,* 2012). Though a lot is still unknown about the health implications of THS, researchers suspect that it could be as lethal as active or second-hand smoke because many toxic and carcinogenic components have been identified in low levels of tobacco smoke leading to the declaration that there is no safe level of exposure to smoke from tobacco (Winickoff et al., 2009). More about the health consequences of smoking is discussed in subsequent sections.

History of tobacco smoking

In an attempt to trace the history of tobacco smoking, Sarafino (2002) explains that the habit of setting fire to leaves that were either put in pipes or rolled up in paper was a practice Christopher Columbus recorded as what inhabitants of the western hemisphere were involved in during his exploration of this region. These leaves—which he explained were tobacco leaves—when dried, produced smoke which was drawn through the mouth (Ashton & Stepney as cited in Sarafino, 2002). Other explorers of the western hemisphere who adopted the practice of smoking took tobacco plants back to Europe in the 1500s (Sarafino, 2002).

Tobacco was initially used in religious rituals and for medicinal purposes (*The Columbia Electronic Encyclopedia,* 2011) but later on, people smoked for pleasure. Snuff, which is powdered tobacco, was later introduced by the French. When machines were made to produce cigarettes and tobacco farming improved, tobacco became more available and tobacco smoking

became very widespread (Sarafino, 2002). Describing the biology and use of tobacco, Desalu et al. (2008) write thus:

> Tobacco is an agricultural product from fresh leaves of the plant in the
>
> genus *Nicotina.* It is commercially available in dried, cured and natural
>
> forms besides cigarettes, cigars, stem pipe or hookah smoking, it is
>
> chewed, 'dipped' (placed between the cheek and gum), or sniffed into
>
> the nose as finely powdered snuff. (para. 1)

From the beginning and throughout history, tobacco is said to have had a symbolic role (Feinhandler, 1986). There are over one billion people who currently smoke around the world (Esson & Leeder, 2004) and smoking cuts across gender, culture and even religion. In 1964 however, the Surgeon General of the United States issued a report describing the ill effects of smoking. After this report, warnings against smoking started being visible in the American media and on packages of cigarette (Sarafino, 2002). The impact of this information about cigarette smoking has been felt in many nations across the world with many countries especially in the developed world putting in place strategies to reduce the prevalence of smoking (Levy, Nikolayev & Mumford, 2005; Ross, Blecher, Yan & Hyland, 2010).

Although Sarafino (2002) agrees that the trend of smoking declined after the appearance of warning messages over the media and on cigarette packs, he also admits that this decline was not significant enough to lead cigarette manufacturers into bankruptcy as there were still quite a good number of smokers especially in countries where regulations of tobacco products are loose

and Nigeria is one of such countries. Melgosa (2007) rightly notes that tobacco use has declined in many countries, but it is increasing in others especially countries in Africa and Asia.

In Africa, tobacco has been a common product for more than three centuries and as at 1993, about half a million tons of tobacco were being cultivated in 33 African countries (Yach, 1996). Zimbabwe and Malawi are currently Africa's largest producers of tobacco with both producing close to 300 million tons of tobacco leaves as at 1999 (*Projections of production of tobacco leaf*, n.d.).

In Nigeria, tobacco cultivation first started in 1934 in Ogbomosho, Iseyin and Ago-Are; all three towns are in the present-day Oyo State, South-west Nigeria (Edohasim, 2010). However cultivation of tobacco currently goes on in virtually all parts of the country. The Nigeria Tobacco Company (NTC), which was the former tobacco establishment in the country which earlier collapsed, was taken over in the year 2000 by the British American Tobacco (BAT) company to become the BAT-Nigeria (BATN). The BAT-Nigeria is said to currently control about 75% of the country's tobacco market (McGruder, n.d.). The BATN re-launched cigarette production in Nigeria when it signed a memorandum of understanding with the Nigerian government in September 24, 2001 under the then President Olusegun Obasanjo in an event tagged 'Nigerian Investment Summit' held at Park Lane Hotel in London (Adewumi, 2009). The Memorandum of Understanding (MoU) entailed the setting up of a US$150 million ultra modern cigarette manufacturing plant (the largest in Africa) in Ibadan, Oyo State. The BATN was also granted a high tax concession and waiver (Adewumi, 2009). Explaining part of this agreement, Adewumi (2009) states that BATN was expected to source raw materials in Nigeria, employ Nigerian workers, manufacture and sell cigarettes to Nigerians and other countries in the west coast of

Africa. The BATN reports that of the twenty-two (22) cigarette brands produced by the company and sold in the West Africa's markets, twenty-one (21) are manufactured in Nigeria (BATN, 2012).

What is in a cigarette?

Cigarette has been said to contain over 4,000 chemical compounds when burnt in the form in which it is smoked (Mitchell et al, 2005; Desalu et al., 2008). The vast majority of these chemicals many of which are known carcinogens are present naturally in the tobacco and are transferred into the smoke or are formed when the tobacco is being burnt (Mitchell et al, 2005; Desalu et al., 2008; Winickoff et al., 2009). The compounds contained in the tobacco smoke belong to various classes of chemicals which include "amides, imides, lactams, carboxylic acids, aldehydes, ketones, alcohols, phenols, amines, hydrocarbons, ethers and inorganic compounds...these may be in gaseous form or bonded to suspended particulate matter" (Narkowicz, Polkowska & Namieśnik, 2012, p. 16).

Among the chemicals present in the cigarette therefore are acetone, arsenic, ammonia, benzene, cadmium, carbon monoxide, formaldehyde, lead, toluene, polonium-210, chromium, hydrogen cyanide, nicotine and tar (Atawodi, Preussmann & Spiegelhalder, 1995; Winickoff et al., 2009; Wu, Ashley & Watson, 2002). None of these chemicals mentioned has any positive effect on the human body. Individually, they are known to be very hazardous chemicals. It is therefore not surprising that cigarette smoking has been implicated in many diseases including many types of cancer (Sarafino, 2002). The tar in cigarettes has been identified to be the substance that actually transports most of the other chemicals contained in cigarette smoke directly into the body (Mitchell et al., 2005). In the light of research-based evidence on the negative health

consequences of cigarette smoking, Weiten's assertion that 'some people seem determined to dig an early grave for themselves doing precisely those things that are bad for their health' gives health promotion a push to do more to prevent a global tobacco epidemic(1989, p. 497). The health implications of smoking are further discussed.

Implications of smoking

The negative consequences of smoking both to the active and passive smoker(s) are manifold. These range from health to social to economic and physical well-being of the individuals involved. These will be discussed under their different headings.

Health implications of smoking

Smoking has been known to be responsible for over 25 diseases in humans some of which include chronic bronchitis, ischaemic heart disease and cancers of the lung, oral cavity, urinary bladder, pancreas, and larynx (Atawodi et al., 1995; Desalu et al., 2008). Cigarette smoking has also been implicated either as a contributory factor or causal agent in the following health conditions: osteoporosis, blindness, impotence, loss of teeth, diabetes, reduced fertility, cataracts, asthma, reduced sperm count, fungal eye infection, early menopause, stomach ulcers, cardiovascular heart diseases, reduced lung function, reduced lung growth, and artherosclerosis (Fakoya, 2008; Sarafino, 2002; US Dept. of Health and Human Services [USDHHS], 2012). The increased risk of smoking is said to be positively correlated with the number of cigarettes smoked and with their tar and nicotine content (Sarafino, 2002; Weiten, 1989). It has also been noted that smokers face a much greater risk of premature death than non-smokers (Hammond & Horn, 1984; USDHHS, 2012). Unfortunately, these health implications are not the exclusive

preserve of active smokers but are also shared by passive smokers or second-hand smokers (Erikson, LeMaistre & Newell, 1988; Humble et al., 1990; Sarafino, 2002).

In a nutshell, smoking harms the lungs, heart, arteries, brain, kidneys, bladder, skin and eyes; even the unborn children whose mothers are either active or passive smokers. It speeds up the aging process and raises blood pressure, harming the unborn baby directly by lowering birth weight and increasing the unborn child's susceptibility to disease (Mitchell et al., 2005).

The major components of cigarette that constitute the greatest health hazard are nicotine and tar. It has been found that the cigarettes manufactured and sold in the Nigerian market have very high tar content with all of the fourteen brands analyzed having more than 17mg or tar per cigarette (Awotedu, Higenbottam & Onadeko, 1983). This thereby increases the health risks involved in smoking in Nigeria. This study by Awotedu et al., 1983 was carried out about 30yrs ago and the levels of tar quoted may have changed. However, the researcher could not lay hands on a more recent publication to review current levels of tar in the cigarettes speficifically manufactured or marketed in Nigeria. Nicotine is the component of cigarette known to have 'psychoactive effect' (Sarafino, 2002). Psychoactive effects, according to Sarafino (2002), are produced by some chemical substances which tend to alter the person's mood, cognition or behaviour. Psychoactive effects eventually produce psychological dependence, which Sarafino defined, as a state in which individuals feel compelled to use a substance for the euphoric effect it produces. Sarafino also asserts that nicotine can cause an increase in heart rate and blood pressure. Explaining psychological dependence using the biobehavioural model of Ovide and Cynthia Pomerleau, Sarafino (2002) notes that "...people continue to smoke and often have a

hard time quitting because they use and come to depend on the effects of nicotine to regulate their cognitive and emotional states' (p. 208).

There is conflicting evidence as to the effect of cigarette smoking on cognition (Brayne, 2000). Nicotine has been named as the component of the cigarette which is responsible for altering cognitive functioning (Protopapas, Pliatsikas, & Travlou, n.d). Findings from a study by Almeida et al. (2011) suggest that smoking tends to cause cognitive decline and results in the loss of gray matter tissue in the brain with time.

Having reviewed some of the negative effects of smoking, the question one could ask is, why do people still go ahead to initiate smoking despite the consequences associated with the habit? Sarafino (2002), quoting the World Health Organization's statistics, states that at the end of the twentieth century, deaths from smoking related illnesses had risen to 4 million a year worldwide and projections indicates that this could rise to 10 million a year by 2030. It can therefore be assumed as common knowledge the fact that smoking reduces people's life expectancy by several years and increases their risk of many illnesses Sarafino (2002).

The health implications of smoking no doubt outweigh the other implications of the habit. This implication of smoking is worsened by the fact that the negative health consequences associated with smoking are not restricted to the smokers themselves. Passive smokers who must unavoidably be around those who smoke (that is, while the smoker is actively smoking) share and suffer from the health hazards of the tobacco smoke also (Sarafino, 2002). People are sometimes not given in to believing how dangerous the habit of smoking cigarettes can be to themselves. Melgosa (2007) rightly considers tobacco as a drug with the lowest risk, in the short

term but one which takes away health and life from the greatest number of people in the long term.

It has been found that, knowledge about the health hazards of smoking has not always served to prevent people from smoking (Hussain, Akande & Adebayo, 2010). It should also be noted that smokers' low perception of the negative effects of their smoking behaviour on their health also results in many being unwilling to quit smoking (Fawibe & Shittu, 2011). A possible explanation for this attitude could be that most tobacco users are not fully aware of the harms caused by tobacco use (WHO, 2011c) hence their underestimation of the ill-effects of smoking.

Social implications of smoking

Tobacco has sometimes been described as a social drug due to the fact that it is used to enhance social relationships in many ways and by different categories of people (Feinhandler, 1986; Otsuki, 2009). Over the years and in different cultures, tobacco has also been used for traditional ceremonies and traditional purposes (Alderete, et al., 2010; Feinhandler, 1986). However, if the predictions of the burden of the tobacco epidemic by the WHO are anything to go by, current trends of tobacco use will result in an annual death of 8 million people globally by 2030 with 80% of these deaths occurring in low-and middle-income countries (WHO, 2011c). The long term negative effects of smoking in a society with heavy smokers and high environmental smoke will translate to the fact that many young people who should be the pillars of social capital (especially in low- and middle-income countries [LMICs]) might be plagued with dealing with one tobacco related disease or the other. This predicted situation apart from increasing poverty

will create an imbalance in society as well as cause a health and social burden on the health care delivery system and support systems like the family.

Economic implication of smoking

The economic effect of smoking can be felt in the amount of money spent on a non-profitable habit which eventually increases the burden on the health care delivery sector of the economy. Smokers who are addicted would spend money maintaining the habit rather than on other more profitable and positive result oriented ventures. Hence, families of smokers more of whom belong to the low and middle classes in society (Esson & Leeder, 2004) would tend to suffer want as money is rather spent on buying cigarettes than for the education and the general economic wellbeing of the members of that family.

For the manufacturers, the habit of smoking keeps them in business as the more there are addicted smokers, the better or more profitable is their business. Many tobacco farmers and traders also depend on tobacco as their means of livelihood and it has been considered that tobacco control could result in the loss of livelihood of these farmers (Chaloupka et al., 2003). The global tobacco workforce in tobacco cultivation has been reported to be between 31 and 32 million comprising farmers, seasonal labourers or family members who help with the tobacco crop (Esson & Leeder, 2004). While tobacco leaf production decreased by 36% in developed countries, it more than doubled in developing nations between 1970 to 2000 (Davies, Wakefield, Amos & Gupta, 2007).

In some countries, taxes and duties paid by cigarette manufacturing companies provide revenue for government (Chaloupka et al., 2003) and this may result in the lack of government's political

will to campaign against smoking. Ogden (2000) highlights the fact that governments who wish to ban cigarettes completely would need to forego the large revenues they currently receive from advertising and sales of cigarettes. However, the huge amount spent on the health of the citizens might make the tax paid by tobacco companies in such countries a costly exchange for human life and capital. Da Costa e Silva (2005) argues that the major reason for governments' inaction on tobacco control is based on the fear that regulating the companies could translate to job loss and reduced revenue from tobacco taxes. Though research has shown that this assertion may not be exactly true (Ross & Chaloupka, 2002; van Walbeek, 2005), it continues to be one effective tool by which tobacco companies make it difficult for governments to put in place stringent measures to regulate the activities of these companies.

What do smokers stand to gain?

It is unlikely that health promotion research and literature would want to focus on the gains associated with the habit of smoking as experienced by the smokers themselves. But this understanding, other than seemingly encouraging the habit should be seen as means of identifying with the world and experiences of the smokers so as to recognise the motivation for their smoking behaviour. This is also important if desired results are to be achieved in designing and tailoring intervention programmes against smoking. It is also in line with the assertion by McKie, Laurier, Taylor and Lennox (2003) that;

> ...an acknowledgment of the attractive, pleasurable aspects of
>
> smoking may be seen as unacceptable and irresponsible but this
>
> could well provide an opportunity to relate to the everyday and
>
> multiple practices of smoking and smokers themselves. (p. 83)

People smoke for a variety of reasons which ranges from psychological, social to self medication (Chaiton, Cohen, O'Loughlin & Rehm, 2010; Feinhandler, 1986; Mitchell et al., 2005). Many smokers have also highlighted a number of benefits from smoking such as socialising with others, breaking from boredom, relaxation effect, confidence building and as a coping mechanism (McKie et al., 2003; Scales, 2009). Smokers have also reported positive mood effects when they smoke and smoking has been found to help such individuals to cope with difficult circumstances (Graham, 1987). Smoking has also been viewed by some as a fun-filled and pleasurable experience. It is claimed that smoking helps smokers cope better in stressful situations (Sarafino, 2002) but then, stress can also increase an individual's indulgence in the habit. Otsuki (2009) however notes that cigarette smoking often serves as a social lubricant among Asian-American smokers.

Further, an individual for whom tobacco or cigarette holds a traditional symbol may regard smoking as not just a habit to satisfy his/her cravings but as a means of identifying with his 'traditional roots'. In such traditions where the cigarette serves as a cultural item for a certain age grade of the community, it is likely that smokers will not only be free to indulge in the habit at such traditional ceremonies but would see the habit as a sign of belongingness to their age group and an indication of having come of age (Odigwe, 2008).

Smoking and the youth: what is the link?

Youth has been characterised by an increased association with experimentation of various risk related behaviours like tobacco, alcohol and drug use as well as risky sexual behaviours (Mokgwathi, 2011). Personality traits of impulsiveness and sensation seeking have also been

identified with this developmental stage (Harden & Tucker-Drob, 2011). Perception of a health-risking behaviour like smoking as having distant health consequences that can be averted or are less harmful has been identified as one of the reasons why many youth smoke (Kelly in Breinbauer & Maddaleno, 2005).

Research studies found that most adult smokers became daily smokers before the age of 18 (Bonnie, Stratton & Wallace, 2007; Niemelä et al., 2009; USDHHS, 2012). Between the ages of 18-24 years, the youth usually go through remarkable changes in their academic and social lives which can make them vulnerable to the risks of cigarette smoking (USDHHS, 2012). Within this age bracket, many individuals are just leaving high school and gaining admission to study in tertiary institutions (Yusko, Buckman, White & Pandina, 2008). Though the youth have been found to be more sensitive to the pricing of cigarettes (Tauras, 2005; van Walbeek, 2002), many of the older youth may have already settled in their first job too thus having a higher purchasing power and making them more able to afford cigarette. Townsend, Flisher, Gilreath and King (2009) aver that higher social economic status may be placing youth at an additional risk for tobacco use in particular country contexts.

Further, youth is a period of self-determination and the youth tend to want to make a mark or be identified with or by something significant and different. Peer approval tends to be an important aspect of the life of these individuals and sometimes this could warrant having to initiate smoking. However, going by undisputable evidence of the negative implications of smoking either directly or indirectly (through ETS), a strong commitment to discourage the youth from initiating or perpetuating tobacco use and the use of any harmful substance becomes very important. At this stage of human development, the more addicted one is to nicotine, the more

unsuccessful cessation attempts will be as nicotine is the main addictive chemical found in cigarette (Cotton, 2011).

It is important that health promotion practitioners take into account the perceptions and positions of the youth in order to tailor multilevel and multidimensional interventions that would address youth's health risking behaviour such as smoking comprehensively.

Youth-based smoking cessation interventions

A systematic review of youth-based smoking cessation intervention research by the Youth Tobacco Collaborative Cessation (YTCC) Panel (Backinger et al., 2003) shows that there is no known optimal delivery setting nor the best method of delivering interventions aimed at assisting the youth in their effort to quit smoking. While acknowledging the fact that the most popular setting found in the research reviewed was the school, they mentioned the potential utility of clinic and home-based interventions. The most common method used in the reviewed youth smoking cessation interventions was cognitive-behavioural approach. Backinger et al. (2003) also suggested further studies on economic, policy and media interventions, and telephone quit-lines (these are reviewed in chapters 3 and 7 of this dissertation). These researchers also highlighted the fact that there is a dearth of smoking cessation research in 'youth detention centers, homeless shelters, community centers, and churches' (p. S117).

Smoking and gender

Epidemiological statistics of smoking prevalence show that in most regions of the world, smoking is more prevalent among males than females (Eriksen, Mackay & Ross, 2012; van Walbeek, 2002). Cigarette has for a long time been associated with maleness and tobacco

companies now tend to use adverts associating smoking with gender equality and women emancipation to market cigarettes to females (Eriksen et al., 2012; Hitchman & Fong, 2011; Francis, Katsani, Sotiropoulou, Roussos and Roussos (2007).

The global estimate of male to female smoking prevalence rate is between 4 or 5 to1 (Hitchman & Fong, 2011). However, Hitchman and Fong (2011) report that this ratio varies dramatically across countries. The prevalence of males and females smoking is quite similar in high income countries but skewed towards the male gender in middle and low income countries (Ali et al, 2009; Eriksen et al, 2012, Hitchman & Fong, 2011; Morrow & Brands, 2003). In terms of age and gender however, a study conducted in Sweden found the daily smoking prevalence to be higher among women than men between the ages of 18 and 24 years (Ali et al., 2009). A cohort study of adolescents' tobacco use also in Sweden by Galanti, Rosendahl, Post and Gillijam (2001) found that though boys tend to initiate smoking earlier than girls in pre-adolescence, girls had a more rapid progression to regular smoking than boys. Morrow and Brands (2003) also report that more young women than men now smoke in Denmark and Germany.

In fact, even in regions where the prevalence rates of female smokers are similar or higher than that of males, Ali et al. (2009) notes that it is a recent trend as the smoking prevalence of males have long been higher than that in females (Hitchman & Fong, 2011). It has been suggested that females started smoking to assert themselves based on the perception that it shows liberation and equality of rights with their male counterparts (Hitchman & Fong, 2011; Morrow & Brands, 2003). The trend of smoking by gender especially in high income countries like the United States, Canada, Denmark and Sweden shows that the number of females who smoke are on the increase and this increase has been blamed for the reduction in the life expectancy of females in

these countries (Hitchman & Fong, 2011; Ali, et al., 2009; Trovato & Lalu, 2007; Preston & Wang, 2006; Prescott, Clemmensen, Juel & Tobak, 2004). In some social settings however, there is a slow increase in smoking among females but this has been attributed to social disapproval of women smoking in such societies (Hitchman & Fong, 2011). Another factor fuelling smoking prevalence among females is the misconception that cigarettes can help in weight control (Morrow & Brands, 2003; Francis et al., 2007). With fashion trends going in the favour of the slim and elegant figures, more ladies are seeing cigarette as a weight-control drug. There is however no scientific evidence to support this claim (USDHHS, 2012).

Africa is one of the regions where the male to female smoking prevalence ratio is still sharply skewed towards men. The adult prevalence rate in sub-Saharan Africa as reported by Chaloupka et al. (2003) shows that 28% of males and 8% of females are smokers. In Nigeria, the prevalence rate of adults by gender in the north-eastern region was found to be 45.3% (for males) and 18.4% (for females) giving a ratio of 3 to 1 (Desalu et al., 2008). Traditionally, it is still not socially acceptable for females to smoke in Nigeria just as it had been in many parts of the world (Hitchman & Fong, 2011). Most female smokers in Nigeria cannot smoke in the open because of the stigma attached to the habit. Stigmatization of smoking has been said to contribute to some smokers hiding their status (Stuber, Galea & Link, 2009). Stigma may also serve as a protective factor against smoking. Stuber et al. (2009) stress that stigma may serve as a means of socially controlling tobacco consumption as it can prompt smokers to make decisions to quit in a bid to avoid being socially excluded. While this stigma exists to some extent for males too, it is much stronger for female smokers. Though smoking is common in Nigeria, Odigwe (2008) notes that adults (especially ladies) do not easily acknowledge being smokers and most youth especially

females, who smoke will decline disclosing their smoking behaviour in order not to incur the wrath of their parents or guardians. Stigma may also serve the purpose of fuelling smoking behaviour especially among youth as it makes it more difficult for smokers to seek help to quit if they need to be assisted to do so (Stuber et al., 2009).

Tobacco companies also view women as potential market to be exploited in order to boost their businesses especially in many developing countries in Africa and Asia where it is still not socially acceptable for females to smoke (Esson & Leeder, 2004). They have in the past been accused of organizing fashion shows to encourage smoking among females (Coombs, Bond, Van & Daube, 2011; Morrow & Brands, 2003). They are aware that women are in tune with fashion and seek to link this love for fashion with their cigarette brands so as to sell the idea of smoking to unsuspecting young women. These companies therefore use a strategy similar to associative learning (Shanks, 2010) to lure women into forming a positive attitude towards smoking thus encouraging them to initiate smoking.

Smoking and the society, a review of attitudes, habits and unanswered questions

The human brain is said to be the most complex in the animal kingdom. This is because it can collect, store, integrate and retrieve information more and much more easily than those of all other animals. Information received by humans goes into the making of future decisions and actions. Information on the dangers inherent in the habit of smoking continues to be disseminated by various health organizations like the World Health Organization (WHO), Ministries of Health and some Non Governmental Organisations (NGOs). It is therefore no longer news that tobacco smoking has been associated with many ailments like cancers,

cardiovascular diseases, diabetes, tooth loss, ulcers etc (Esson & Leeder, 2004; Fakoya, 2008). Against the backdrop of people's involvement in the habit of smoking, can it then be said that human beings do form this attitude based on the information and experience stored by their brains according to Ajzen (1985; 1991)? Or is it that there is not enough awareness in the population about the ill effects of using tobacco products? Ajzen (1985) maintains that people consider the implications of their actions before they decide to engage or not to engage in a given action. Could this assertion be true for a habit like smoking especially among the youth who tend to initiate tobacco use more than any other group? Ogden (2000) however asserts that individuals have complex views and theories about their health hence it is not a surprise that sometimes individuals make decisions that can sometimes be perceived as 'irrational'.

The trouble with smoking (to the smoker) is not just a stick of cigarette which is harmful in itself but the fact that it leads to addiction which consequently increases the risks involved in this behaviour (Iyiola, 2008). Studies have shown that an individual is likely to be a regular smoker after the fourth stick of cigarette (Leventhal & Cleary, 1980). Once smoking has been cultivated, stopping the habit means that the would-be quitter has to deal with both the psychological and physical addictions concurrently (Mitchell et al., 2005). This may not be easy for every smoker to do alone thus there is the need to increase awareness especially among the youth so as to discourage new entrants into the habit of smoking as well as encourage those already smoking to get help to quit where this is available.

SECTION TWO

ENVIRONMENTAL INFLUENCES FOR SMOKING

Introduction

Historically, the effort to reduce the prevalence of smoking in the world has dwelt mainly on medical, economic, psychological and physiological aspects of smoking (Feinhandler, 1986; Nichter, 2003). However, since the formulation of the World Health Organisation's Framework Convention on Tobacco Control (WHO-FCTC) in 2005, policy interventions towards curbing smoking prevalence have become widespread. While gradual success is being recorded in curbing smoking prevalence in some parts of the world like Britain and America through tobacco control legislation, smoking is still on the increase in most developing nations (WHO, 2008). There seems to be one missing thread running through most efforts at reducing smoking prevalence and that is the role of cultural factors in influencing smoking prevalence. One could say however that 'culture' is not a living entity but derives its life from its environment whether political or biological. Culture therefore can mediate or be moderated by the political environment. Burke et al. (2009) assert that "culture governs and yet is influenced by social context" (p. 625). This therefore means that policy intervention should also take into cognizance the cultural context within which tobacco use is perpetuated especially in traditional societies and communities where cultural practices are valued.

The policy and cultural environment are therefore two aspects of the environment in need of serious attention in tobacco control. Literature and previous research regarding   the influence of the policy and cultural environment on youth's smoking behaviour will be reviewed in this section.

Smoking and the policy environment

What is a policy?

A policy, according to Breinbauer and Maddaleno (2005), is a framework that guides decision-making in an organisation or government and is usually expressed in a statement of intended actions. Governments are directly responsible for the well-being of their people and this is ensured through appropriate policies and the right constitution. Health issues for example demand government's prompt interventions and budget backings. Sometimes governments need to partner with external agencies to ensure a healthy population.

Policy has been described as people's ideas which they use in making sense of the world and the policy process has been depicted as one which involves the pursuit of shared goals (Colebatch, 2002). Policy making involves constructing the basis for collective action among participants who are likely to have diverse views on the nature of the task which the policy intends to tackle (Colebatch, 2002).

According to Colebatch (2002), a policy ought to be systematic and consistent since it also seeks to set limits on the behaviour of participants and is aimed at creating order in the society. In the view of Bardoel and van Cuilenburg (2010), the demand for policy always comes up when things are not going well. They assert however that having a formal policy in place is just the beginning of the policy process because of the criticality of what happens after the policy is in place.

Players in the policy environment

There are usually many players in the policy environment. Colebacth (2002) describes the connection between the makers and implementers of policies and their roles in policy effectiveness. In an attempt to answer the question, 'who makes policy?' Colebatch identifies two dimensions of policy namely the *vertical* and *horizontal dimensions* which according to him impact greatly on how people make sense of policies in general.

Colebatch's dimensions of policy

In the view of Colebatch (2002), the vertical dimension of policy focuses on transmitting authorised decisions to subordinate implementers. Here, the major concern is how the process of policy making with its implementation can be structured to ensure compliance with that policy at the downward level. The horizontal dimension on the other hand sees policy with regards to "the structuring of action" (Colebatch, 2002, p. 23). The major focus for this dimension is the relationships among policy partakers in different organisations which are outside the circle of hierarchical authorities. This dimension also takes into account the fact that the work of policy spans across organisational boundaries as well as within them. Due to this awareness, it focuses on how commitment and understanding of such policy can be strengthened within participants in the organisation and between these partakers and the organisational hierarchy.

Colebatch (2002) points out that the vertical and horizontal dimensions of policy are not alternatives, for each presupposes the other. Figure 4 presents a pictorial representation of Colebatch's dimensions of policy.
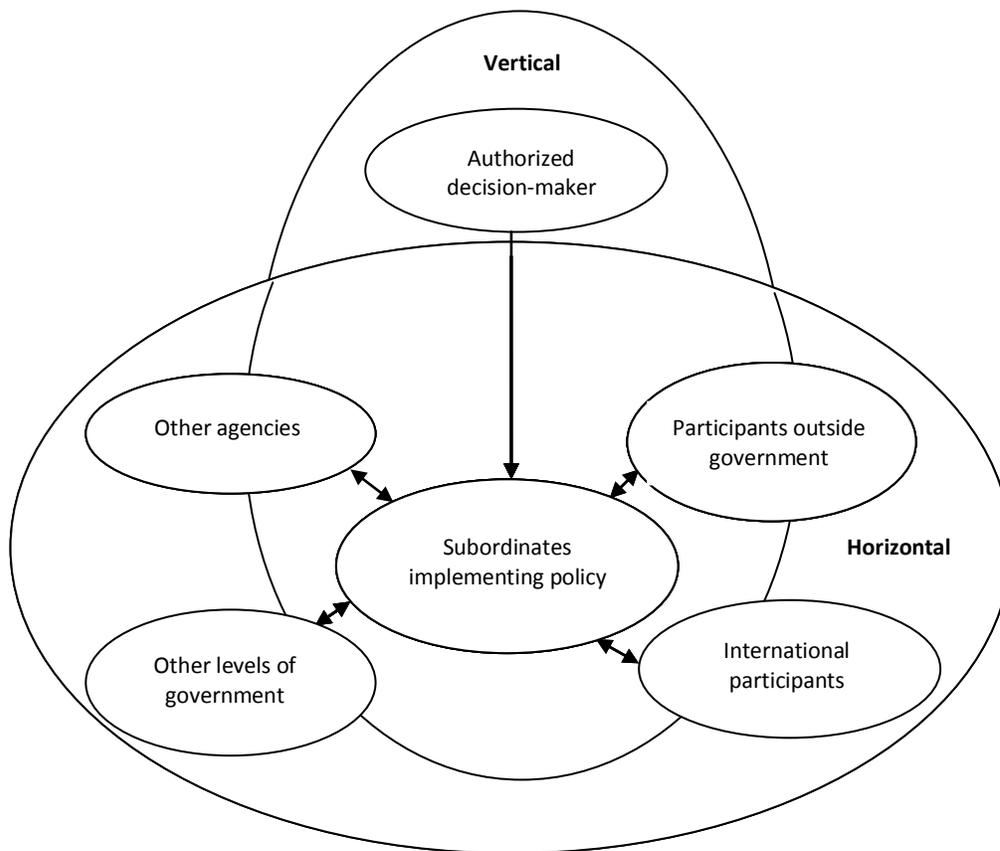
Figure 4: The vertical and horizontal dimensions of policy (adopted from Colebatch (2002, p. 24)

While the vertical dimension focuses on rules (by policy makers), the horizontal dimension makes it clear that rules and rulers (i.e. policy makers) are not sufficient in policy formulation and implementation. This dimension holds that the very many partakers or participants in the process of policy making are also very important and there should be no clear distinction between policy makers and 'policy takers' (participants).

The two dimensions of policy by Colebatch (2002) point out the fact that even when a policy originates from the people, it still needs to be authorized by policy-makers and go through the process of being approved for implementers for implementation across and within an

organisation (in the context of this research, a nation). It is important to note that lobbying, advocacy, negotiations and consensus are important to achieve an effective implementation of the policy (Colebatch, 2002). All these processes become very vital to policy making and implementation when such policies will impact on organisational or national policies written or unwritten as is the case with most cultural practices. However, it should be noted that parties who perceive that a particular policy will not be beneficial to their interest do also carry out lobbying, advocacy and negotiations against such policies. A good example is the case of tobacco multinationals and tobacco control policy (Coombs et al., 2011; West, 2011; WHO, 2012b).

In focusing on tobacco control policy using this model as proposed by Colebatch (2002), the impact of this policy will be felt by organisations such as the formal organisation of companies (including the tobacco companies), traditional organisations of indigenous communities and by an entire country. The importance of negotiation and consensus is highlighted by Colebatch's position of 'policy collectivities'. Colebatch defines 'policy collectivities' as "relatively stable aggregations of people from a range or organisations who find themselves thrown together on a continuing basis to address policy questions" (p. 23). Often times however, policy collectivities tend to involve functionally organised groups and departments. In African settings, traditional communities (though not formerly recognised in policy issues such as health) are known to have strong holds on their members. Where traditional cultures would be affected by a particular policy, it is important that traditional organisations form part of the policy collectivities especially in issues that may involve their cooperation and input to determine the success of such policies.

Health policy

The World Health Organisation (WHO) defines a health policy as the expression of goals aimed at improving the health condition of a group of people and this includes the prioritising of these goals as well as how they will be attained (WHO in Breinbauer & Maddaleno, 2005). Policies are the instruments that governments can use to bring about change in the trend of events on health-related issues. Sarafino (2002) notes that "people are more likely to adopt health behaviour if it is promoted or encouraged by community organizations, such as government agencies and the health care system" (p. 171).

According to Breinbauer and Maddaleno (2005), health policy may mean different things to different professionals. For the public health professional however, it may mean the development of health promotion strategies aimed at preventing poor health to the highest possible degree. In the view of Breinbauer and Maddaleno (2005), for the young members of the population, the focus should be on policies that would encourage health promoting lifestyles and discourage picking up health compromising behaviours. They therefore propose a comprehensive approach to be used in formulating policies involving the young population. This comprehensiveness, they posit would entail involving both public and private partners like schools, families, religious organisations, commercial advertisers and the mass media. In a nutshell, Breinbauer and Maddaleno believe that a good health policy ought to make it easier for people to make informed healthy choices over unhealthy ones. However, one important group which they understandably failed to mention was the traditional communities, which play a great role in coordinating and regulating activities of their members in traditional African societies for example. These communities therefore need to form part of any comprehensive approach towards changing

group behaviours such as smoking especially when there are specific cultural practices and symbols that encourage smoking behaviours.

Policies can be in terms of global, national macro and micro policies (Petersen & Govender, 2010). Where global and national micro policies try to address issues that cut across sectors and populations, micro policies focus on a specific sector e.g. health. In many cases, government's micro policies are drawn from regional and global policies which sometimes have to be adopted and adapted to address local and national issues as they present themselves within the prevailing socio-cultural contexts.

The next section will be a review of events and issues around the role of policy in tobacco control with particular reference to the World Health Organisation's Framework Convention on Tobacco Control (WHO-FCTC) as a global policy on tobacco control. The adoption of this framework in some countries in and outside Africa with specific focus on the Nigerian case will be reviewed. Issues addressed by the WHO-FCTC including price increase, ban or restrictions on media advertising, smoking sites restrictions, sales to and by minors, exposure to environmental tobacco smoke (ETS) are discussed in relation to the effectiveness of these measures in tobacco control. It is important to note that there is currently no functional comprehensive tobacco control law in Nigeria and research around the effectiveness of tobacco control measures in Nigeria are none existent. An overview of the nation's drafted tobacco bill still awaiting presidential assent will however be presented and discussed.

Tobacco control policy: the WHO-FCTC

The current global policy aimed at achieving a reduction in smoking prevalence globally is the World Health Organisation Framework Convention on Tobacco Control (WHO-FCTC), which opened for signature from 16 June to 22 June 2003 in Geneva. The WHO-FCTC came into force on 27 February 2005; 90 days after it had been acceded to, ratified, accepted, or approved by 40 States (WHO, 2003 updated, 2005). There are 173 parties (as at May 2011) – which covers about 87% of global population who have signed or rectified the WHO-FCTC (WHO, 2011c). This global document emphasises the significance of demand reduction strategies as well as supply issues on tobacco control. These measures are discussed subsequently.

Part II (Article 3) of the FCTC which explains the objectives, guiding principles and general obligations of this framework states as follows:

> The objectives of this convention and its protocols is to protect present
> and future generations from the devastating health, social, environmental
> and economic consequences of tobacco consumption and exposure to
> tobacco smoke by providing a framework for tobacco control measures to
> be implemented by the parties at the national, regional and international
> levels in order to reduce continually and substantially the prevalence of
> tobacco use and exposure to tobacco smoke. (WHO, 2005)

Gartner and McNeill (2010) however assert that many countries are just beginning the implementation of the FCTC and no nation as yet has implemented it in its entirety.

The WHO-FCTC focuses on demand and supply reduction strategies as means of controlling tobacco consumption. The demand reduction strategy is based on price and tax measures as well

as non-price measures which are intended to reduce the demand for tobacco and tobacco products and discourage people from initiating or perpetuating smoking.

The core demand reduction provisions of the WHO-FCTC

Price and tax strategies for tobacco control

Tax increase for tobacco products which usually would translate to a consequent increase in price are geared towards making such products unaffordable for the average individual. Thus Blecher and van Walbeek (2009) declare that "the fact that cigarettes have become increasingly affordable in a majority of low-income and middle-income countries is a major tobacco control failure" (p. 167). While smoking prevalence is said to be declining in many high income countries, it is currently on the increase in low-and medium-income countries [LMICs] (Parkinson et al., 2009). The trend is unfortunately the same with regards to cigarette affordability; it is decreasing in high income countries and increasing in LMICs (Blecher & van Walbeek, 2009). Statistics, as reported in *The Tobacco Atlas* 2012, shows that while cigarette consumption has decreased in Western Europe by 26% between 1990 and 2009, it has increased by 57% in the Middle East and Africa within the same period (Eriksen, Mackay & Ross, 2012). The WHO also reports that LMICs experience on a greater scale the negative health impact of tobacco consumption (WHO, 2011c).

Tax increase and a consequent increase in the price of cigarettes has been successfully used to achieve a reduction in the sale and consumption of cigarettes in many developed countries like the United States and the United Kingdom (Hu, Sung & Keeler, 1995; Levy, Nikolayev & Mumford, 2005; Ross, Blecher, Yan & Hyland, 2010). In the view of Blecher and van Walbeek

(2009), in LIMCs, the demand for cigarette increases with an increase in income as the product becomes more affordable to such individuals. According to the WHO, unless the prices of cigarettes rise above the purchasing power of the consumers, tobacco consumption will continue to increase among young adults (WHO, 2011c). Adolescents and young adults have been found to be the most sensitive group to cigarette price increase (Breinbauer & Maddaleno, 2005; Farrelly, Pechacek, Thomas & Nelson, 2008; Taurus, 2005; Tauras & Chaloupka, 1999; WHO-FCTC, 2003). Cigarette price has also been found to have stronger effects on young adults aged 18 to 24 compared with older adults (Farrelly et al., 2008). A study by Tworek et al. (2010) showed a positive association between cigarette price and cessation related measures among smokers in high schools. It has been argued that a 10% increase in tobacco tax leads to about 8% decrease in tobacco consumption in LMICs (*Nigeria: Report card on the WHO-FCTC,* n.d.)

While good research-based evidence abounds to show that smoking prevalence is highly sensitive to price resulting in a change in smoking patterns (daily smoking rates and smoking cessation), a few studies have also shown that cigarette price increase may not have the same effect in all contexts. Lance, Akin, Dow and Loh (2004) found that price increase may not have the same effect in impoverished nations. Using China and Russia as their case study, Lance et al. (2004) suggest that the lack of effect of price increase on smoking prevalence in these countries may be due to stronger addiction caused by more addictive locally produced cigarettes. In their study, Lance et al. (2004) found that locally produced cigarettes in China and Russia tend to have higher nicotine levels compared with those produced in developed nations. Cultural and institutional factors were said to interact with price effects and these do not encourage a decrease in smoking. As a result, what is observed is lower price responsiveness (Lance et al., 2004).

A study of adolescents from 27 European countries also found no association between cigarette price and adolescent daily smoking prevalence (Schnohr et al., 2008). The fact that the same results have not been obtained in all countries concerning price increase and decrease in smoking prevalence seem to suggest that in developing countries (most of whom have not adopted stringent policies towards tobacco control), tobacco control measures must use more than price and tax measures to achieve a decline in smoking prevalence. In the view of Sugarman (2003), it is important to have a balanced tobacco control policy because a price increase for cigarette via increased taxes might only just be able to delay some smoker's initiation of smoking rather than permanently preventing them from picking the habit. Sugarman (2003) argues that due to the fact that most addicted smokers will try to satisfy their addiction at all cost, an excessive reliance on tax increase as a policy instrument could lead to an increase in illicit trade on tobacco and involvement in organised crime. Ayo-Yusuf (2011) however asserts that two chief demand reduction measures which are the most cost effective ways to reduce tobacco consumption as well as create a healthy environment are tax increases and regulation of public smoking.

Non-price measures for tobacco control
The WHO-FCTC identifies seven non-price measures to reduce the demand for tobacco. These include protection from exposure to tobacco smoke, regulation of the contents of tobacco products, regulation of tobacco product disclosures, packaging and labelling of tobacco products, education, communication, training and public awareness, regulation of tobacco advertising, promotion and sponsorship and demand reduction measures concerning tobacco dependence and cessation. Each of these measures is discussed further.

Protection from exposure to tobacco smoke

Environmental Tobacco Smoke (ETS) has been known to lead to exposure to second-hand smoke (SHS) as well as third-hand smoke (THS) which are equally harmful to health (Collins et al., 2010; Winickoff et al., 2009). Second-hand smoking involves a situation when a non-smoker being in the same environment of smoking—when active smoking is taking place or not long after it happens—takes in the smoke puffed out by smokers. This has been found to have about the same health effects on non-smokers as active smoking on smokers (Sarafino, 2002; Winickoff et al., 2009). Studies and reviews have shown that non-smokers (and unborn children) have the risk of contracting many of the diseases smokers are at risk of by just being exposed to environmental tobacco smoke (Ian Gilmour, Jaakkola, London, Nel & Rogers, 2006; Pechacek &Babb, 2004; Panagiotakos et al., 2004; Slowik, Ma, He, Lin & Soldin, 2011). Exposure to ETS and consequently SHS has been the basis for smoke site restrictions for tobacco smokers. Protecting non-smokers from environmental smoke is not only aimed at discouraging smokers from continuing to smoke (by restricting the places where they can conveniently smoke) but serves to protect all non-smokers and quitters (including unborn children) from suffering the consequences of smoking.

Protection from exposure to environmental tobacco smoke is being addressed by laws on smoking site restrictions. The WHO-FCTC states in Part III of article 8 that "nations should provide for protection from exposure to tobacco smoke in indoor workplaces, public transport, indoor public places and as appropriate, other public places" through legislative, executive, administrative and/ or other measures (p. 8).

Restrictions of smoking on school premises (Kayaba, Wakabayashi, Kunisawa, Shinmura & Yanagawa, 2005) and at private work sites and other public places (Taurus, 2005) have led to a decrease in smoking prevalence. A meta-analysis to study the effectiveness of home restrictions on youth smoking behaviour shows evidence that home smoking restrictions were associated with reduced adolescent smoking behaviour (Emory, Saquib, Gilpin & Pierce, 2010). Nineteen studies were reviewed in their study out of which sixteen (including two longitudinal studies) show clear evidence of this association.

Nigeria though without a functional national tobacco control policy in place, has smoking restrictions on designated facilities like the Airport and health facilities (*Nigeria: WHO-FCTC report card,* n.d). For South Africa, it is stated in the WHO-FCTC South African Report that health care facilities, educational facilities, universities and government facilities are completely smoke-free (*South Africa: WHO-FCTC report card,* n.d.). A report on tobacco control in Africa by Drope (2011) however notes that there is no mechanism dedicated to the enforcement of smoking restrictions in South Africa. A study by Awotedu et al. (2006) corroborates this report when it suggests that smoking is prevalent in tertiary institutions of learning in the Eastern Cape Province of South Africa. Smoking bans in schools have been found to lower the odds of daily smoking in 27 European countries (Schnohr et al., 2008). Results from the cross-national study also show that mandatory national bans on smoking lowered smoking prevalence in these European countries (Schnohr et al., 2008). Ayo-Yusuf (2011) maintains that the most cost effective ways to reduce the consumption of cigarettes and create a healthy environment still remain tax measures and the regulation of public smoking.

Regulation of the contents of tobacco products

As mentioned previously in this review, cigarette contains over 4,000 chemicals many of which are hazardous to human health (Narkowicz, Polkowska & Namieśnik, 2012; Desalu et al., 2008). The hazardous nature of cigarette smoking has been attributed to the psychoactive and carcinogenic properties of over 60 of these chemicals. According to Desalu et al. (2008), nicotine and harmane (a monoamine oxidase inhibitor) both combine to give euphoriant and addictive properties to the cigarette. Research has also shown that the nicotine content of cigarettes could determine how addicted a smoker can be to smoking with the higher the nicotine content making the more addictive the cigarette will be (Hoffman & Hoffman, 1997). According to Freiden and Blakeman (2005), the high amount of nicotine in cigarette makes it more difficult for many smokers who would want to quit as this keeps them addicted. Lance et al. (2004) explain that cigarettes in China and Russia are likely to have higher nicotine content and therefore are more addictive than those in the United States due to the absence of a strong culture of consumer advocacy in China and Russia. A study by Tsai, Yang, Chen, and Tsai-Ching (2003) showed that locally produced cigarettes in Taiwan were likely to be more addictive than imported ones. This difference in addictive capacity is due to nicotine levels of locally produced Taiwan cigarettes being above 1 mg.

In the same vein, many Nigerian cigarette brands have very high tar and nicotine contents when compared with some of the cigarettes from developed countries (Atawodi, et al., 1995; Awotedu, Higenbottam & Onadeko, 1983). Of the fourteen brands of cigarettes analyzed by Awotedu et al. (1983), five were classified under the 'high and middle-to-high tar' category (i.e. having greater than 22 mg of tar per cigarette) while nine fell under the 'middle tar' category (i.e. having

between 17-22 mg of tar per cigarette). These researchers found that none of the brands of cigarettes they analyzed fell under the 'low-to-middle and low tar' category (i.e. having less than 17 mg of tar per cigarette). This finding makes it more imperative for regulations on the contents of tobacco products in Nigeria. It is unclear if the tides have changed since the study by Awotedu et al. and Atawodi et al. as recent research findings in this regard are unavailable. For now, there are no regulations concerning the nicotine content of tobacco products in the drafted National Tobacco Control Bill [NTCB] (2009) as this has been left to be determined by the Minister of Health. However, it is in the drafted bill that the nicotine level set by the WHO must not be exceeded (NTCB, 2009).

Regulation of tobacco products' disclosures

Article 10 of the WHO-FCTC stipulates that tobacco companies should publicly disclose information about the toxic components of tobacco products and the emissions that they may generate. This requirement presupposes that this information can help people to make informed decisions about using tobacco products based on the evidence that it is addictive and harmful to health (Bonnie, Stratton & Wallace, 2007). As previously mentioned, Ajzen and Fishbein (1980) posit that in deciding whether to carry out any specific behaviour, individuals tend to put into consideration the implications of such behaviours. Going by this assertion, it is possible that when more information becomes available to consumers of tobacco products, an informed choice can be made by these people before ever engaging in the habit. This is particularly important since about 80% to 90% of smokers have been known to begin smoking before the age of 18 (Bonnie et al, 2007), an age when it is difficult to conclude that they fully understand the consequences of their actions. It must be acknowledged that due to the problem of addiction,

quitting smoking for active smokers cannot just be simply achieved by an increase in knowledge about the constituents of tobacco products and their effects on humans though this can go a long way in discouraging new entrants into the group of smokers.

Regulations regarding the packaging and labelling of tobacco products

The Regulations regarding the packaging and labelling of tobacco products can be found in Article 11 of the WHO-FCTC. It stipulates that tobacco products should have labels and packaging that do not have any false or misleading information as to create an impression in the consumer that some products are less harmful than others. It also calls for warning messages on packages (pictorial and textual) to raise awareness on the harmful effects of smoking. Laws on packaging and labelling of tobacco products as do most tobacco control laws are strongly enforced in developed countries but the same cannot be said for many developing countries within and outside Africa. Tumwine (2011) reports that Mauritius is the only African country that currently display graphic or pictorial health warnings on cigarette packs. Mauritius also has the largest warning labels on tobacco products in Africa (Tumwine, 2011). Thirty-two African countries either have no warnings or have small warnings; with the average coverage of the warning on the cigarette package being less than 30% (Tumwine, 2011). Textual warnings are however present on cigarette packs in Nigeria but this covers only 15% of the display surface of the tobacco packaging; far less than the 65% coverage which obtains in Mauritius (*Nigeria: WHO-FCTC report card,* n.d.). Tumwine (2011) also reports findings from a recent study in Mauritius showing that pictorial health warnings were more effective than textual warnings in reducing tobacco consumption. The WHO-FCTC guideline however requires large warnings

covering at least 50% of the entire package of a tobacco product-both front and back inclusive (Tumwine, 2011).

Owing to the fact that some countries view the cigarette brand names on packs as a means of advertisement by tobacco companies, there is a gradual shift from enforcing pictorial or textual warning towards plain packaging of cigarettes in some developed countries like Australia. West (2011) in a commentary on the implementation of plain packaging in Australia calls it a "very small ethical step towards sanity" as this according to him "will remove the opportunities for tobacco manufacturers to make such a harmful product as cigarette attractive to children and adults" (p. 682).

Education, communication, training and public awareness

Many of the non-price measures stipulated by the WHO-FCTC involve raising awareness on the hazards of tobacco products to individuals and the environment at large. The Article 12 of this global framework is principally dedicated to promoting awareness on the health, environmental and economic consequences of producing and consuming tobacco. This specific aspect of the WHO-FCTC is one which is supposed to involve both government and non-governmental organisations (NGOs) in raising awareness in every sector of the society.

It can be said that many NGOs are making concerted efforts towards the promotion of awareness on the dangers of smoking. However, governments at national and state levels might not be doing enough in many developing countries especially in Africa (Tumwine, 2011). Anti-smoking lessons in schools have been found to correlate negatively with a progression to established smoking (Mowery, Farrelly, Haviland, Gable & Wells, 2004). The introduction of tobacco

control in the educational curriculum by curriculum planners and developers may contribute in preventive care as young people would learn about the health consequences and mechanisms of experimentation and how this can lead to addiction to smoking.

Regulation of tobacco advertising, promotion and sponsorship

The Article 13 of the WHO-FCTC involves implementing a comprehensive ban on advertising, sponsorship and promotion of tobacco products. This article stipulates that where this is not possible due to the principles of the country's constitution, a restriction on all tobacco advertising, sponsorship and promotion ought to be applied. This article also requires some vital elements: a restriction of the use of direct and indirect incentives to encourage public purchase of tobacco products; elimination of cross-border advertising and ban or restriction of tobacco sponsorship of and participation in international events. Where a comprehensive ban is not possible, it stipulates that health or other appropriate warnings or messages should accompany all tobacco advertising, promotion or sponsorship.

The effect of anti-smoking media campaigns in reducing the consumption of cigarettes has been found to be positive by Hu, Sung and Keeler (1995), who however notes that in their study, the strength of the effect is influenced by the amount of media campaign expenditures. It is important to note here also that over the years, where there are restrictions or ban on tobacco advertising, tobacco companies have resorted to using subtle adverts that escape the eyes of policy makers and enforcers like sponsoring the use of cigarettes in films and distribution of branded items (Freiden & Blakeman, 2005; Tumwine, 2011). In their report on the Millennium Development Goals (MDGs) and tobacco control, Esson and Leeder (2004) assert that

developing countries are seen as new markets for tobacco companies and thus these companies are doing all it takes to get their target population (especially the youth) in these countries.

Research findings have shown that advertisements lead to an increase in the prevalence of smoking behaviour among the youth and even older individuals (Iyiola, 2008). Young people are actually targeted by tobacco companies around the world with the offering of free cigarettes as part of promotional programmes (Breinbauer & Maddaleno, 2005) and various marketing strategies like introducing flavoured tobacco products and attractive packaging (Coombs et a., 2011). In many countries in Africa, tobacco control regulations are either weak or non-existent (Tumwine, 2011) and this further provides a good ground for tobacco companies to sell their products with little or no restrictions. In places where there are restrictions to advertising tobacco products (Alli, n.d.), tobacco companies have been accused of using subtle means (like in movies scenes and social events) to send messages that promote the culture of smoking especially among the youth (Coombs et al., 2011; Iyiola, 2008). Patel, Okechukwu, Collin & Hughes (2009) identified sponsorship of music events in sub-Saharan Africa as a veritable tool used by the British American Tobacco (BAT) to undermine health legislations and target young consumers in the region. During such social events, branded gift items are usually distributed all in a bid to gain brand loyalty from the youth for specific tobacco brands (Coombs et al., 2011).

Scenes in movies which have their main actors smoking cigarettes are one of such ways through which the youth can identify smoking as a noble act. Studies have shown a strong association between seeing tobacco use in films and adolescents' trial of cigarettes (Brook, Pahl & Morojele, 2009; Chen, Cruz, Schuster, Unger & Johnson, 2002; Sargent et al, 2001; Sargent & Hanewinkel, 2009; Waylen, Leary, Ness, Tanski & Sargent, 2011). Movie stars are more likely

to be regarded as role models by adolescents; adolescents tend to want to do things to identify with their favourite movie stars, who may smoke (Distefan, Pierce & Gilpin, 2004). Role models tend to make the youth to be more susceptible to smoking. Gilpin, White, Messer & Pierce (2007) found that receptivity to tobacco advertising and promotion can predict smoking prevalence in young adults. All these subtle advertisements and promotions tend to go on unabated because according to Breinbauer and Maddaleno (2005):

> When there is a significant percentage of adults (e.g., parents, teachers, community leaders, government officials, law makers) who are themselves struggling with the addictive effects of nicotine. These individuals might possibly resist (or, at least not actively support) policies to ban smoking. (p. 10)

Another dimension to tobacco marketing is through what is called 'Corporate Social Responsibility' (CSR), which is the contribution companies ought to make towards improving the lives of the people in the host communities where they do business. It ought to be a way of 'giving back to society'. Some aspects of CSR are the provision of scholarships for indigent students, sponsorship of government programmes and social events. Social events for tobacco companies however may rather serve the purpose of marketing their products (Coombs et al., 2011). For example, as part of their CSR, British American tobacco has devoted 1% of its local profits towards improving access to drinking water, health care and vaccines in Nigeria (Kugler, 2009). In the past, they also sponsored in the cultural festivals like the Osun Oshogbo International Festival in Osun State and other social events like the 'Proudly Nigeria' campaign which is originally aimed at encouraging the buying and use of goods made in Nigeria –cigarette inclusive (Akinremi & Akioye, 2003; Odigwe, 2008; Tunmise, 2005).

It is important to note that banning direct advertisement of tobacco products in the media is never sufficient in controlling exposure to tobacco advertisement; attention must be paid to subtle forms of adverts being used by tobacco industry to sell the idea of smoking to naive, unsuspecting individuals one of which is through promotional events. In Nigeria specifically, the BAT Nigeria has continued to organise promotional events and shows for young and vulnerable Nigerian youth. Buhari (2010) reports on one of such events held on August 7, 2010 tagged 'Bursting with Flavour', which was organised to promote one of their brands, the *PallMall*. The 'Experience IT' promotion in 2003, the 'Experience Freshness' promotion in 2008 (Chiejina, 2010), the St Morris Fashion Show, the 'Experience Flavour' and series of secret smoking parties (Buhari, 2010) are also some of the aggressive, pro-tobacco activities of these tobacco companies within Nigeria.

Demand reduction measures concerning tobacco dependence and cessation

The addiction question has always been an issue to deal with when strategising on how to reduce tobacco consumption. As mentioned earlier in this review, the psychoactive property of the chemical nicotine has been blamed for the incessant urge to continue smoking. There are reports stating that a smoker would usually get addicted after the fourth stick of cigarette (Leventhal & Cleary, 1980).

It is a well known fact that policy measures on price increase and restrictions to tobacco sites alone cannot adequately discourage one who is addicted to nicotine. However, what can be done to help these persons would involve therapy which could be medical or psychological or both.

The purpose of the fourteenth article of the WHO-FCTC is to ensure that tobacco cessation services be promoted so that people can have access to treatment for tobacco dependence. The WHO-FCTC recommends that these services should also involve health and education programmes aimed at diagnosis and treatment of tobacco addictions, counselling services on cessation and psycho-educational programmes. In Nigeria however, there seems to be no one cessation service available to smokers who are willing to quit but cannot do so on their own. The researcher could not trace any of the aforementioned services in the entire country.

Core supply reduction provision in the WHO-FCTC

There are three strategic approaches specified by Part IV of the WHO-FCTC. These approaches are geared towards reducing the supply of tobacco products and are discussed further.

Curbing illicit trade in tobacco products

Illicit trade, according to article 15 of the FCTC, includes all forms of smuggling, illicit manufacturing and counterfeiting of tobacco products. To achieve the curbing of illicit trade, the FCTC specifies that all unit packets and all packaging of tobacco products are clearly marked to determine the sources of the products. It is also to be indicated on the packaging that such products are to be sold only in the specified country or the destination where it is to be sold be clearly indicated. Thus, countries are expected to enact laws to ensure compliance and when anyone is found wanting with regards to this law, penalties are to be meted out on them and the products confiscated.

Banning the sales of tobacco products to and by minors

Article 16 of the WHO-FCTC stipulates that tobacco products should not be made accessible and/or affordable to minors. Minors here include persons below the age of 18 or the age set by the law of a country. This article prescribes: banning the sales of tobacco products to minors and in places like store shelves, prohibition of the manufacture and sale of objects like sweets, toys etc that take the form of tobacco products. It also requires the display of notices at points of sale indicating a prohibition of sales to minors. To reduce the affordability of tobacco products, a prohibition of retail sale of tobacco products in the form of sale of single sticks of cigarette or in smaller packs is also encouraged. Unfortunately in Nigeria, cigarettes are still sold in single sticks making it very affordable for a primary school student who depends on pocket money from his/her parents.

In contradiction to the notion that access restriction reduces smoking prevalence especially among the youth, a meta-analysis of 9 studies by Fichtenberg and Glantz (2002) found that there was no significant difference in youth smoking prevalence in communities with youth access interventions compared with control communities. However, a review of 60 youth access intervention studies done between 1990 and 2007 by Richardson et al. (2009) reveals that restriction of access may produce significant reductions in the rate of illegal tobacco sales to the youth. They however argue that effective enforcement of this restriction as well as measures to prevent young people from acquiring cigarettes from social sources are needed to ensure the effectiveness of these interventions.

Provision of support for economically viable alternative activities

Tobacco farmers and their families as well as those who trade in tobacco products have these businesses as their means of livelihood. The WHO-FCTC rightly puts into consideration the fact that unless these individuals are offered viable alternative sources of income, they will not want to quit such businesses no matter the reports about the harm the product causes to people. It is especially difficult to convince people in tobacco businesses about the hazards posed by tobacco to health because most of the consequences of smoking and exposure to cigarette smoke like cancers are only manifested after a long period of time. As identified by Alli (n.d.): the economic contributions of the tobacco industry to farmers who grow tobacco, the workers (skilled and unskilled) in the tobacco farms and the workforce involved in the manufacturing of tobacco products, all intermingle in the politics of tobacco control. Providing economically viable alternatives to these persons directly or indirectly involved in the production of tobacco products will therefore go a long way in winning public support for tobacco control measures.

Implementation of the FCTC so far: A brief

As at May 2011, the WHO-FCTC has had a total of 173 parties, who made a legally binding commitment towards implementing an effective tobacco control policy (WHO, 2011c). However, Gartner and McNeil (2010) as previously mentioned assert that many countries are just beginning the implementation of this policy while no nation has yet implemented it in its fullness.

Globally, the WHO reports that only 11% of the world's population is protected by comprehensive national smoke-free laws (WHO Factsheet, 2012). In a bid to hasten the implementation of the FCTC, the WHO further stipulates six measures to help in the

implementation of effective interventions to decrease the level of demand for tobacco. Each letter in the acronym MPOWER stands for the six demand reduction measure: **monitor** tobacco use and prevention policies, **protect** people from tobacco smoke, **offer** help to quit tobacco use, **warn** about the danger of tobacco, **enforce** bans on tobacco advertising, promotion and sponsorship, and **raise** taxes on tobacco (WHO, 2011a). However, the 2011 *WHO Report on the Global Tobacco Epidemic* states that only roughly 3.8 billion people accounting for about 55% of the world's population have been covered by at least one of these six MPOWER measures at the highest level of achievement (WHO, 2011a).

It is important to note that of the six MPOWER measures, 'sales to and by minors' (a supply reduction strategy in the FCTC) and a contributory factor towards young people initiating the habit of smoking has not been explicitly covered. On the whole, the success of the WHO-FCTC as an effective tool for health promotion depends on the political commitment that can be demonstrated by each participating country (Lee in WHO, 2011a).

African countries were seen to play a very active role during the negotiations involving the FCTC. Out of the forty-six African countries that belong to the WHO, forty-one of them are parties to the FCTC (Tumwine (2011). However, since negotiating and signing the global document, there is little progress in its implementation in the African continent (Tumwine, 2011). As ealier stated, Mauritius is the only country in Africa with pictorial health warnings on tobacco packs meeting the standard prescribed by the WHO. In her review of the status of legislations on three key areas of the FCTC (i.e. protection from exposure to tobacco smoke, packaging and labelling of tobacco products and tobacco advertising, promotion and sponsorship), Tumwine (2011) concludes that the implementation of the FCTC in African

countries at national level has not matched the commitment of the region during the negotiation process. Further research is needed to establish why this grim situation is so. The lack of commitment by governments of many African countries towards a comprehensive tobacco control is especially disturbing owing to the fact that tobacco marketers are shifting their focus from such countries in Europe and America with stronger regulations to Africa and Asia (Esson and Leeder, 2004).

Tobacco companies use various strategies to ensure that Africa does not implement strict regulations on tobacco control. Tumwine (2011) identifies this tactics as promoting voluntary regulations which will give an impression that a regulation is in place. Such self-regulation programmes have been discovered to slow down the process of ensuring a complete compliance with the WHO-FCTC in such environments (Coombs et al., 2009).

The Nigeria National Tobacco Control Bill (NTCB): An overview

Nigeria is a signatory to the WHO-FCTC. She signed this document in June 2004 and it was ratified in October 2005. Nigeria was expected to bring the WHO-FCTC to force by 18 January 2006 (*Nigeria: Report card on the WHO-FCTC,* n.d.). Before the WHO-FCTC, Nigeria had the *Tobacco Smoking (Control) Act, Decree 20* of 1990 promulgated under the rule of the military (Fakoya, 2008). This act banned tobacco smoking in public places and stipulates that offenders be fined not less than ₦200 and not more than ₦1000 or imprisonment to a term not less than one month and not exceeding two years or both (Alli, n.d.).

Going by the defunct nature of the Tobacco Smoking (Control) Act of 1990 especially under

current circumstances of democratic rule and increased threats and hazards of smoking, there is a

bill titled *the Nigeria National Tobacco Control Bill* or the *National Tobacco Control Bill*

(NTCB) 2009 passed by the Nigerian Senate in March 2011 but still awaiting presidential assent.

This bill is aimed at adapting and domesticating the WHO-FCTC policy (NTCB, 2009). It was

sponsored at the floor of the Nigerian Senate by Senator Olorunimbe Mamora of Lagos State (in

the South-West zone) in 2008. A public hearing on this Bill was heard on July 20 and 21, 2009

but the passing of this bill is going through a rather slow process. The NTCB is supposed to

repeal the *Tobacco (Control) Act 1990 Cap. t16* Laws of the Federal Republic of Nigeria and

enact the *National Tobacco Control Bill, 2009.* It would provide regulation for the production,

manufacture, sale, advertising, promotion and sponsorship of Tobacco or Tobacco products in

Nigeria and other related matters (NTCB, 2009) in line with the WHO-FCTC. It will also bring

about the establishment of the National Tobacco Control Committee. The explanatory

memorandum of this Bill states as follows:

> This Bill seeks to provide a legal framework for the control of the
>
> production, manufacture, sale, labelling, advertising, promotion,
>
> sponsorship, use of tobacco products and exposure to tobacco smoke
>
> in order to; protect the health of the individual in light of conclusive
>
> scientific evidence implicating tobacco production, use and exposure
>
> to tobacco smoke and tobacco products; protect the health of persons
>
> under the age of eighteen years by preventing their access to tobacco
>
> products; protect the purchasers or consumers of tobacco products
>
> from misleading and deceptive inducements to use tobacco and inform

them of the risks and health consequences of using tobacco products

and exposing others to tobacco smoke; promote research and

dissemination of information on the hazardous effects of tobacco

products or their emissions as the minister may specify, which levels

shall not exceed the levels by the World Health Organization. (NTCB,

2009, pp. 43-44)

Content of the proposed Nigeria NTC Bill

The researcher acknowledges that this is a review of the document titled *National Tobacco Control Bill 2009* (NTCB, 2009) therefore many parts of this document are replicated here for the purpose of this review without repeating this reference.

The NTCB is a proposed bill presented in ten parts. An overview of the content of each of these ten parts of the bill will be presented but with particular emphasis on the very important aspects in relation to the main provisions of the policy as it affects actual tobacco control. Consequences for contravening provisions of the proposed law are therefore totally excluded from this discourse.

Part I of the bill contains the preliminary commencement, the short title, establishment and interpretation of the bill. The contextual meanings of forty-nine (49) terms applying to the document are outlined and explained. A committee called the National Tobacco Control Committee (NATOCC) is proposed to oversee the implementation of the bill when passed into law. Part II addresses the prohibition of tobacco products with subsections including conformity with specified requirements for the manufacture, importation and distribution of tobacco

products; supply to young persons; display of signs; distribution by vending machines; number of cigarettes per pack; self service display; delivery of tobacco products and information required on cigarette packages. A closer look at Part II shows a disparity in the proposed minimum number of cigarettes in a pack that should be allowed. While the subsection on the display of signs (No. 7) stipulates this to be a minimum of 10, the subsection which addresses the number of cigarettes in a package (No. 1) specifies this to be a minimum of 20 cigarettes. Also, the subsection addressing the supply to young persons (No. 1c) only specifies that parents, legal guardians or persons responsible for the care of minors would be held liable if a minor is allowed to possess cigarettes or any other related item. Non-legal guardians who may also send children on errands to buy cigarettes in the absence of their parents or guardians are not addressed by this provision. Another worrisome aspect of this part of the bill is the stipulation of only textual warnings on the packages of tobacco products (*Information required on packages*, No. 5). While this has been found to be effective to some extent as discussed previously in this dissertation, pictograms have been proven to be more effective. Unfortunately, the all important decision of replacing the textual warnings with pictures or pictogram has been left to the discretion of the Minister of Health. The subsection on *Information required on packages* also stipulates that manufacturers provide leaflets displaying information about the tobacco product and its emission and the health hazards and effects of using these products in every cigarette package. This is a very good provision which will help smokers to make informed decisions about their habit. However, it would have been an additional good for the consumer to know the composition and quantities of each in the cigarette but manufacturers are only mandated by this proposed bill to supply the composition only on the outside of every package.

Part III of the NTCB deals with the promotion of tobacco products. Subsections in this part of the bill include prohibition of promotion; false promotion; testimonials and endorsement; promotion by advertisement (including but not limited to bill boards, newspaper adverts, leaflets, posters, point of sale adverts, branding of vehicles, mobile adverts, films, brand placement home videos and events); promotion by sponsorship (which includes sponsorship of sporting, cultural, artistic, educational, recreational events or entertainment programmes); name on manufacturer's facilities; accessories; display of non-tobacco products; sales promotion, communication media and display of prohibition notices on designated areas.

Part V relates to the enforcement of the provisions of the proposed law by authorized officers like public health officers, law enforcement agents and any concerned Nigerian. It also stipulates the powers of such officers and other legal issues in relation to the enforcement of the law regulating tobacco. In Part VI and VII of the NTCB, the causes of action, liability and the recovery of health care benefits and other related matters are highlighted. These sections stipulate that the government can litigate against tobacco manufacturers, distributors, agents and those associated with the manufacturing, sale, marketing and distribution of tobacco products with a view to recover the cost of health care for medical issues associated with the consumption or exposure to tobacco products either as a causative or contributory factor.

Part VIII of the bill addresses the issue of funding for tobacco control. The fund is to be established by the Federal Minister for Health but will be managed by the NATOCC. The proposed use of the fund shall be for three major areas which are research, documentation and dissemination of information on tobacco and tobacco products; promoting national cessation and rehabilitation programs and any other matter related the previously mentioned uses.

In Part IX of this NTCB, stipulates government's role on tobacco control. Although there is the provision for an inclusion of tobacco control education in subjects taught in schools, there is no provision for the specific curriculum where this should be incorporated and at what learning stage to do this. There is also no provision for the training of teachers who would implement this curriculum despite the fact that there is provision for the training of health care providers who will be doing same as part of health care services (Part IX, No. 1). Part IX also highlights a multidisciplinary and multi-sectoral implementation of the Tobacco Control Act but it is the researcher's opinion that even the formulation of the bill itself should have been multi-sectoral and multidisciplinary to ensure that all stakeholders take ownership of its formulation and consequently take responsibility for its implementation. This section of the bill outlines the role that would be played by the Ministries of Health (to promote the objects of the law), Finance (address issues of pricing and tax policies and trade on tobacco products) and Agriculture (to promote alternative crops for tobacco products and other economically viable alternatives to farmers and workers); the Ministry of Education is expected to incorporate instructions on the health consequences, addictive nature and mortal threat of consuming tobacco or being exposed to tobacco smoke as officially provided by the Ministry of Health. The focus of this proposed tobacco education seems to be more on raising awareness only and not on other prevention strategies and cessation. With research showing that most smokers begin smoking while they are still at school, it is a surprise that this fact is not put into consideration in outlining the role to be played by the Education sector. Surprisingly also, the Ministries of Interior and that of Women and Youth affairs are not included among the Ministries who are to implement the provisions of this proposed law. Going by statistical evidence on the increasing number of young persons initiating smoking around the world and in Nigeria in particular, this can be viewed as a serious

omission on the part of the lawmakers. In a country where some regions still use tobacco products as cultural items (as found in this study), it is shocking that nothing is mentioned about the need to integrate the traditional political structure in the fight against tobacco.

The Part X of the bill addresses miscellaneous provisions. The first schedule of this Part stipulates the composition of the NATOCC to include the Minister for Health, Directors of Public Health and Hospital Services in the Federal Ministry of Health and the National Coordinator Non-Communicable Diseases and Tobacco control focal person. Representatives from the following Federal Ministries: Justice, Environment, Health, Finance, Customs services, Nigerian Police Force, Agriculture, Education, Science and technology as well as the Nigeria Medical Association, Nigerian Bar Association, Nigerian Union of Journalists, Nigeria Tobacco Control Alliance (NTCA), DG National Food and Drug Administration and Control (NAFDAC), National Drug Law Enforcement Agency (NDLEA), Advertisement Practitioners Council of Nigeria (APCON), Consumer Protection Council (CPC), Standards organisation of Nigeria (SON) and Civil Defence Corps also form part of the proposed committee. What is conspicuously absent are representations from the Nigerian Union of Teachers and the Counselling Association of Nigeria (or any other association of Psychologists) whose members should play a key part in raising awareness and running smoking cessation programmes especially to young people before they start smoking or before they get addicted if they have already started smoking. It is surprising that these key individuals in the fight against tobacco are not seen as such by the proponents of the bill. Also, this bill does not seem to have carried the States along. Nigeria is supposed to be operating a federal system of government therefore any federal law which does not accommodate the issues that would be dealt with at State level or even Local Government level may likely be poorly implemented. The role of State and Local

governments including their executive and legislative arms should be factored into the bill especially because some State governments have already been proactive in tackling tobacco control in their jurisdiction. A provision to accommodate such already enacted state-level laws should be addressed by the bill as well.

It is commendable however that the second schedule of the NTCB has a comprehensive list of prohibited areas for smoking which if implemented will go a long way to protect non-smokers from SHS as well as discourage some active smokers from continuing with the habit.

The implementation of the right policies to aid the promotion of healthy lifestyles cannot be overemphasized. A comprehensive tobacco control policy has been identified as one of the most effective ways to prevent tobacco related illnesses including cancers (Bialous, Kaufman & Sarna, 2003). Policies and laws with an effective communication of both are expected to be put in place if people are to change their lifestyles. Research has shown that where these policies have been implemented, reduction in cigarette consumption has been achieved (Forster, Widome & Bernat, 2007; Taurus, 2005; van Walbeek, 2005). It will therefore be an important step in the right direction if the right policies and laws are put in place in Nigeria and in other African countries yet to do so in order to reduce smoking among their people, especially the youth.

Implications of a lack of tobacco control policy - The Nigerian case

With about 18% of Nigerian youth smoking cigarettes (World Health Organisation statistics cited in Fakoya, 2008), and higher figures recorded in a more recent study by Salawu, Danburam, Isa & Agbo (2010), chances are that the country with its lean health facilities might

be heading for an epidemic of tobacco-related diseases. This situation may be caused by many factors including defunct, unimplemented tobacco control policies or a total absence of a functional policy. Many of the youth believe that the government is not serious about campaigns against smoking. They feel the government ought to do more than pay lip service to the issue. Edohasim (2010), a feature editor in one of Nigeria's news dailies conducted an interview with a heavy smoker to assess his opinion about this trend and this was his statement:

> That is outright hypocrisy. How can the government that granted license to these tobacco firms to operate in Nigeria turn around to discourage people from buying the products of companies that pay huge taxes to them? That is why nobody is taking the warning on cigarettes packs serious. If government is honest, let them revoke those firms' operating licenses and ban them from producing cigarettes in Nigeria, because government posture only amounts to giving with the right hand, only to retrieve with the left hand, which is day light robbery (para. 17).

The statement above may also imply that government seems to be more disposed to approve and encourage programmes that will definitely increase the prevalence of smoking among the people of Nigeria. The deficiency in policy making that the above statement refers to is reinforced by the quick approval of the building of a $150 million ultra modern cigarette manufacturing plant (the biggest in Africa) in Oyo State (south-west Nigeria) in 2001 and a high tax concession and waiver granted the company involved (Adewumi, 2009) compared with a very slow process of putting a functional policy for tobacco control in place. The government's very slow response to the National Tobacco Control Bill which was deliberated upon for 25 months but now awaiting

presidential assent since March, 2011 or the weakness of the former Tobacco Control Act of 1990 cannot be reconciled with the Nigeria's government's ratification of the WHO FCTC in 2005.

As yet, there is no known national response currently being implemented to address the tobacco issue in Nigeria. One of the issues the NTBC will address when it is signed into law is that of an official national response to tobacco control since it will establish the National Tobacco Control Committee. As with many governments especially in developing countries, the interest of the big tobacco companies in Nigeria is being speculated to be one of the reasons for the delay in tobacco policy formulation and implementation in Nigeria. Blame has been laid on the relentless lobbying of government and orchestrated public relations' campaigns in the name of 'corporate social responsibility' by the tobacco companies (Esson & Leeder, 2004). Citing Gill Walt, Breinbauer and Maddaleno (2005) note that "…although health policy is concerned with 'content', it is really about 'process' and 'power'… and policy development is ultimately determined by who influences whom in the making of policy, and how this comes about" (p. 227). The delay in a national response by the Nigerian government may be viewed as a costly one especially when one considers the enormous adverse health impacts the nation could suffer in the near future as a result of this.

Going beyond policy intervention for tobacco control

The World Health Organisation-FCTC has been described as a comprehensive evidence-based approach towards tobacco control (*South Africa: report card on the WHO-FCTC,* n.d.). However, the WHO-FCTC and the proposed NTCB in Nigeria do not addressed issues relating

to the cultural use of tobacco. By cultural use here is meant traditional cultural practices existing in Nigeria and in many other parts of Africa and Asia which require the use of tobacco and tobacco products. Policy intervention may go a long way in curbing the prevalence of tobacco use yet tobacco use may still persist in society if interventions are not tailored to address the cultural aspects of tobacco use (Feinhandler, 1986). It is expected that such interventions should involve traditional political structures in communities where tobacco has symbolic cultural meaning in order to succeed. Just as the FCTC prescribes the provision for alternative activities for tobacco farmers and traders, the support for the use of alternative traditional items that are not hazardous to people's health is seriously needed in tobacco control in such communities.

Smoking and the cultural environment

In this section, issues around culture and the cultural environment are discussed with specific focus on their role in the persistence of tobacco consumption in society.

What is culture?

Defining culture in the context in which it is used in this study means borrowing from the field of anthropology. There are many approaches to the understanding of what culture is. Geertz as cited in Laitin (1977) sees culture as the 'webs of significance' that humans have spun and in which we are all suspended. Geertz believes that culture is made up of a system of symbols (Laitin, 1977). Culture has also been described as the way "specific groups of people encounter, make sense of, and ascribe meaning to, the respective social, mental and physical worlds into which they are born, in which they live, and where they usually die" (Tomaselli, 1999, p. 29). Hofstede (1997) defines culture as the way of life of a group of people comprising the people's behaviours, beliefs, values, and symbols that they generally accept without thinking about them,

and which are also passed down by communication and imitation from one generation to another. Culture therefore could be described as a vehicle for understanding how a group of people perceive the world around them.

Furthermore, theorising about culture, Laitin (1977) presents two faces of culture: the social systems theorists' view and the rational choice theorists' view. According to him, the 'social systems theorists' hold that cultural identities are primordial and self-reinforcing and they offer ideological guidelines for collective action. These theorists accentuate the effects of cultural meanings (which are embedded in symbols) on behaviour. The 'rational choice theorists' however postulate that individuals maximize utility and will therefore manipulate their cultural identities in order to enhance their power and wealth. Thus, these theorists emphasize the political use of shared cultural symbols (Laitin, 1977). For these theorists, cultural identities become an instrument of politics. Laitin (1977) explains that "political entrepreneurs recognize that through appeals to culture, they can easily attract mass followers and individuals learn that by modifying their cultural identities they can improve their life chances" (p. 11).

The two faces of culture as theorised by Laitin (1977) can be used here to understand how culture can influence the smoking behaviour of people especially the youth. For the purpose of clarity, culture is taken to mean socio-cultural norms and cultural practices which are primordial as well as hybridised culture which could be seen as socio-cultural norms which have been mediatised or manipulated by either the government or marketers of tobacco (sometimes through the media) in a manner of 'making the unfamiliar familiar' where images and the perception of stories are 'conventionalized' (Wagoner, 2008). The ongoing debate about ethnicity and smoking

has also been acknowledged by Nichter (2003) and this lends credence to the fact that it is an emerging angle of research on tobacco use.

Socio-cultural norms

Social norms are the traditions shared and upheld by a group of people with lived common stories. Nichter (2003) writes that "culture is commonly thought of as an enduring set of social norms and institutions that organise the life of members of particular ethnic groups giving them a sense of continuity and community" (p. 140). The manifestation of culture in a community occurs at different degrees of depth ranging from the outermost to the innermost dimensions as symbols, heroes, rituals and values (see Figure 5). Symbols, heroes, and rituals, according to Hofstede (1997), are the tangible or visual aspects of the practices of a culture. The true cultural meaning of the practices is intangible and is only revealed when these practices are interpreted by the insiders.
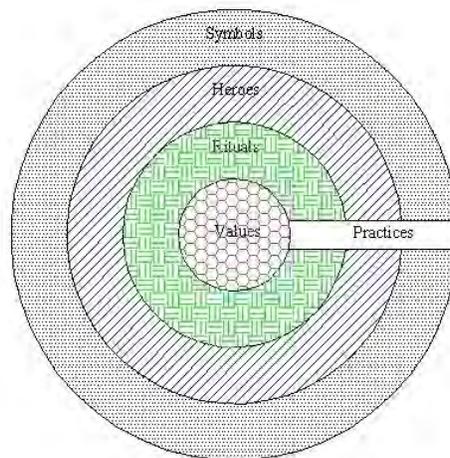
Figure 5: Manifestation of culture at different levels of depth (Adopted from Hofstede, 1997)
[Source: http://www.tamu.edu/classes/cosc/choundhury/culture.html]

Moreover, the meanings of particular symbols, rituals, heroes and values are peculiar to a specific culture and may not necessarily be the same even for societies that share geographical boundaries. Symbols therefore help to create and maintain sentiments and aspects of culture and are not mere images to be seen (Feinhandler, 1986).

In the views of Hicks and Gwynne (1996), symbols, imitation and experience are three ways through which the process of enculturation takes place; an individual absorbs the details of his or her specific culture (beginning from the moment of birth) through the process of enculturation. Haviland (1990) describes enculturation as the process by which culture is passed from one generation to another: in his view, enculturation begins soon after one's birth. He believes that enculturation begins with self-awareness (an ability to react to and evaluate one's self) and this does not begin at birth. This therefore could mean that when an individual is born into a culture where the tobacco or its products are symbolic cultural objects, they may not need to learn how to accept it as such but will do as they experience this culture except if they have the opportunity to have anti-tobacco messages reach them early.

Hybridised Culture

Ideologies and symbols in a community can sometimes be mediatised or manipulated to appeal to individuals in that community in a way that seem familiar and in tune with their primordial culture or popular cultural practices. A hybrid culture is one that results from the interaction of a people's culture with globalization and privatization. The term "mediatised" is used in qualifying the major means through which this interaction takes place i.e. through the media. Such a culture, though different from primordial cultures retains the identity of its origins (Portella,

2000). The use of hybrid culture is one of the marketing strategies employed by tobacco marketers. This can be seen in some cigarette adverts which depict 'communal sharing' characteristic of African communities. The use of cigarettes in some adverts that show that smoking is 'cool' and is a sign of achievement or being among the 'in-group' as against the 'out-group' could create a hybridised version of the African collectivist culture and thus appeal to individuals in a way that depicts smoking as promoting culture. For example the passing of 'peace pipes' is a tradition of the Indians seen as a gesture of friendship and goodwill when settling a dispute (Feinhandler, 1986). When cigarettes are passed around in this fashion in an advert, the symbol of the peace-pipe and that of the cigarette are considered as one and people of that culture may tend to identify the two as serving the same purpose. This type of media representation of a phenomenon which already possesses a symbolic interpretation within a group produces a 'hybrid culture'.

Culture and social representations

The field of social representations deals with the explanations that people give for phenomena which they encounter in the social world (Joffe, 1999). The social representation theory which was originated by Moscovici (1984) holds that the main objective of representations is to help interpretation, understanding, and opinion formation. Social representations are therefore the "environment" in relation to the individual or group, and are specific to a particular society (Moscovici, 1984). They are associated with values, images, social stigma, beliefs and myths held by a group, which inform taken-for-granted, normative behaviour within the group (Markova & Wilkie cited by Petersen & Govender, 2010); the development of cultural

representations and associated practices are brought about by two generative processes called *anchoring* and *objectifying*.

Joffe (1999) expounding on these concepts (anchoring and objectifying) posits that 'anchoring' leads to the integration of unfamiliar event by moulding it in such a way that it appears continuous with existing ideas shared by a group. Anchoring shows how ideas are perpetuated once they are in circulation. 'Objectifying' however, brings what has been anchored to the realm of reality making these ideas, images and language shared by a group more concrete. Joffe asserts that objectification saturates an unfamiliar object or phenomenon with something easier to grasp and this process overlaps significantly with that of symbolisation.

The influence of an individual's culture (through their social representation of a phenomenon like cigarette smoking or the use of other tobacco products) may not only be at the interpersonal or community level but may influence significantly an individual's subjective norms, attitude and self-efficacy (towards issues involving tobacco use), hence influencing a person's aversion or desire for cultivating the habits of smoking.

Social representations are therefore presumed to underpin both the thoughts and actions of an individual (Joffe, 1999). This anchoring of individual's thoughts and action by social representation is expected to be stronger within a community where collective existence is primary. Petersen and Govender (2010) rightly affirm that the concept of social and cultural identities and representations is very much relevant to health promotion in African contexts, particularly due to the dominance of collectivist orientations. Behaviours anchored on collective

identities are usually difficult to change at individual levels. It is therefore important that health promotion practices in Africa and other collectivist-oriented societies should take into account culture specific context within which smoking behaviours occur in designing interventions. Such interventions must also take into account traditional political structures if the desired results are to be achieved.

Social representations and risk perception

How individuals perceive risks is very important in understanding why people engage in risky behaviours like smoking, alcohol abuse and risky sexual behaviours. Familiarity with a risky phenomenon in a sense that does not connote danger calls for a closer examination of people's belief systems. The representation of that phenomenon in the individual's society might hold the key to understanding his/her belief system.

Studies in different parts of the world have shown that many messages concerning the health risks of smoking may not be perceived as such (Clark, McCann, Rowe, Lazenbatt, 2004; Merdad, Al-Zahrani, Murphy-Hoefer, Alder, Higbee, 2004; Umoh, Otoh, Taiwo, Danfillo & Jalo, 2009). According to Joffe (1999), the group an individual identifies with plays a part in defining which events are perceived as undesirable and to whom or what they are linked. He also explains that "the most important aspects of the response to risks do not lie in how people process the information they get, but in how they feel about and explain what filters through the lens with which they look at the risk" (Joffe, 1999, p. 100). The way an individual perceives messages about a risky behaviour may prevent such an individual from having a sense of vulnerability towards such risks.

An individuals' social representation of a risk reflects his/her defence of the self against unwelcome emotions (Joffe, 1999). This is done by integrating the new and threatening information and repackaging it in a way that is perceived to be less threatening. Thus this lends credence to Joffe's (1999) assertion that "by imposing culturally familiar ways of thinking on each new phenomenon, social representations function to maintain the status quo in a society" (p. 97). Burke et al. (2009) also mention the following about culture and how it makes sense of the world.

> Culture is not bounded or static but rather dynamic, fluid and constantly
>
> being shaped and reshaped. People bring culture into being (existence)
>
> as they go about making their world – making the structures, institutions,
>
> rituals and beliefs that reflect and reproduce individuals and collective
>
> sense making activities (p. 625).

The cultural symbol of tobacco

Symbols provide people with a means to experience abstract content, allowing them to feel that they understand a complicated scenario at just a brief glance (Joffe, 1999). Within culture, a particular symbol can have several representations depending on the context of reference. A symbol can have different meanings in different cultures; Feinhandler (1986) asserts that symbols are embedded and interpreted in culture. Tomaselli (1999) also explains that a symbol has no obvious connection to the idea it represents and so it has to be interpreted within a context one of which may be the culture which the individual identifies with.

As mentioned earlier, there is a paucity of literature and research on the cultural representations of tobacco and tobacco products as well as the cultural influence on smoking prevalence.

Previous research has mainly dwelt on psychological, medical and social influences on smoking behaviour. However, if new frontiers are to be advanced in efforts to reduce smoking prevalence, Feinhandler's (1986) assertion that 'by recognizing the social and cultural factors related to tobacco use we can understand its persistence in society' (p. 185) has to be considered. Recent efforts aimed at investigating the link between culture and tobacco use outside Nigeria have shed some light to this phenomenon. For example, Bush et al. (2003) in their research among Bangladeshis and Pakistanis in the UK found that tradition, culture and the family played significant roles in nurturing and cultivating norms and values around smoking. The DREGAN (Diverse Racial and Ethnic Groups and Nations) Project is a research project conducted by

Foldes and Schillo (2003), who sought to investigate community, culture and tobacco in Minnesota's minority communities in the United States. This longitudinal study involved the production of culturally meaningful, community specific information to help guide tobacco reduction efforts in each community studied and to evaluate its progress over time (Foldes & Schillo, 2003). Part of the conclusions made by Foldes and Schillo about their findings was that:

> Community leaders offer a complex and nuanced understanding of the role that tobacco plays in their communities. Tobacco use is undoubtedly an addiction, but ***many aspects of tobacco use in each community are constrained by culture. Understanding these cultural features is the key to effective tobacco control interventions.*** (emphasis added) [lines 23-25]

The tobacco and tobacco products like snuff and cigarettes are symbolic in many traditions across the world and meanings surrounding tobacco use differ across cultures too. Writing on the social significance of tobacco around the world Feinhandler (1986) states:

> Today tobacco is used socially, ceremonially and instrumentally. It is used in a variety of contexts: in Pacific Island courtship rituals; in African councils, clan gatherings and marriage negotiations; in North and South American Indian divination and healing ceremonies; to seal bargains in Asia; and for hospitality in the Middle East (p. 171).

Feinhandler (1986) also mentions the fact that early societies viewed smoking as a symbol of hospitality, communication with the gods and spirits and that it had the healing power to chase diseases away. Some cultures therefore view smoking as a habit with a high prestige producing great personal satisfaction (Roediger, Capaldi, Paris, Polivy & Herman, 1996). A study of the cultural predictors of the stages of smoking conducted in South Africa by Brook, Morojele, Brook, Zhang and White (2006) among adolescents, found that identifying with one's ethnic tradition, history and custom predicted a decreased risk of being a regular smoker compared with experimental smokers. They however did not explain how this is brought about since it was a quantitative study.

On the cultural symbolism of tobacco within cultures in Africa and specifically Nigeria, there is a dearth of research and literature and this is one of the motivations for carrying out this study. Personal communications with persons from three major ethnic groups in southern Nigeria (namely Igbo, Ijaw and Urhobo) reveal that the use of tobacco for cultural ceremonies abounds

in Nigeria. One major ceremony where cigarettes and other tobacco products are used culturally in Nigeria is in traditional marriages. Tobacco products like cigarettes and snuff are supplied by a prospective bridegroom as part of the bride-wealth for his bride among some ethnic groups. In the tradition of the Igbo people (from south-eastern Nigeria), cigarettes are provided for the youth of the bride's community and cured tobacco leaves (together with the ingredients needed to process them for snuff making) are also provided for the elderly in the bride's community. The Ijaw people (of south-south Nigeria) also have similar traditions as that with the Igbos while in the customs of the Urhobo people (also from the south-south), it is required that snuff or the cash equivalent be provided for the mother of the bride.

Further, as discussed earlier, mediatised culture of tobacco smoking abounds within the Nigerian society (as can be observed in other parts of the world) as tobacco manufacturers try to market their products through familiar means and 'corporate social responsibilities'. Tobacco adverts and films glamorizing tobacco use and giving smoking a high social status have made many youth come to believe that smoking is a sign of masculinity, success, power and the coming of age (Odigwe, 2008). This perception is especially engineered by tobacco adverts with many of the male dominated lifestyles they glamorise, for example motorcycle riding, riding a sports' car, automobile racing and mountain climbing (Iyiola, 2008).

It is very likely that there are other cultural undertones to the prevalence of smoking in Nigeria and the knowledge of this could help health promotion and policy strategies in tobacco control to be more effectively designed and implemented. Feinhandler (1986) mentions that tobacco use is as much culturally patterned, as it is individually determined and calls for a contextual

understanding of the situations in which people smoke which are defined by social structure and shared systems of culturally defined meanings (p. 181).

Culture, social environment and smoking

Social structures and systems of cultural meanings are shared within ethnic and sub-cultural groups (Feinhandler, 1986) and these meanings vary across cultures. Tobacco and tobacco products have had social significance in many cultures at different times in history acquiring in each time and culture a set of social meanings (Feinhandler, 1986). However, in a bid to find a leeway in the rising smoking prevalence especially in developing countries (WHO report, 2008), most studies have overlooked cultural factors as expressed in community social norms and practices. Feinhandler (1986) however asserts that smoking has come to exist as a set of culturally regulated behaviours which can be interpreted at three different levels. These levels include personal behaviour pattern, interpersonal convention, and cultural mechanism. He notes that these levels have been so often ignored.

In this doctoral study, an attempt has been made to study the smoking behaviour of youth aged between 18 and 24 years at these three levels. This is also what the proponents of the theory of triadic influence termed the "big picture" (Flay, Petraitis & Hu (1995). Looking at the big picture thus helps the researcher to understand the value placed on smoking by an individual based on cultural and political factors that constitute the smoker's environment. The expression of the influence of these environmental factors in the day to day smoking patterns and attitudes towards smoking becomes better understood in the light of these environmental influences.

The social environment of an individual in a collectivist society has a different influence on his/her behaviour than on an individual in an individualistic-oriented society. Airhihenbuwa and Obregon (2000) rightly opine that individualism is foreign to many non-western cultures. As is characteristic of the African collectivist style of living, role models are usually senior members of the family like older brothers and sisters, uncles, aunts, senior cousins etc. These persons are held in high esteem and are held up by parents for emulation especially if they are educated or viewed to be successful in other aspects of life according to the standard of the particular community. All these family members serve to influence the individual in one way or the other. As noted by Ayittey (2006), "in traditional African societies as in other non-African cultures, there is acute awareness of the effects of the environment on people" (p. 41). In the Igbo tradition in south-eastern Nigeria for example, it is commonplace for young adults to be sent to their senior relatives or member of the same community (living in urban areas) to be educated or to learn a trade. This tradition, however, also exposes the young adult to the influence of many societal ills prevalent in urban areas (Iyiola, 2008) and smoking is often one of them.

The cultural practice of sending children and young adults on errands to buy groceries and on other types of errands is also a common phenomenon in the African collectivist pattern of living. The buying of cigarettes is not excluded from such items these individuals (mainly minors) are sent to buy especially in Nigeria where there are no age restrictions in the buying and selling of cigarettes (Odigwe, 2008). In Nigeria, adult smokers prefer to send children to buy cigarettes for them rather than buying themselves (Odigwe, 2008). This is not to say that smoking by children is officially condoned in Nigeria but children are exposed to tobacco use from at a very early age due to this societal practice.

Human behaviours are very complex hence Green and Kreuter explain that "...human behaviour, culture and social change processes are not uniform enough to permit a single set of best practices to suffice the way medical best practices might" (cited in Breinbauer & Maddaleno, 2005, p. 21). It therefore becomes imperative that attempts at tobacco control be tailored to address context specific issues around tobacco use.

SECTION THREE

PSYCHOSOCIAL INFLUENCES FOR SMOKING

The psychosocial influences for smoking would be discussed under two broad headings: intrapersonal and interpersonal (social) influences.

Intrapersonal influences for smoking

These are usually intrinsic influences for smoking and they vary from individual to individual. Many of these intrapersonal influences tend to serve as 'push' factors for the youth towards smoking. For the purpose of this review, these factors have been grouped into traits/attitudes, behavioural skills and motivators.

Personality traits and attitudes as risk influences of smoking

Traits and attitudes have been described as constructs which are intended to capture certain variations in the behaviour of individuals (Sherman & Fazio, 1983). Though these characteristic features of an individual are considered intrinsic, they are usually externalised. Personality traits and attitudes therefore determine an individual's behaviour to a very large extent (Terracciano & Costa, 2004). According to Sherma & Fazio (1983) both "attitudes and traits have served as within-person constructs intended to permit the prediction of later behaviour" (p. 308). Some

personality traits and attitudes have been found to be prone to smoking. Though for various reasons, there are conflicting findings about the specific traits and attitudes found to have this association (Terracciano & Costa, 2004), it is important that a few of these findings be reviewed.

In a longitudinal study conducted in Finland, childhood hyperactivity was found to be correlated with both daily moderate and heavy smoking (Niemelä et al., 2009). Studies have also shown smoking to be associated with persons possessing attributes like aggressiveness, extroversion, sociability, risk taking, sensation seeking and with temperaments like anger (Bisol, Soldado, Albuquerque, Lorenzi & Lara, 2010; Dinn, Aycicegi & Harris, 2004). In their study investigating five personality traits (neuroticism, extraversion, openness, agreeableness and conscientiousness), Terracciano and Costa (2004) found that smokers were characterised by high impulsiveness, high excitement seeking, low self esteem and low deliberation. They also found a difference in extraversion and openness to experiences between smokers and non-smokers. Findings from a study by Evans et al. (2006) showed a positive relationship between sensation seeking and smoking among patients with Pakinson's disease. Smokers have also been found to exhibit higher impulsivity compared with non-smokers (Wing, Moss, Rabin & George, 2012). Personality traits like novelty seeking have also been found to be associated with both light and heavy smoking (Gurpegui et al., 2006).

Deficient behavioural skills as risk influences of smoking
Behavioural skills are life skills that are required by individuals to be able to adjust properly in their social environment. Life skills have been defined as "a set of abilities that pave the way for positive and useful behaviour" (Mardani, Houz, Mardani & Khajavi, 2011, p. 498). Life skills

help individuals to improve communication, boost the power of decision making, management and self awareness (Mardini et al., 2011). Research findings have highlighted the fact that certain patterns exist in the levels of these life skills among smokers. Three of these behavioural skills will be discussed: coping skills, social skills and refusal skills in relation to findings in previous studies.

According to Sarafino (2002), many individuals who initiate smoking seem to lack general personal and social life skills. Such skills include assertiveness skills, decision making skills and techniques for coping with anxiety (Sarafino, 2002). It is proposed that individuals who have good levels of these social skills will not be overly influenced by peers or other factors to smoke. Mardini et al. (2011) note that life skills which are related to psychological factors such as having a strong will, confidence, positive and healthy mental awareness, having problem solving and decision making skills are positively correlated with high self esteem.

Findings from a meta-analysis of 27 studies show a strong support for positive association between refusal skills and smoking onset (Conrad, Flay & Hill, 1992). A study by Keer (2002) also found poor refusal skills and risk-taking tendency as some of the psychological determinants of smoking. Keer's study also found that self-efficacy to refuse cigarettes was negatively related to high level of smoking in the environment. In other words, those who reported having higher levels of smoking in their environment had lower self efficacy/confidence with regards to resisting cigarette offers successfully when compared with those not surrounded by smokers.

In a study by Francis, Katsani, Sotiropoulou, Roussos and Roussos (2007), attention problems and the presence of delinquent behaviour were found to be the main risk factors for smoking

initiation among Greek adolescents. It is therefore evident that deficiency in life skills may be a risk factor for smoking initiation and perpetuation among youth.

Motivators for smoking

Motivators for smoking in this review are regarded as factors which tend to push or pull the youth to initiate and/or perpetuate smoking. For the purpose of this discussion, they have been group into psychological, physiological and social factors. The social factors will however be addressed under interpersonal influences for smoking.

1. Psychological motivators for smoking

Psychological factors that motivate young people to smoke include among others: anger, depression, worry/distress and stress. Psychological factors like these have been found to push young people towards smoking as a way or means of relieving themselves of life's distresses (Shuaib et al., 2011). Various studies have also shown positive associations between these psychological attributes and being a cigarette smoker. A study by Bancroft, Wittshire, Parry and Amos (2003) showed that smokers' moods are changed positively when they smoke. Magid, Colder, Stoud, Nichter and Nichter (2009) found negative affect (general distress and sadness) to be the most robust correlate of cigarettes smoking among college students independent of alcohol and marijuana use. In a study by Laws, Holliday and Huang (2007), smokers were found to more likely report experiencing feelings of anger, anxiety, low morale, depression and lack of motivation compared with non-smokers.

Further, a history of depression has also been found to increase smoking reinforcement in smokers irrespective of their mood (Perkins, Karelitz, Giedgow, Conklin & Sayette, 2010). A

link has also been found between depression disorders and cigarette smoking among Nigerian university students (Adewuya, Ola, Aloba, Mapayi & Oginni, 2006). The cause-motivator link between depression as well as other negative affect and smoking has not been fully understood. It is somewhat difficult to ascertain whether smokers smoked to get out of depression (as a way of self medicating) or whether it is depression itself which makes people want to initiate or perpetuate smoking. Though Kear (2002) found depression to be one of the determinants of smoking, among Greek adolescents, Francis et al. (2007) found that smokers tend to score higher in scales measuring anxiety and depression. These researchers however suggest further investigation of the direction of the association between depression and smoking.

Findings from a study by Childs and de Wit (2010) showed that stress increases smokers' desire to smoke though it did not change the number of cigarette smoked. Even though the link between psychological motivators of smoking and smoking behaviour might not be fully understood at present, it should be noted that past research have found some correlations; smokers have been found to score higher in many scales measuring negative affects, stress and depression (Magid et al., 2009). Researchers have also found that as the nicotine level in a smoker diminishes, smokers tend to show withdrawal symptoms, some of which are expressed as these negative affect, stress and depression (Munafò & Araya, 2010).

2. Physiological motivators for smoking

Physiological motivators largely stem from the effect of nicotine on the body system. Smokers have been noted to be more relaxed than non-smokers or smokers who were deprived of smoking (Nesbitt in Silverstein, 1982) while it has also been found that the relaxation felt by smokers is as

a result of the calming effect of nicotine when ending withdrawal symptoms in smokers who are addicted (Silverstein, 1982). Nicotine, in itself is a psychoactive chemical occurring only in tobacco (Sarafino, 2002). It has been described as the major inducer of tobacco dependence (Hoffmann & Hoffmann, 1997). As is characteristic of psychoactive chemicals, nicotine tends to have a relaxation effect when an addicted smoker has a high amount of the chemical in his or her system at a particular point in time. Due to the short half-life of nicotine, it is said to be depleted at a fast rate resulting in the speed with which symptoms of withdrawal manifests in heavy smokers (Munafò & Araya, 2010). Some of the symptoms of withdrawal have been identified as anxiety and negative affect (Munafò & Araya, 2010) and it is therefore understandable that since these are signs of a low level of nicotine, they will be reduced or changed (as the case may be) by a re-introduction of nicotine into the system via smoking.

The ritual associated with lighting a cigarette and smoking it is said to give addicted smokers some pleasure (positive feedback) so much so that in itself, the ritual begins to serve as psychological or physiological reinforcements for the smoking behaviour (Flay, Snyder & Petraitis, 2009; Mitchell et al., 2005). In the view of Flay et al. (2009), once a person attempts a particular behaviour, the feedback experienced influences his/her future behaviour in that regard. Mitchell et al. (2005) describe these feedbacks as 'neuromuscular habits' which become associated with the ritual of smoking. In their view "how the cigarette is smoked, the kind of personal rituals involved, how and where the cigarettes are carried, the times and circumstances under which they are used are called the secondary habits of smoking" (p. 73). Smoking after a meal and smoking before going to bed are therefore some of the neuromuscular habits some smokers have associated with the smoking habit. Cigarette therefore becomes associated with sleep and food. When this happens, the smoker begins to feel that it is actually the cigarette that

eases digestion or aids sleep but this may not necessarily be so. Mitchell et al. (2005) suggest that identification of these secondary habits of smoking and devising strategies to deal with them are very important in achieving success at quitting.

Interpersonal influences for smoking

The smoking behaviour of peers, family and role models have been found to be strongly associated with smoking (Skinner, Haggerty & Catalano, 2009; Yu, Hahm & Vaughn, 2010). The social predictors of smoking have also been identified to include behaviour and beliefs of parents, peers and schools (Ogden, 2000). Due to the fact that there is a separate section dealing with the review of influences from the cultural environment in this thesis, only factors relating to influences from the social environment of the youth will be reviewed in this section. The factors discussed under this section include peers and friends, family members and older adults and the school.

Peer influence on smoking

Peer smoking and/or approval of smoking have been strongly linked to adolescents' initiation and perpetuation of smoking (Conrad, Flay & Hill, 1992). Peer smoking trends have also been found to be significantly associated with future smoking (Epstein, Botvin & Spoth, 2003). Many young adults have been cajoled into initiating smoking by their peers especially close friends. Peer pressure and having peers or close friends who are smokers have been widely reported to strongly predict smoking status (El-Amin, Nwaru, Ginawa, Pisani & Hakama, 2011; Erbaydar, Lawrence, Dagli, Hayran & Collishaw, 2005; Hussain, Akande & Adebayo, 2010; Mowery, Farrelly, Haviland, Gable & Wells, 2004). Comparing the influence of parents and peers or close

friends on the strength of their prediction of smoking behaviour, Kear (2002) found a higher level of support for peer influence (72%) than the influence of parents (59%).

The family environment and smoking

The smoking behaviour and attitude of family members have been found to influence smoking in young adults (Loureiro, Sanz-de-Galdeano & Vuri, 2010; Sarafino, 2002). However, different members of the family have different influences they exert on the youth with regards to smoking. A study by Hrubá and Žaloudíková (2008) found that parents and other relatives' smoking behaviour led to a significant increase in the number of children who were determined to smoke in the future or who were considering to do so. Close parental attachment has also been established to be a strong protective factor against possible negative peer influence towards smoking and other risky behaviours (Francis et al., 2007; Caffray & Schneider, 2000). Results from the study by Caffray and Schneider (2000) show that negative relationships with parents, low family cohesion, poor communication between family members and low levels of social support, are all important factors which influence adolescents' behaviour. A significant association between parental warmth and a decrease in the likelihood of an adolescent ever having smoked cigarettes, was also found in a study by Foster et al. (2007).

A recent study by Loureiro et al. (2010) shows that the influence of parents in two-parent households and single-mother households were slightly different concerning adolescents' decision to smoke. Where the household had two parents, the father's smoking habit tended to influence their son's decision to smoke and the mother's smoking habit influenced their daughter's decision to smoke. In households of single-mothers however, the same-sex

parent/child influence was no longer at play. Instead, the smoking habit of the cohabiting parent (irrespective of his/her gender) was influential in the child's decision to smoke.

Further, one very rarely discussed influence on youth's smoking behaviour from the family environment is that from older siblings. In their study, Francis et al. (2007) found that siblings' smoking had a strong association with reported cause of some non-smokers picking up the habit by the age of 20. As highlighted by Francis et al. (2007), sibling modelling on adolescents' smoking behaviour has not yet been fully explored in tobacco research. However, few studies carried out on this aspect of the family environment shows that sibling modelling is an influence that is as strong (if not stronger) than that of parents irrespective of their parental smoking status.

The presence of family members who smoke within a household has also been found to be a predicting factor of smoking behaviour in an individual (Imhonde & Aluede, 2007; Lader & Matheson, 1991; Ogden, 2000). For a family within a collectivist culture it is expected that this influence will be even stronger as a result of the close family ties they share. Imhonde and Aluede (2007) in their study of Nigerian adolescent smokers found that parental smoking status and family connectedness influenced smoking intensity of adolescents who are addicted to cigarettes. This is more so when this family is in a developing country like Nigeria. Family activities in Nigeria would involve children being sent on errands to purchase cigarettes or clean up the smoking pipes of older members of the family who are respected and seen as symbols of authority. This close contact with these items (which are iconic to the young adults) could also lure these young ones into indulging in the habit either secretly as they come in contact with these items or when they grow older as a sign of having come of age (Feinhandler, 1986).

The school environment and smoking

It has been reported that more than 80% of all regular smokers had started smoking at 18 years of age (US Dept of Health and Human Services, 1994). This implies that most smokers started smoking when they were still at school. The school environment is composed of many social factors that could influence adolescents' behaviour. Teachers, peers and the tone of the school are some of such factors. The smoking behaviour of adolescents have been found to be influenced by their teachers' smoking behaviour during school hours (El-Amin et al., 2011; Poulsen et al. in Kayaba, Wakabayashi, Kunisawa, Shinmura & Yanagawa, 2005).

A study by Erbaydar et al. (2005) suggests that attending school has a protective effect on smoking initiation among adolescents. In addition, they found that better communication with teachers and being successful at school also decreased the risk of smoking. But this may not be the case where the teacher's smoking status is known to the student. It is important to note that peer influence is likely to be stronger in school than in any other social environment of the adolescent. However, school level tobacco policy as well as anti-smoking curriculum may likely help to decrease the pressure adolescents face from peers towards initiating smoking at school (Moore, Roberts & Tudor-Smith, 2001). This is due to the fact that at the age when most smokers have been discovered to try smoking, they can be said to be unarmed with the right information as to be able to make informed decisions about smoking. As mentioned earlier in this chapter, most smokers have been found to initiate smoking as teenagers. Thomas McKowen, a medical writer made the following assertion.

> ... It is said that the individual must be free to choose whether or not he
>
> wishes to smoke. But he is not free; with a drug of addiction the option is

open only at the beginning, so that the critical decision to smoke is taken, not

by consenting adults but by children below the age of consent. (Mitchell et

al., 2005, p. 67)

Smoking and immediate predictors

The proponents of the theory of triadic influence have identified some behaviour which they

believe can closely predict whether or not a person will smoke. These include related behaviours

(like alcohol use and drug use); decision or intention to smoke and trial behaviour or experiences

(Flay, et al., 2009; Flay, Petraitis & Hu, 1999).

The study of behavioural intentions in psychology has been used to predict future behaviour. A

cohort study by Hampson, Andrews and Barckley (2007) found that children's intention to

smoke significantly predicted their actually experimenting with cigarettes one to five years later.

The use of tobacco has also been significantly associated with using illicit drugs (e.g. ganja,

charas, phensidyl and heroin) among Bangladeshi men (Khan, Aklimunnessa, Kabir, Kabir &

Mori, 2006). However, the illicit drug found to be generally closely related to smoking is

marijuana (Kear, 2002). Smoking among young people has generally preceded and increased the

risk of illicit drug use hence the tagging of cigarettes as a 'gateway drug' (Chen, Chen, Fagot-

Campagna, Narayan, 2001; Kaer, 2002; USDHHS, 2012). Petraitis, Flay and Miller (1995)

explain that the use of illicit drugs and alcohol have been reported to follow smoking hence this

tag.

The use of alcoholic beverages has also been closely linked with smoking (Brook, Rubenstone, Zhang, Morefele & Brook, 2011). The US Department of Health and Human Services [USDHHS] (1994) reports that almost all smokers use alcoholic beverages. However, this is not to say that all smokers use or will eventually use illicit drugs or drink alcohol.

Summary of literature review

This chapter has reviewed literature on tobacco use in history, what smoking is all about especially to the youth and the implications of smoking on people's health, society and the economy. There is a gap in the literature and research on how cultural practices function to influence smoking behaviour in a population. This gap exists at both the continental and international levels. Few studies exist which show the prevalence of smoking among certain socio-cultural groups such as among African-American adults, Chinese-Americans and Asians as mentioned in this review but there is a dearth in studies carried out to investigate cultural influences on smoking in Africa and particularly in Nigeria. This chapter on the review of literature has also higlighted the possible risk influences within the cultural and political environments that precipitate and perpetuate smoking prevalence in Nigeria in particular. Psychosocial and environmental risk influences for smoking were also discussed in relation to existing literature and previous research in these areas.

In conclusion, this review has made a case for a comprehensive approach towards tobacco control which should include psychosocial, cultural and policy interventions.

CHAPTER FOUR

RESEARCH METHODOLOGY

Introduction

This chapter outlines the methodology of this study in terms of the mixed methods design, the study setting, sample and sampling procedure, instruments for data collection, data collection procedure and data analysis.

Research design

This study employed a mixed methods research design. Creswell (2005) defines mixed methods as a procedure for collecting, analyzing and "mixing" both quantitative and qualitative data at some stage of the research process within a single study to understand a research problem more completely. The type, rationale, advantages and disadvantages and procedure followed are further discussed. Diagrammatic representations of the research design are also presented.

Mixed methods research design

Mixed methods design is a fairly new approach to research which has gained the status of a third research approach (Ivankova, Creswell & Plano Clark, 2007). The first two and older research approaches are quantitative and qualitative research designs. Mixed methods design has its origin dated back to psychology with Campbell and Fiske named as its first users in 1959. They first referred to it as the "multimethod" approach (Ivankova et al., 2007). Early critics of this method argue that it is not a feasible research method due to the incompatibility of quantitative and qualitative methods as a result of the differences in philosophies and methods of using these

research designs (Reichardt & Rallis as cited in Ivankova et al., 2007). However, this method of research is gradually becoming quite popular.

According to Ivankova et al. (2007), there are four different procedures for using a mixed methods research approach. These also inform four different types of mixed methods research designs. They are as stated by Ivankova et al. (2007);

- *Explanatory mixed methods design:* This involves carrying out a quantitative phase followed by a qualitative one in one study.

- *Exploratory mixed methods design:* This entails carrying out a qualitative phase followed by a quantitative one in one study.

- *Triangulation (or concurrent) mixed methods design:* This requires carrying out the quantitative and qualitative phases of a study at the same time but separately. In other words, the two phases are run concurrently.

- *Embedded mixed methods design:* This is when the quantitative and qualitative phases of a mixed methods study are carried out together at the same time.

The type of mixed methods design used in this study is *the exploratory mixed methods design.* The choice of the exploratory mixed-methods research design was based on the type, purpose and focus of this research. According to Ivankova et al. (2007), researchers use the exploratory mixed method design when there is a need to do an initial exploration of a topic with the help of qualitative data after which such data can be verified by using quantitative measures. They mention that this method is suitable when a researcher does not know which constructs are appropriate or how to measure important variables. As the socio-cultural dimensions of tobacco use have received limited attention within Nigeria, this exploratory mixed methods approach

becomes very important in order to first qualitatively capture socio-cultural factors associated with tobacco use in the society. This is in line with the view of Ulin, Robinson, Tolley and McNeill (2002), who explained that it is important that a social phenomenon (in this case, tobacco smoking) be understood within the context in which it is carried out. These authors described such contexts to include among others, the physical settings were the behaviour takes place, attitude towards the behaviour and the "historical, social and political climates and organisational or individual characteristics that influence the phenomenon" (p. 136).

As mentioned earlier, exploratory mixed methods design is carried out in two sequential phases. The first phase comprises of the collection and analysis of qualitative data. One important function of this stage is to develop constructs for the quantitative research instrument. These constructs will emanate from the themes in the qualitative data. The second phase is the collection and analysis of quantitative data. The results from these two phases are then integrated during the interpretative stage and the discussion of study outcomes (Ivankova et al., 2007). A diagrammatic representation of the procedure for carrying out an exploratory mixed methods research is shown in Figure 6.
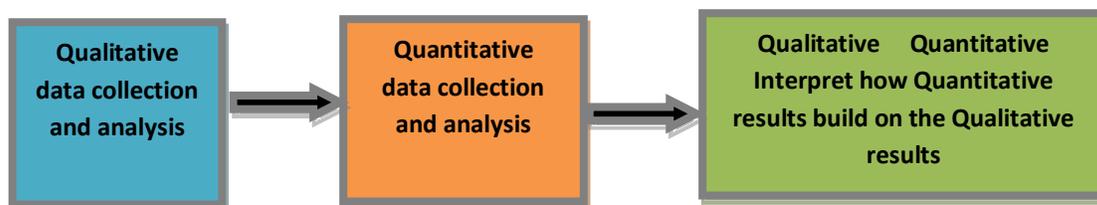
Figure 6: Diagrammatic representation of Exploratory mixed methods design (Ivankova et al., 2007. p. 265)

For this study, the major purpose of first conducting the qualitative phase was to inform the cultural constructs that were incorporated into the quantitative research instrument used in this study– the Global Youth Tobacco Survey [GYTS] questionnaire. Hence the relevant qualitative data analysed for this purpose were those from community leaders and political analysts. In line with the exploratory mixed-methods design's tradition, data collection was done in the following order:

- Step 1: Qualitative interviews with a total of 27 persons including five (5) community leaders, four (4) political analysts/NGOs working on youth development or tobacco control in southern Nigeria and eighteen (18) young smokers (aged between 18 – 24 years).

- Step 2: Analysis of the qualitative data for codes and themes (Ivankova et al., 2007) around socio-cultural use of tobacco and policy issues, noting emergence of new constructs relevant for the second phase of the study.

- Step 3: Modification of the GYTS questionnaire and pilot testing on 30 undergraduate students who were not part of the actual sample for the quantitative phase.

- Step 4: Administration of quantitative questionnaire on 720 youth of southern Nigeria; 240 (60 participants in four categories each namely, college students (students from tertiary institutions which were not universities), undergraduates, skilled workers and unskilled workers) from each of the three geopolitical zones in the Southern Nigeria.

- Step 5: Analysis of quantitative data.

- Step 6: Integration of results from both qualitative and quantitative data at interpretation and discussion stage of the study (Ivankova et al., 2007).
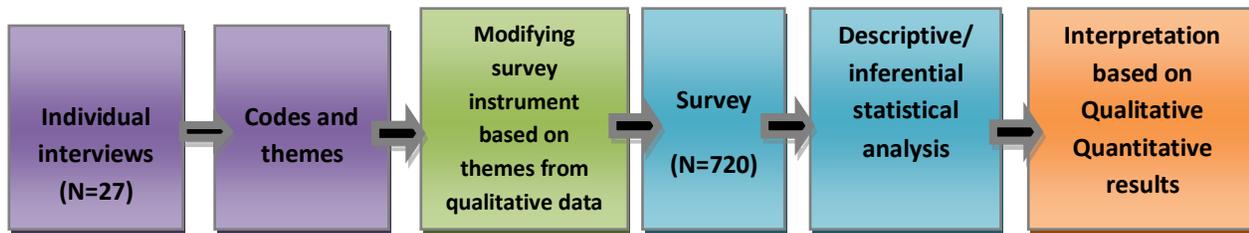
Colour keys: ● = Qualitative; ● = Connection; ● = Quantitative; ● = Interpretation of results

Figure 7: Schematic representation of the steps involved in the exploratory mixed-methods design.

Rationale and advantages of using exploratory mixed methods design for this study

This study was carried out in Nigeria, West Africa. Nigeria has an estimated population of over 150 million people comprising over 250 ethnic groups with over 500 languages creating a country of rich ethnic diversity (*World Statistics Pocketbook Country Profile: Nigeria*, 2010). This diversity is also seen in the country's cultures that vary along tribal and ethnic nationalities. Nigeria no doubt is a complex society in terms of cultures and traditions even though certain trends cut across many cultures. While research has shown that smoking runs along ethnic lines in North-eastern Nigeria (Desalu et al., 2008), little is documented about specific cultural practices that could serve as risk influences for smoking behaviour in any part of the country. It is therefore important that the socio-cultural setting of the targeted population of this study be understood before the socio-cultural predictors of smoking behaviours can be established.

The cultural symbols and use of the tobacco and its products and how these influence young people's smoking behaviour have not received much attention in the form of empirical research. Besides, there is a dearth of research and literature on the state of tobacco policy and its influence on smoking in Nigeria. The use of mixed methods in this study served as a means of

not only exploring the prevalence of smoking and related behaviour, the use of tobacco and tobacco products as cultural artefacts but also provided qualitative data on how primordial cultures and social norms surrounding the use of tobacco and tobacco products may influence young people's smoking behaviour in Nigeria. Similarly, the adoption of the mixed-methods design for this study provided an opportunity to explore the role played by the "big capital" of tobacco companies and government policies as well as other contextual factors arising from these as they serve to influence the smoking behaviour of young people.

Another major advantage of using the mixed-methods over either the quantitative or qualitative methods is highlighted by Ivankova et al. (2007). They assert that when quantitative and qualitative research approaches are combined in one study, they serve to complement each other therefore making it possible to address the research problem more completely. The mixed methods research also serves a triangulation purpose (Neuman, 2011) as it helps the researcher to verify qualitative data with quantitative ones and vice versa.

In summary, the exploratory mixed methods design was best suited for this research because it enabled the researcher to understand the socio-cultural and socio-political background of the population and sample of the study as well as their relationship with the use and regulation of tobacco and tobacco products. This also informed the quantitative phase enabling the findings of this research to provide an in-depth understanding of the issues under study.

Study setting - Nigeria

This study was conducted in Nigeria, one of the sub-Saharan states in Africa. Nigeria is located in the West African sub-region and is home to the largest group of Africans with a population of 154, 729,000 based on a 2009 estimate (World Statistics Pocketbook, 2010). Nigeria occupies a land mass of about 923, 700 km^2 with a population density of 173.94 km^2 as at 2010 (*Nigeria-Population density,* n.d).Youth within the age range of 15 and 24 make up about 20.57% of this population (30.92 million) according to estimated figures from the US Bureau of the Census, International Data Base (2010). The researcher could not lay hands on any specific documents to ascertain the estimated population of youth within the 18 and 24 years age bracket.

Nigeria is subdivided into thirty-six (36) states and one Federal Capital Territory (FCT- Abuja) but these states and the FCT are further grouped into six geopolitical zones (GPZs). Each of the two major regions of the country (North and South) has three GPZs each. The northern region is made up of the North-east, North-central and North-west GPZs while southern Nigeria comprises of the South-west, South-east and South-south GPZs. This study was conducted in the southern region of Nigeria.

Southern Nigeria

Southern Nigeria is made up of seventeen (17) states. The states in Southern Nigeria under their respective geopolitical zones are presented in Table 2. Southern Nigeria was chosen by the researcher due to its accessibility since the researcher is from that region and due to her familiarity with the common language of communication is this region.

Table 2: States in the three GPZs in Southern Nigeria

SOUTH-EAST	SOUTH-SOUTH	SOUTH-WEST
Abia	Akwa Ibom	Ekiti*
Anambra	Bayelsa	Lagos
Ebonyi	Cross River	Ogun
Enugu*	Delta*	Ondo
Imo*	Edo*	Osun
	Rivers	Oyo*

*States where survey was conducted

South-eastern (SE) Nigeria is home to the Igbo ethnic nationality and the predominant language spoken is *Igbo*. South western (SW) Nigeria is home to the Yoruba ethnic nationality and the predominant language spoken is *Yoruba* while the south-south (SS) has a diversity of smaller ethnic nationalities. Some of the ethnic groups in the south-south include the Edos, Efiks, Esakos, Ibibios, Aniomas, Ijaws, Esans, Isokos, Itsekiris, Ukwanis, Urhobos and several other smaller ethnic groups. Indigenous languages spoken in this region include; *Edo, Ukwani, Ika, Izon, Efik, Afema, Calabari, Ishan, Itsekiri, Urhobo, Ibo etc.* Major cities in southern Nigeria like Lagos, Benin, Ibadan and Port-Harcourt have people from virtually all parts and tribes in Nigeria coexisting. The Nigerian *Pidgin English* is also spoken in most parts of Southern Nigeria as a common means of communication. A profile of the states where the survey was conducted is presented in Table 3.

Table 3: Profile of survey locations

States (GPZ)	Towns/Cities where survey was conducted	Population 2008	Landmass Km^2	Population Density (Km^2)	Religious diversity	Predominant language spoken other English and Pidgin English
Delta (SS)	Effurun & Warri	4,112,445	18,050.00	227	Mostly Christian	Urhobo, Itsekiri, Ijaw, Ibo
Edo (SS)	Benin & Ekiadolor	3,233,366	17,450.00	184	Mostly Christian; few muslims	Edo
Ekiti (SW)	Ado-Ekiti & Ilawe-Ekiti	2,398,957	6,353.00	375	Christian and Muslim	Igbo
Enugu (SE)	Enugu	3,267,837	12,440.00	262	Mostly Christian	Igbo
Imo (SE)	Nekede & Owerri	3,927,563	5,430.00	725	Mostly Christian	Yoruba
Oyo (SW)	Ibadan	5,580,894	27,460.00	204	Christian and Muslim	Yoruba

Part source: National Population Commission 2006, Landmass complied from NPC Report, 1991 and Field Reports.

It should be noted however that among the southern states in Nigeria, only Osun State in the South-west has an operational law banning cigarette smoking in public places (Drope, 2011). This law came into operation in November, 2009 through the effort of the State's legislative arm of government. The effectiveness of the law could however not be ascertained in this study. The participating states in the survey were selected based on accessibility to the researcher and the fact that they do not currently have any state law on tobacco control.
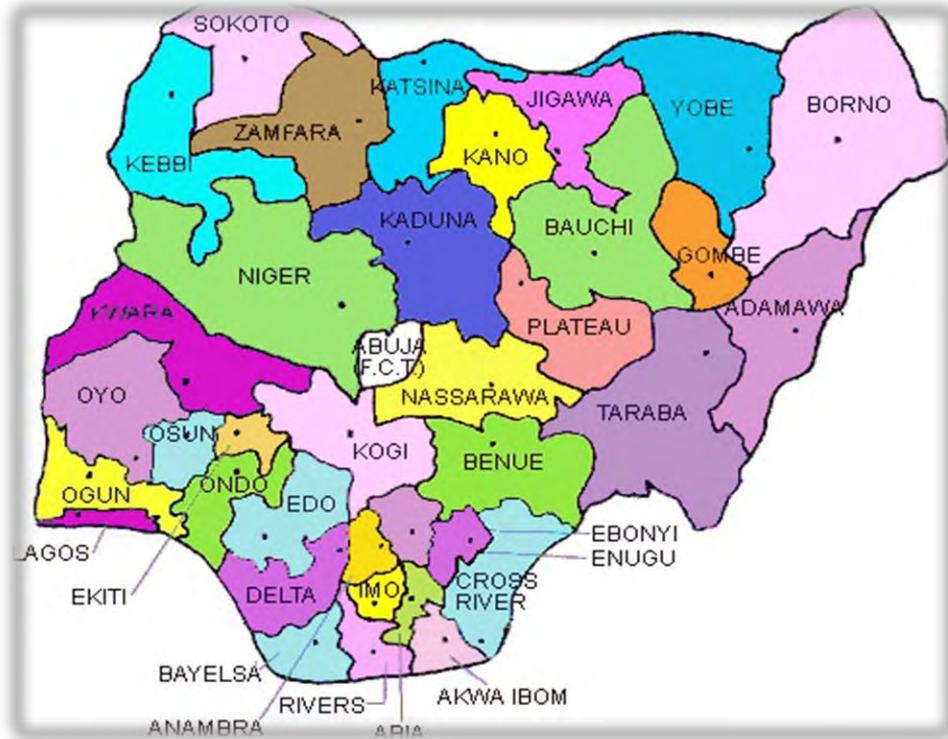
Figure 8: Map of Nigeria showing the 36 states and the FCT
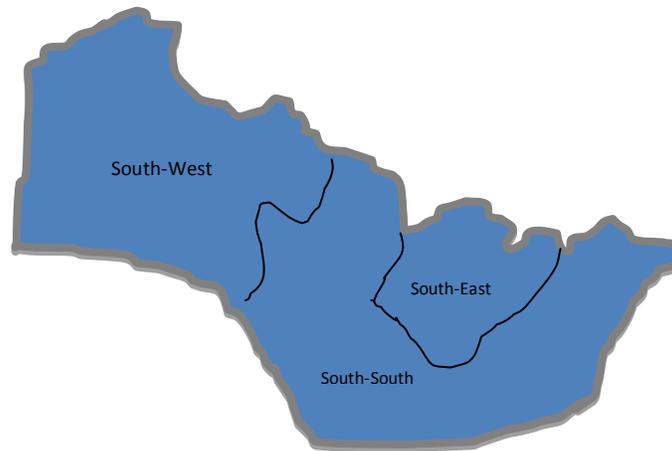
Figure 9: Extracted map of southern Nigeria showing the three southern GPZs

Sample, sampling technique and procedure

Study sample

For this study, the age range adopted for youth is 18 to 24 years. This falls within the definition of 'youth' by the Pan American Health Organization (PAHO) and the World Health Organisation (WHO) as documented by Breinbauer and Maddaleno (2005). This age group was chosen because the researcher wanted to ensure that individuals are not minors having found that most smokers (even those above 18 years) concealed their smoking behaviour from their parents. Youth aged above 18 years were chosen in order not to compromise ethical procedures as it was envisaged that smokers who are minors would not want their parents to become aware that they smoke making it a near impossibility to get parental consent if smokers who are below 18 years of age are to participate in this study. The older participants in this study are those who have good knowledge of happenings in Nigeria's political realm as well as those who have been working with the youth in NGOs (both are grouped as political analysts in this study). Community leaders who head smaller indigenous communities in southern region of Nigeria also participated in this study.

Sampling technique and procedure: Qualitative phase

In the first phase of the research, a purposive sampling technique was used in selecting participants. According to Henning, Rensburg and Smit (2004), this is similar to theoretical sampling as both look for people who fit the criteria of desirable participants. Purposive sampling is a non-probability sampling technique which involves the researcher selecting research participants who can shed more light on the issue under investigation (Durrheim & Painter, 2006). It allows the researcher to choose a case because it illustrates some features or

process in which the researcher is interested (Denzin & Lincoln as cited in Silverman, 2001). In this case, young smokers (aged between 18 and 24 years), community leaders in southern Nigeria as well as political analysts formed the research sample. However, the researcher made attempts to construct a heterogeneous sample of young smokers (with regards to GPZs) by making sure that there were participants from all the GPZs in Southern Nigeria.

A total of twenty-seven (27) persons were purposively sampled in this first phase of this study. Attempts were made by the researcher to ensure that the composition of this purposive sample was stratified into four (4) categories as follows: young smokers between the ages of 18 and 24, community leaders, government officials and political analysts. However, due to the busy political period at the time of data collection (Nigeria's 2011 general elections), efforts at getting government officials to participate in the study were not fruitful. Five community leaders, four political analysts some of whom are also involved in working with the youth in NGOs and eighteen (18) young smokers formed the actual sample for this phase of the study. A total of twenty-four young smokers were approached to take part in this study but only eighteen (18) were willing to participate. The 18 young smokers interviewed comprised of four (4) college students; three (3) university undergraduates; six (6) unskilled workers and five (5) skilled workers all within the 18 and 24 years age bracket. By sampling youth in these categories, the researcher attempted to obtain a sample of young smokers from different socio-economic and educational backgrounds to aid in having a broader picture of youth's experiences with smoking. The breakdown of demographic characteristics of the young smokers is presented in Table 4.

Community leaders were contacted through members of three purposively sampled indigenous communities in three states of Southern Nigeria namely: Edo (south-south GPZ), Ondo (south-west GPZ) and Anambra (south-east GPZ).

Table 4: Sample demographics of young smokers-interview participants (n=18)

Young smokers	No. of respondents
Age:	
Mean age	23 years
Age range	18 – 24 years
Gender:	
Female	0
Male	18
Mean age in years of young smokers	23.4
Mean age in years for initiating smoking	15.2
Category of respondents	
College students	4
Undergraduates	3
Skilled workers	5
Unskilled workers	6
R respondents who attempted quitting	17
Highest educational level attained:	
Tertiary education	5
Secondary education	11
Primary education	1
No. with close family members who smoke	17
No. with close friends who smoke	18

Sampling technique and procedure: Quantitative (survey) phase

This study also employed non-probability sampling technique in its second (survey) phase. Multi-stage quota sampling was employed in recruiting participants for the survey. Youth aged 18 to 24 years irrespective of their smoking status formed the population for this phase. Youth were first stratified according to their GPZs. In each GPZ, youth were sampled along four strata namely; skilled workers, unskilled workers, undergraduate students and college students (students from tertiary institutions which were not universities). Cluster sampling was used for the youth who were undergraduates and college students. All willing students in a department within a faculty in the institution sampled participated in the survey. Quota sampling which also involved the use of convenient sampling technique to get the actual sample was also employed in getting youth who were skilled and unskilled workers to participate in the study. Skilled workers were conveniently recruited from among young graduates who were currently serving in the National Youth Service Corps (NYSC). The NYSC is a programme designed by the Nigerian government which mandates all young graduates below the age of thirty to serve the nation for one year before being formally employed by any institution/organisation in the country. It was therefore more feasible to get skilled workers who are between the ages of 18 and 24 years among this group of workers. These skilled workers were approached during their weekly community service. Unskilled workers comprised of youth who did not receive academic training for the kind of job they do. These include motor cyclists, hair dressers, drivers, sales persons, receptionists, traders etc. They were recruited at their places of work which included building sites, shops and motor parks where they carry out their small businesses. Quota sampling has been described as a non-probability sampling method used when a researcher seeks

to get a predetermined number of some categories of the population to form the sample for a study (Durrheim & Painter, 2006; Neuman, 2011).

Power calculation

The software OpenEpi was used in calculating the sample size using the smoking prevalence of 32.8% obtained for adolescents in north-eastern Nigeria as stated in the most recently published peer review article on smoking prevalence among youth in Nigeria (Salawu, Danburam, Isa & Agbo, 2010). With a 99.0% confidence interval, a sample of 585 was suggested. Rounding this up to 600 and splitting among the three GPZs where the study was conducted yielded 200 respondents per GPZ (50 participants per category of respondents). However, after conducting a pilot study and experiencing about 86% return rate, the researcher decided to have an additional 10 participant per category for each GPZ. The final sample size involved in the survey was therefore 720 participants (60 participants per category of respondents).

The Sixty (60) youth sampled from each of the four categories in each of the three GPZs in southern Nigeria gave a total of two hundred and forty [240] youth from each of the three geopolitical zones. The study had to be repeated among college students in the South-South region after the research assistant employed failed to return the questionnaires and efforts to contact her yielded no fruits. A breakdown of the number of questionnaires returned per category is presented in Table 5.

At least two states from each geopolitical zone were involved in this survey (see Table 2). The States where the survey was carried out and their GPZs include: Edo and Delta States (South South), Enugu and Imo States (South East), Oyo and Ekiti States (South West). A total of five

hundred and fifty-seven (557) questionnaires were returned (giving a response rate of 77.4%) but only 550 were used in the analysis as seven (7) respondents did not meet the age inclusion criterion.

Table 5: Distribution of survey respondents

Category of respondent	South-East	South-South	South-West	Total
College Students	45	60	45	150
Undergraduates	54	56	45	155
Skilled workers	32	49	40	121
Unskilled workers	47	38	46	131
Total Respondents	178	203	176	557
Response rate (%)	74.2	84.6	73.3	77.4

Instruments for data collection

Phase 1 (Qualitative Phase):

In qualitative research, the researcher serves as an instrument for data collection (Ivankova et al., 2007). In this study, data collection by the researcher was also aided by the use of three different semi-structured interview schedules to guide the interview process for the three groups of participants in the qualitative interviews (see Appendices 4, 6 and 7). Open-ended and broad questions were constructed informed by the concepts in the three streams of the theory of triadic influence (TTI) as well as the idiographic purpose of qualitative research (Neuman, 2011) which is aimed at obtaining accounts which are detailed and unique to the participants. The interview

schedule for young smokers had questions that required the youth to recount how they started

smoking and their perception of the influence of culture, government policies, tobacco

companies and other personal and social factors on their smoking habits. The interview schedule

for the political analysts contained questions that probed into the current socio-political trends of

tobacco policies and how these are affected by tobacco companies and other socio-cultural

factors. Community leaders were required to answer questions mainly concerning the cultural

symbolism of tobacco and tobacco use in their community. The interview schedules served only

as guides to the researcher and not as scripts to allow for the exploration of new issues stemming

from the interview process. Personal data forms were also designed to capture the biographic

data of young smokers and older respondents (see Appendices 3 and 5).

Phase 2 (Quantitative Survey):

The research instrument for the quantitative phase of the study was a modified version of the

Global Youth Tobacco Survey (GYTS) questionnaire. The GYTS questionnaire is a World

Health Organisation (WHO) instrument for carrying out surveys to ascertain the prevalence of

smoking among youth. It has been widely used in many countries around the world including

Nigeria, though mainly among teenagers (Ekanem, 2008; Harbour, 2011; Koh et al., 2011; Minh

et al., 2011; Nelson, 2003). The US Centre for Disease Control (CDC) and prevention describes

the GYTS questionnaire as an instrument comprising of "core" country-approved questions

designed to gather data on the following seven topics;

- Prevalence of cigarette smoking and other tobacco use

- Knowledge and attitudes towards cigarette smoking

- Role of the media and advertising on the use of cigarettes

- Access to cigarettes

- Tobacco-related school curriculum

- Exposure to second hand smoke (SHS)

- Cessation of cigarette smoking (US CDC, 2010)

An eighth section on socio-cultural roles of tobacco was added to the GYTS during the modification process. Questions pertaining to cultural use of tobacco products, tobacco policy and other environmental or contextual factors influencing young people's smoking behaviour were incorporated into the core questions of the GYTS questionnaire. This instrument originally had fifty-four questions but the modified version eventually had 67 main questions as well as seven (7) questions in section A to capture the demographics of respondents. A copy of the modified GYTS questionnaire used for this study can be found in Appendix 8.

Reliability and validity of the instruments for data collection

The interview schedules

The three interview schedules were assessed and found to have face, construct and content validities by the researcher and supervisors. Since many questions in the three different schedules were asked across participants, the researcher was able to verify statements from three different angles or dimensions viz: the young smokers themselves, community leaders and political analysts/NGO officials. During the interview process also, the researcher's repetition of statements made by participants or paraphrasing of same during the interview process helped to facilitate her understanding of the participants' positions. This equally guaranteed that the

interpretations of respondents' statements by the researcher were verified on the spot by the participants themselves. This is consistent with Kvale's submission as cited by Henning, Rensburg and Smit (2004) that "validation depends on good craftsmanship in an investigation, which includes continually checking, questioning, and theoretically interpreting the findings" (p. 148). The researcher's skill as a counselling psychologist was very helpful during the interview process as this ensured skilful probing, paraphrasing and reflection during the interview process.

Trustworthiness

Several scholars have argued and tried to decipher the thin line that links reliability and validity especially in qualitative research (Paton, Lincoln & Guba in Golafshani, 2003). Golafshani (2003) assert that trustworthiness is crucial in the quest to ensure reliability in qualitative research. Trustworthiness in data analysis according to Nieuwenhuis (2007) can be enhanced by various means. Some of the ways in which the trustworthiness of the data analysis process of this research was improved include obtaining of data from three different sources (namely, young smokers, community leaders and political analysts and NGO officials), verifying raw data during the interview process, back translation of translated interviews and inter-coder consistency. The researcher involved two independent coders in coding some of the data to find the themes emanating from the interviews. These research assistants were given a copy each from the three categories of respondents as well as the constructs for the various streams of influence identified in the theory of triadic influence (TTI) by Flay, Petraitis and Hu (1999). Codes from the independent coders were compared with the initial codes of the researcher and discussed and consensus was reached by all with regards to the final codes to be used.

The modified GYTS questionnaire

The validity and reliability of the modified GYTS questionnaire was established before its use for the actual survey. This was achieved through a pilot study conducted among thirty (30) randomly sampled first year undergraduate students from the University of Benin, Nigeria aged 18 to 24 years who were not part of the final study sample. The University of Benin was used for this pilot study because it is a federal University and students in this institution come from all parts of the country. The use of first year students who are expected to be within the lower range of the age range of interest in this study was to ensure that the research instrument would be suitable for other categories of participants as well. Response rate for the pilot study was 86.7% The Cronbach's alpha coefficient obtained for the entire modified GYTS questionnaire was .84 using a split half reliability procedure. The reliability coefficients for the various scales and indices constructed for quantitative analysis are presented in Table 5.

It should be noted that though it is widely recommended that a Cronbach's alpha coefficient of above .7 be accepted as an indication of good reliability (DeVellis in Pallant, 2010), coefficient values have been found to be quite sensitive to the number of items making up a scale with low alphas commonly reported for short scales (Pallant, 2010). All the scales and indices constructed in this study had less than 10 items each. In such cases, Pallant advices that the mean inter-item correlation be reported. The acceptable range of values for the mean inter-item reliability is recommended to be between .2 to .4 (Briggs & Cheek in Pallant, 2010). Worthy of note however is the assertion by Schmitt (1996) that "there is no sacred level of acceptable or unacceptable level of alpha. In some cases, measures with (by conventional standards) low levels of alpha may still be quite useful" (p. 353).

Triangulation of the study

Triangulation has been defined by Golafshani (2003) as a means of improving the validity and reliability of research or assessment of findings. The word 'triangulation', according to Henning et al. (2004) "is supposed to indicate that by coming from various points or angles towards a 'measured position' you find the true position" (p. 103). This study involved three categories of respondents namely; community leaders, political analysts and key officials of NGOs working towards a tobacco free Nigeria and other areas of youth development even though this study focuses mainly on youth aged 18 and 24 years. The inclusion of these categories of respondents therefore served the purpose of triangulating the data obtained in this phase of the research. This was ensured by including in the three interview schedules some questions cutting across the different groups of respondents. Further, Maree and van der Westhuizen (2007) explain that triangulation could necessitate researchers to confirm the extent to which conclusions based on qualitative sources are supported by a quantitative perspective, and vice versa. Thus the use of a mixed methods research design also served the purpose of triangulation (Patton in Golafshani, 2003; Neuman, 2011) in this research.

Data collection procedure

Data collection for this study took place from February to July, 2011 after permission had been granted to carry out the study by the University of KwaZulu-Natal research ethics office (see Appendix 9). Data were collected in two phases which are discussed below.

Phase 1 (Qualitative study):

In the first phase of this study, qualitative interviews were conducted using the Interpretative Phenomenological Approach. Interpretative Phenomenological Analysis (IPA) was chosen over

other phenomenological approaches to qualitative research because its features, goals and method were more likely to help the researcher achieve the objectives of the research. This objective is mainly to understand the experiences of young tobacco smokers within their socio-cultural and socio-political contexts. The researcher also sought to understand among other issues, the symbolic meanings ascribed to tobacco in various communities through the interviews with community leaders and elders, as well as the experiences of participants concerning the issues of laws surrounding tobacco use in Nigeria.

Other advantages of using the IPA in this research include:

1) IPA aims at exploring in a flexible manner and in details, an area of interest (here tobacco smoking).
2) It has its root in psychology.
3) It is idiographic in nature as it focuses on the detail elements reflected in the subjective experience of the individual's world (Potter as cited in Silverman, 2001).

The researcher first attempted to use snowball method in recruiting participants for this phase but this was unsuccessful due to fear on the part of prospective participants. In conducting the interviews with consenting participants, the researcher first established rapport and obtained their permission to record the interview. Afterwards, the purpose of the study was explained with the aid of the consent form and participants informed of their rights in participating in the study. They were thereafter requested to sign the informed consent form (see Appendix 2) as a proof of their voluntary participation in the study before the commencement of the interview. The interviews took place in a variety of settings depending on the preferred choice of each participant. The interview sites included participants' homes, drinking corners and offices. Each

interview was guided by an interview schedule and the interview session lasted for about 60 minutes per participant. Interpreters were used where the language spoken by the participant was not English or Nigerian Pidgin English as was the case with the community leaders.

Interviews were done at the residences of the community leaders. The interview with the South-west community leader turned out to be a focus group discussion involving three participants. Two other elders of the community who were visiting the community leader (earlier contacted) at that time also volunteered to participate in the interview since it concerned their cultural practices. In all the interviews with the leaders of the three communities in southern Nigeria, the gate keepers who arranged the meetings served as interpreters. The languages used for these interviews were; Edo (South-south community leader), Yoruba (South-west community leader), Igbo (South-east community leader), English language as well as Nigerian Pidgin English (which is more of a *lingua franca* in southern Nigeria). For all other participants in this study, interviews were conducted in English language and Nigerian Pidgin English. The researcher who is from southern Nigeria is very fluent in the Nigerian Pidgin English as well as English language and conducted these interviews herself.

Participants were adequately compensated for their time (₦200 each i.e. an equivalent of about R10 was given to each youth who participated) and the cost of their transportation to their choice of interview location (where applicable) while a modest non-monetary gift was given to each of the community leaders and political analyst as it is customary for elders during circumstances such as this in Nigeria.

All interviews were tape recorded using a voice recorder with the permission of participants. Confidentiality of information as well as anonymity of the participants was maintained throughout the process of the research. Code names were used to ensure this. An example of a code name used is "YS-SW1" for Young smoker (YS), skilled worker (SW)-participant one (1). Also, interviewees were requested to complete the personal data form in order to capture their demographic data (see Appendix 3 for young smokers and 5 for older respondents).

Phase 2 (Quantitative survey):

The survey instrument was self-administered for most of the respondents. However, it was administered by interviewers for some unskilled workers due to their literacy level. A total of seven research assistants were recruited in the various GPZs to carry out the survey. Prior to actual data collection, the research assistants were trained by the researcher on how to administer the questionnaires especially to the unskilled workers who may need more assistance due to expected low level of literacy.

The questionnaire was written in English language which is Nigeria's first official language. Pidgin English was however used to explain the questions where the participant asked for assistance. For survey participants who were recruited from tertiary institutions and meetings (in the case of the NYSC members during their monthly meetings), the questionnaire was administered in groups. For all other participants, it was administered individually. The questionnaire took approximately 30 minutes to complete but a little longer for less educated participants. The need to explain the aim of the study prior to obtaining consent for participation was a key aspect of the training of research assistants. Ensuring that respondents are those within the age range under study in this research was also an important issue addressed during the

training of the research assistants. For example, the decision to specifically conduct the survey of skilled workers among NYSC members (who are Nigeria's youngest graduate workers) was reached during the training.

Data analysis

Phase 1 (Qualitative study):

Socrates asserts that words have the power to reveal or conceal, thus promoting the message in an ambiguous way (Couzens Hoy as cited in Silverman, 2001). As is traditional to the idiographic quality of IPA, the researcher sought to explore among other areas, the diverse roles played by the tobacco in the life of communities in Nigeria and how these influence smoking behaviour of youth. Narratives of smoking initiation and their experiences were also particularly explored to note various influences on youth smoking behaviour.

Drawing on one of the strategies for using theory in IPA work as mentioned by Storey (2007), the researcher employed an *a priori* theoretically committed approach to data analysis in this phase. According to Storey (2007), "this involves choosing a single theory in advance but using it to inform rather than drive the analysis so no attempt is made to test the theory" (p. 56). Consequently, the theory of triadic influence (TTI) served to inform the analysis of the data. Storey (2007) outlines four stages in doing IPA. These include:

Stage 1: Initial readings of the transcript

Stage 2: Identifying and labelling themes

Stage 3: Linking themes and identifying thematic clusters

Stage 4: Producing a summary table of themes with illustrative quotations

By reading and re-reading the transcripts, coding and noting significant points of convergence, divergence and repetition, the researcher immersed herself in the data. After this systematic qualitative analysis of the transcripts case by case, the points and codes noted which represented recurring ideas of concern or constructs that matter to the participants and their communities, were organized into themes with the aid of the software Nvivo version 9.1. Themes were then grouped according to their relevance to the three different streams of risk influences (intrapersonal, interpersonal (Social) and Cultural/environment) and immediate predictors according to the TTI. These formed the superordinate themes.

It should be noted that though this research was guided by the theory of triadic influence, theory-wise, it did not regimentally follow the constructs explained by this theory. This is because the researcher was open to new socio-cultural constructs that emerged from the field while carrying out this study. Airhihenbuwa and Obregon (2000) had contended that there is need to develop innovative theories and models that take into account regions' contexts due to the contextual differences in locations where currently existing 'classical' models are applied.

Phase 2 (Quantitative survey):

Statistical data analysis was performed with the aid of the software; Statistical Package for the Social Sciences (SPSS) version 19.0. Initial data entry was done with the help of a research assistant. Data was entered in this software using numerical codes for all variables except the age of respondents which were entered in their original form. Before the actual analysis of the data, the researcher screened them for errors by running frequency for all variables. Values lying

outside expected range of values were checked and corrected and some wrongly entered values were identified and corrected. Five respondents were deleted due to their ages being beyond the age range (18 to 24 years) used for this study.

Coding and recoding of variables

For the demographic variables in section A of the modified Global Youth Tobacco Survey (GYTS) questionnaire, gender was coded as 1=male and 2=female; age was entered in its original form. Geopolitical zone (GPZ) of origin and residence were coded as 1=South-east; 2=South-south and 3=South-west, other GPZs were coded as 4. The seventeen (17) states in Southern Nigeria were arranged in alphabetical order and coded 1 through 17 according to their placement in this order; other states were coded as 18. Category of employment was coded as; 1=college student; 2=university undergraduate; 3=skilled worker and 4=unskilled worker. These were recoded for analysis as 1=students (i.e. college and university students); 2=skilled worker and 3=unskilled worker. Respondents' highest level of educational qualification (educational attainment) was coded as 1=primary education; 2=secondary education and 3=tertiary education. Due to the small size of those with primary education (n=14), educational attainment was re-categorized for analysis. Primary and secondary education was coded as 1=basic education and tertiary education was coded as 2. Initial coding of all variables in section B was done using codes 1 to 10 for options 'a' to 'j' respectively.

Smokers in this study were those who had smoked cigarette within the last 30 days. To ascertain the current smoking status of respondents, the question; "during the past 30 days, on the days you smoked, how many cigarettes did you usually smoke?" was recoded. Initial code for option 'a' (I did not smoke cigarettes during the past 30 days) = 1 was recoded as 0 for non-smoker and

codes 2 through 7 (for options b – g) as 1=smoker. The recoding of other variables is explained in the sections relating to the scales and indices for which they were recoded.

Construction of scales and indices

Six scales and three indices were constructed for analysis to investigate different relationships in the data. These are presented under their appropriate headings. The central tendencies of all scales and indices as well as the normality of their distribution were also explored. Because of the skewness of most of the scales, they were categorized for the analysis involving Chi-square test and logistic regression. Table 6 is a summary table of the descriptive statistics of the scales and indices (before categorization). See Appendix 1 for more detailed presentation of the construction and categorization of these scales and indices.

Social acceptance of smoking for gender groups

To investigate social acceptance of smoking behaviour for the different gender groups, questions 18, 19, 21 and 22 were recoded as 1= less friends (or less attractive); 2= no difference and 3= more friends (or more attractive). The recoded values for questions 18 and 21 were summed to construct the social acceptance for boys' smoking scale (SABSS) while the recoded values for questions 19 and 22 were summed to construct the social acceptance for girls' smoking scale (SAGSS).

Intention to smoke scale

An intention to smoke scale (ITS) was constructed by summing the values of questions 15 and 16. The intention to smoke scale was rated and recoded for analysis as; 1-4=1 (no to low probability) and 5-8=2 (moderate to high probability).

135

Exposure to second hand smoke (SHS) scale

The SHS exposure scale (ESHSS) was constructed by summing the values of questions 30 and 31. This scale was recoded for analysis as low (values 1-3), moderate (values 4-6) and high (values 7-10) level of exposure.

Table 6: Descriptive statistics of scales and indices

Scale/ Index	No. of items	Reliability Coefficient		Min/Max. Range of values	Mean	Median	Mode	SD	Variance
		Mean Inter-item reliability	α**						
Social acceptance for boys smoking scale	2	.11	.19	0 – 6	3.22	3	2	1.27	1.62
Social acceptance for girls smoking scale	2	.30	.46	0 – 6	2.85	4	2	1.24	1.54
Culture index*	3	.44	.69	1 – 6	3.88	4	3	1.35	1.83
Anti-smoking message scale	2	.41	.57	1 – 6	3.73	4	4	1.29	1.66
Tobacco media advertisement scale	5	.36	.74	3 – 15	8.33	9	10	2.49	6.21
Intention to smoke scale	2	.64	.77	0 – 8	3.09	2	2	1.82	3.32
Exposure to SHS scale	2	.63	.77	1 – 10	4.15	4	2	2.38	5.68
Knowledge index*	6	.17	.55	2 – 12	9.31	10	10	1.75	3.06
Policy index*	5	.37	.75	1 – 10	7.52	8	9	2.10	4.39

Different attributes of the measure computed; ** Cronbach's alpha

Policy index

The policy index presents respondents' perception about the effectiveness of tobacco control policy in curbing smoking prevalence. Questions 32, 60, 61, 64 and 65 were recoded into dichotomous variables with "no" and "not sure" responses coded as 1=no and "yes" response

coded as 2. The recoded items were then summed to construct the policy index with values ranging from 1 to 10. A rated policy index was made by recoding values 1 to 4 as 1= low perception, 5-7 as 2=moderate perception and 8-10 as 3=high perception.

Knowledge index

The knowledge index was used to weigh the level of respondents' knowledge on the impact of smoking on health and well-being. Questions 17, 20, 23, 24, 28 and 29 were recoded into new variables according to their correctness. Correct responses were coded as 2 and incorrect responses were coded as 1. These questions were recoded as follows; question 17 (3 & 4=2; 1 & 2=1); question 20 (2=2; 1 & 3=1); question 23 (3=2; 1& 2= 1); question 24 (3 & 4=2; 1 & 2=1); question 28 (1 & 2=2; 3 & 4= 1); question 29 (3 & 4=2; 1 & 2= 1). These six items were summed to form the knowledge index with values ranging from 2 to 12. The knowledge index was re-coded for analysis by categorizing the values to make a rated knowledge index with values ranging from 2 to 7 rated as 1=low knowledge, 8 to 9 rated as 2=moderate knowledge and 10 to 12 rated as 3=high knowledge.

Culture index

This measured the level of cultural activities in which cigarette and other tobacco products are used in respondents' communities. Questions 55, 56 and 57 were recoded and used in constructing this index. These questions were recoded as 2=yes and 1=No. The summing of these three items yielded a culture index with values ranging from 1 to 6. This index was rated for analysis as 1-2 =1 (low cultural use); 3-4=2 (moderate cultural use) and 5-6=3 (high cultural use) to form the rated culture index.

Anti-smoking message scale

The anti-smoking message scale (ASMS) sought to measure respondents' exposure to anti-smoking media messages. Questions 39 and 40 were recoded as 3=A lot; 2=A few (or sometimes) and 1=none (or never). These recoded variables were summed to form the ASMS with values ranging from 1 to 6. This scale was rated for analysis as 1-2=1(none); 3-4=2 (few) and 5-6=3 (a lot).

Tobacco media advertisement scale

The Tobacco media advertisement scale (TMAS) measured respondents' exposure to pro-tobacco advertisement in the media. Five items formed this scale. Questions 41, 43, 44, 45 and 46 were recoded as follows; questions 41, 43 and 46 (1=1; 2=3; 3=2 and 4=1) and questions 44 and 45 (1=3; 2=2; 3=1). The summing of these five items yielded the TMAS with values ranging from 3 to 15. These were rated for analysis as 3-6= 1 (low exposure); 7-10=2 (moderate exposure) and 11-15=3 (high exposure).

Dummy variables

Dummy variables were created in order to carry out logistic regression analysis using categorized (rated) scales or indices. This involved creating dichotomous variables comparing each category of the index or scale in question with others of the same variable. For example the rated knowledge index initially had three categories of responses viz; low knowledge, moderate knowledge and high knowledge coded as 1, 2 and 3 respectively. Dummy variables created for this variable were therefore; low knowledge coded as 1 and others coded as 2; moderate knowledge coded as 1 and others coded as 2 and high knowledge coded as 1 and others coded as

2. This was also done for the following variables; employment category, GPZ of origin, GPZ of residence, rated TMAS, rated SHS exposure scale, rated ASMS, rated policy and rated culture indices. This exercise was particularly helpful in knowing where the differences between these categories existed.

Quantitative data analysis

Analyses for risk influences investigated are presented in their respective sections. The level of significance for all tests conducted was $p \leq .05$ (two-tailed).

Socio-demographics of respondents

Descriptive statistics (frequency and percentage) were used in exploring respondents' socio-demographic data. These include respondents' age, gender, GPZ of origin, GPZ residing, highest level of education attained and employment category.

Smoking behaviour

The smoking behaviour of respondents was explored in terms of their socio-demographic characteristics using Chi-square (χ^2) test for independence. Frequency, percentage, pie chart and bar graph were used in exploring smokers' rate of cigarette consumption, their preferred brands and their intention to quit and quit attempts.

Intrapersonal risk influences

Intrapersonal (personal) risk influences investigated using the modified GYTS questionnaire were: level of knowledge on the negative impact of smoking on health and well-being and

respondents' age, gender, smoking status and employment category, trial behaviour, educational attainment, intention to quit and quit attempt in the past year as well as GPZ of origin and GPZ of residence. These variables were investigated using (χ^2) test for independence. The effect size of the relationship between respondents' level of knowledge and each of these demographic variables of concern were also computed.

Respondents' self-efficacy to refuse smoking was also explored under this stream of influence. Due to the skewness of this variable, a Mann Whitney U test which is a non-parametric test was conducted to determine the self-efficacy to refuse smoking among smokers and non-smokers. Self-efficacy of non-smokers was further investigated using descriptive statistics (i.e. frequency and percentage).

Interpersonal (social) risk influences

The influence of the smoking status of parents and closest friends on youth smoking behaviour was investigated using χ^2 test for independence, frequency, bar and pie graphs.

Cultural/environmental risk influences

The respondents' exposure to SHS was explored alongside their smoking status using (χ^2) test for independence. Social acceptance for smoking by gender was also investigated using both the independent and paired samples t-test. The relationship between the presence of various cultural practices and the GPZs was also investigated using χ^2 test for independence. Respondents' perception of policy issues on tobacco regulation was explored using descriptive statistics (i.e. frequency and percentage).

Immediate predictors of smoking according to the TTI

The theory of triadic influence identified three immediate predictors of behaviour. Regarding smoking, these are related behaviour, trial behaviour and intention or decision to smoke. Under this section their predictability of smoking behaviour was not tested but they were explored statistically to find out how respondents measure in these variables.

Related behaviour was explored using frequency and bar graph while trial behaviour was explored using frequency only. Intention to smoke was also explored using Chi-square test for independence with Yates continuity correction. Further investigation of respondents' intention to smoke by their employment category and smoking status was carried out using frequency and bar graph.

In order to investigate the impact of a number of factors on the likelihood that respondents would report to have tried smoking, logistic regression using backward variable selection with twenty-six (26) initial variables (8 variables in their dummy versions and 2 other variables) was carried out. These variables were gender, intention to smoke and three (3) dummy versions (see section on creation of dummy variables below) of each the following variables; employment category, GPZ residing, GPZ of origin, knowledge beliefs on smoking, exposure to pro-tobacco media adverts, exposure to anti-smoking media messages, exposure to SHS, perception on tobacco policy and cultural use of tobacco. These variables also had a VIF of less than 5 indicating acceptable level of colinearity. Using a backward variable selection procedure, ten variables were found to be statistically significant at the end of the procedure. These variables were gender, low knowledge belief, moderate knowledge belief, moderate pro-tobacco media

exposure, low SHS exposure, no anti-smoking media exposure, moderate antismoking media exposure, moderate pro-tobacco cultural practices, intention to smoke and studentship.

Intention to smoke was also explored using χ^2 test for independence with Yates continuity correction. Further investigation of respondents' intention to smoke by their employment category and smoking status was carried out using descriptive statistics (percentage and frequency) and bar graph.

Predictors of smoking

To investigate the predictors of smoking among southern Nigerian youth, logistic regression was carried out to assess the influence of a number of factors on the respondents' smoking status. An initial thirty (30) variables which included three original variables (i.e. age, gender, and intention to smoke) and three dummy versions each of nine other variables namely employment category, GPZ of origin and GPZ of residence, Knowledge belief, pro-tobacco media exposure, exposure to SHS, exposure to antismoking media messages, perception on policy effectiveness and pro-tobacco culture were investigated using Chi-square (χ^2) test for independence. Eight variables were found not to be statistically significant at this first stage of preliminary investigations. Colinearity investigations of the remaining twenty-three variables using linear regression revealed three with Variance inflation factor (VIF) above 5 and three others not tolerated by the model. Sixteen (16) variables met the criteria for inclusion in the initial model. A backward variable selection procedure was then used with these 16 variables forming the initial regression model. Variables were excluded from the model stage by stage beginning with those with the highest p value (level of least significance). This procedure was concluded when all variables in

the model were found to be significant. Four variables: moderate exposure to SHS, high exposure to SHS, high exposure to anti-smoking media message and intention to smoke were found to be significant at the end of this procedure.

Also, respondents' perception on the influences for youth's smoking behaviour was investigated under this section using frequency and bar graph on one variable in the modified GYTS questionnaire (Question 62).

Effect sizes

The effect size for variables with significant associations was also investigated to know the strength of the association or the magnitude of the influence of the independent variable (Pallant, 2010). This value ranged from 0 to 1 and is interpreted as small, moderate or large effect depending on the test and according to Cohen in Pallant (2010).

Effect size for Chi-square test/crosstabulation

The Cramer's V and *phi* coefficient values were used to explore the effect sizes of associations involving variables investigated using the χ^2 test. Cramer's V coefficient (φ_c) for effect size is interpreted as; .01=small; .30=medium; .50=large (for two categories). Small=.07; medium=.21; large=.35 (for three categories). Categories are calculated by subtracting one from the number of categories in rows (R-1) and columns (C-1); the smaller value between both is used. When this value is equals one, two or three, the number of categories will be two, three and four respectively (Cohen in Pallant, 2010). The *phi* (ϕ) coefficient value is interpreted in the same way as the Cramer's V coefficient but this is used for 2 by 2 tables.

Effect size for Student t-test

The effect size for the independent samples t-test (partial eta squared) was calculated with the formula; eta squared $(\eta^2) = t^2/t^2 + (N1 + N2-2)$; where t is the t-test value, *N1* is the sample size of the male group and *N2* that of the female group.

For the paired sample t-test, the effect size was calculated with the formula;

Eta squared $(\eta^2) = t^2/t^2 + (N-1)$; where t is the t-test value and *N* the sample size.

The interpretation for the effect size (eta squared; η^2) value for t-tests according to Cohen in Pallant (2010) is; .01=small effect; .06=moderate effect and .14=large effect.

Effect size for Man Whitney U test

The effect size of the Man Whitney U test was calculated using the formula; r =z / square root of N; where N=total number of cases and z, the value reported in the SPSS output for this test. This is interpreted as .1=small effect; .3=medium effect and .5=large effect.

Ethical considerations

Permission to carry out this research was obtained from the Research Ethics and Higher Degrees Committees of the University of KwaZulu-Natal. The research protocol received approval with reference number HSS/1485/011D (see Appendix 9).

Written informed consent was obtained from participants in the first phase (see Appendix 2) and code names were given to each of them to ensure anonymity and confidentiality. The consent form had information about the topic, aim and objective of the research, method and procedure of data collection and storage. Participants were also informed of their freedom to withdraw from

the research at anytime if they so wished. They were equally assured of the confidentiality of information and anonymity of their identity.

In the second phase, a brief about the topic and the purpose of the research was added to the first page of the research instrument (see Appendix 8) which also included instructions on how to complete it. Participants were also informed of issues around confidentiality and the need for honest responses. In addition to the information provided in the survey instrument, participants were verbally informed about the aim of the study, voluntary participation and their rights to decline participating in the research anytime even if initial consent was given. Participants who did not consent initially to participate in the study were asked not to accept the survey instrument from the research assistants. It is assumed that an unreturned questionnaire was an indication by the participant not to continue his/her participation in the study.

Storage of data

As mentioned earlier, all interviews were tape recorded using a voice recorder and transcribed verbatim with the permission of participants. Audio files of interviews were then transferred to compact discs (CDs) for storage. These will be kept safe for at least five years in a locked cupboard in the University of KwaZulu-Natal and destroyed afterwards. Due to the large amount of questionnaires used in this study, all filled questionnaires used in the survey were kept safely in Nigeria under the custody of the Head of School; Immaculate Conception College, Benin City after the data had been captured in a summary document. The Head of School was asked to sign a document to ensure that these were kept safe and secured and would be presented on demand whenever the researcher has a need for them. Electronic versions of both the qualitative and

quantitative data were safely stored in the researcher's personal laptop and pass-worded to control their accessibility to those not directly concerned with this study.

Conclusion

The research design, the study setting, sample and sampling procedure, instruments for data collection and method of data collection and analysis for the two phases of this study have been discussed in this chapter. Also discussed were the reliability and validity of the data, data storage and ethical considerations.

CHAPTER FIVE

QUALITATIVE FINDINGS

Introduction

This section presents the findings from the qualitative phase of this research. Results from this phase are presented here in line with the relevant constructs (presented here as themes) in the three broad streams of influence and the immediate predictors (influences) as suggested by the Theory of Triadic Influence (TTI) which guides this study. Code names are used for participants and verbatim quotes are presented in italics.

Results in this study have been categorised guided by the 3 X 3+1 Matrix of the TTI (Flay, Petraitis & Hu, 1999). However, only the streams of influence as well as the immediate predictors of the TTI are used in presenting these results. These serve here as superordinate themes (made up of the three streams of influences as well as the immediate predictors [influences] of smoking). Themes presented under each of these superordinate themes as well as their subthemes (where applicable) correspond to specific findings in this study. The superordinate themes are outlined below.

- Cultural/environmental risk influences;

- Interpersonal (social) risk influences;

- Intrapersonal (personal) risk influences;

- Immediate predictors (influences).

Cultural/environmental risk influences

This stream of influence reflects many of the socio-cultural or macro-environmental factors contributing to positive attitudes towards smoking (Flay, Snyder & Petraitis, 2009). In some instances however, some of these factors such as the negative perception of females smoking, serve as protective factors against smoking. Findings within this stream are discussed within their themes and subthemes.

a. High prevalence estimates

All young smokers interviewed were of the opinion that cigarette smoking is a common phenomenon in their community especially among the youth. Twenty-seven individuals participated in this study (adults and youth). Twenty-five (25) of the participants believe that the prevalence rate of smoking in Nigeria is high and increasing compared to the past. Though it was also said that smoking is high among adults, participants noted that present realities show that more youth are involved in cigarette smoking than older adults especially the youth within the 18 and 24 years age bracket.

> **PA 2:** *Before now, it wasn't so prevalent but I think it is becoming more prevalent.*
>
> **YS-US 2:** *As a matter of fact, it is more prominent among young people. Compared to the older ones, it is more prominent among young people. Within that age bracket you are considering.*
>
> **YS-SW 1:** *Wow...I mean almost every door...at least...let me say out of five, in every youth you have in my community area...out of five, let me say four. Just one will not be smoking something.*
>
> **YS-USW 5:** *I do see them, they are many...even when you go to my brother's store...people who smoke are many there...very young boys.*

In the opinion of one community leader, cigarette is seen as the form in which the youth consume tobacco while the old men consume snuff.

> **SWCL 1:** *Yes, actually the youth smoke cigar... they don't smoke the tobacco as the old people used to. The old people smoke in pipe while the youth now smoke in the 'English form' which is called cigarette.*

Participant YS-SW4 though a smoker, seemed to be in some kind of shock at the increasing rate of smoking and the change in the societal attitude towards smoking; from smokers being stigmatised to being tolerated.

> **YS-SW 4:** *Yes, this thing is even getting out of hands now. In the community, cigarette smoking does not look as if there is anything attached to it.*

b. *Gender and smoking*

While most participants were of the view that the prevalence of smoking seems to be increasing among the youth of both genders, the rate of increase among females was reported to be lower compared with the males (see interview extract from participant PA4 later in this section). Participants reported that it is still not common to see females smoking in public and the researcher did not see any female smoking in public during the entire period (6 months) of the fieldwork. One participant mentions that female smokers can usually be found at night in clubs known to be the hang-outs for prostitutes. Attempts by the researcher to find young female smokers (outside this setting i.e. night clubs) to participate in this study were not successful. Participant YS-SW4 however reports that more females are now being seen smoking at bars.

> **YS-SW 4:** *People don't hide any longer. And even surprisingly sometimes you go to a bar, you go to a club, even the girls they even smoke like men now.*

On the society's perception of females who smoke, this study found that females who smoke are viewed from two angles none of which is positive. When from a wealthy family, a female who smokes is seen as having acquired it from western cultures to which she has probably been exposed. However, when the female smoker is from an average or low socio-economic background, she is perceived as a prostitute. Findings in this study also suggest that the society is more tolerant of a male smoker than a female who smokes. This perception was attributed to be the reason behind the low prevalence of smoking among the female gender in Nigeria.

> **YS-USW 5:** *A woman is not supposed to smoke...*

> **INTERVIEWER:** *But generally in Nigeria, how are women viewed – female smokers?*
> **PA 2:** *They are seen as prostitutes, "lay abouts". But this depends on the class. If it is a rich man's child, it could be viewed as; okay, because they are rich but when a poor person, an indigent person or a person from low economic background smokes, they see her as a prostitute. So there is also this form of discrimination between; these youth are the youth of the elite whereas these youth are the youth of the poor so… these ones are prostitutes, these other ones have western influence.*

> **PA4:** *But then, among girls it is still very negative. Most girls that smoke are not seen as marriageable materials and especially around here, marriage is seen as an important part of our lives so I think that's part of the reason why it is still not very high among women…young ladies… though there has been like an increase but not so much compared to the men. So…for many boys they still engage in it but for the girls it is still very negative.*

Cigarette smoking has never been seen as an acceptable behaviour for females in Nigeria.

c. Unemployment as a risk factor for smoking

Low employment rate and lack of government's assistance to the youth were identified by participants as risk factors fuelling the increasing prevalence of cigarette smoking among them. Participant PA2 particularly mentions that youth aged between 18 and 24 years are

more vulnerable since this age range coincides with their finishing secondary or university education as the case may be. With no job to keep them busy, the youth tend to be lured by their friends more easily and spend time at bars where they get introduced into smoking or to perpetuate their smoking habit.

> **PA 2:** *Yes…between ages 18 and 24, they are coming out of school and not being able to get jobs and out of frustration, a lot of them go into the streets and mingle with people and then their behaviours are influenced. A lot of them smoke…*

Some young smokers also pointed to this fact that lack of jobs influence young people to start smoking as seen in the following excerpts.

> **INTERVIEWER:** *Is there anything that you notice that government is doing about it?*
>
> **YS-SW 2:** *I don't know if they are doing anything. To the best of my knowledge, most of the time I come out, you will see a young man, a graduate of 20, 21, 22, no job…. You will see the person getting up, meeting friends, …in short not going to the office or working, by so doing they get involved in smoking, drinking and all the rest of them. So there is no job. There is no opportunity for the graduates to work again. That is the thing that I see that is causing it.*
>
> **YS-USW 5:** *When the government is helping you, you will not have this time as you have it now…. I have my own job…they should give us work…they should give the funds so that there will be work.*

d. Lack of legislation on tobacco control

In Nigeria, there has been one tobacco law promulgated in 1990 by the then Military government; the *Nigerian Tobacco Control Act of 1990*. This law, as noted by participants and as mentioned earlier, is presently non-operational in the entire country. It is a law only in the books. It is a defunct law. One state in the South (i.e. Osun) and the Federal Capital Territory (FCT) have however passed state-owned laws on tobacco control. The assessment

of the implementation and impact of these state-owned laws is beyond the scope of this research.

> **PA 4:** *No it was not operational. It was there but it wasn't enforced.*

> **PA 2:** *I don't know about enforcement but the law is there, it is existing so I don't know...at the beginning, they were trying to enforce it. Most of the laws we have in Nigeria,...the enforcement is always the problem,...so implementation...it is not being implemented because if you go to public places...then they followed it up... you couldn't smoke in emm...public transport, may be you are in a taxi, you couldn't smoke. In a school like this, you couldn't smoke but now people smoke because there is really no follow up on implementation...*

Reasons for the non-implementation of the previous national legislation on tobacco control were outlined as: lack of social structure, lack of awareness, lack of an enforcing system and attendance to things perceived to be of greater priority by the government, etc.

> **PA 4:** *Maybe because there was not enough awareness...not enough people knew...because most of these laws they pass every day, is it not when people are aware that they can even claim right? It was weak and then there was nobody that was really pushing it. It was just there...It wasn't enforced, it was not really effective.*

> **PA 2:** *well...non-implementation could be from different angles...one; either because people think; that's not what we need for now...we should face other more important things and also for the fact that a lot of laws are in place in Nigeria. Because there is no social structure, no system in place, people get away with not obeying laws. A lot of laws are there especially laws that have to do with social aspects of living...social aspects of life, nobody actually feel threatened so nobody feels obliged to implementing it. Nobody is going to get paid extra for doing it, nobody is assigned to it. There is no agency...you know, there is no agency saddled with the responsibility of....this is a law and the implementation has to be carried out. And if it is not carried out, there is nobody you can hold to say oh...this thing or this law against smoking in the public places, who is supposed to be implementing it? If somebody has run afoul of the law, there is no discipline and I don't think the sanctions too were enough though... I can't even remember what the sanction was... that's to tell you how weak the law was...it was very weak. ...So these people in positions of authority, either they don't have a good grasp of the importance or the effect of not passing these laws or these bills into laws or they*

pretend not to know because those that are our representatives, they are law makers and that is the highest law-making body in the country that ought to feel the pulse of the people and do what is right for the improvement of the people's health but they are not bothered about it but the tobacco companies they will also be very happy that Nigeria is not taking the issue of smoking very seriously and that makes their business to boom of course because it makes them to have more customers purchasing their products so for them, it is a field day.

The second attempt at regulating tobacco use in Nigeria is in the form of a current bill which has passed through third reading in the Nigerian Senate. This bill titled the *National Tobacco Control Bill (NTCB) of 2009* has however not yet received presidential assent. The Senate passed it in March 2011 (during the fieldwork for this study).

> *PA 1: (cuts in)... There is an on-going law, a bill in the national assembly to ban tobacco smoking in public places.*
> *PA 3: It was passed last week after 25 months.*

The fact that some lawmakers smoke was highlighted by one political analyst as one of the reasons for the slow process the NTCB went through. Others mentioned lobbying by the tobacco multinationals and a lackadaisical attitude of lawmakers towards matters of public interest.

> *PA 3: So…that is the attitude…even the people, the law makers they too smoke. The law makers themselves, they smoke. As a result of this they are so slow to implement that law.*
> *PA 1: The tobacco companies they are also putting a lot of money into lobbying because it will put them out of business.*
> *PA 4: A lot of lobbying from the tobacco multinationals. I think that was the main thing.*

Government efforts towards curbing the prevalence of smoking

Government's current efforts aimed at curbing smoking prevalence in the population as identified by some respondents were mainly in the area of health warnings and restrictions on advertisement.

> *PA 1: Well, emm…the inscription on the cigarette pack and then making sure that cigarette advertisement is not placed very close to where children are; certain places where children could be lured into smoking…I think government regulates the advertisement of smoking.*

With the tobacco control Act of 1990, the government had attempted to put the country on the right pedestal towards making sure the rate of smoking is brought low. However, lack of implementation of this Act and the fact that tobacco companies were brought back to Nigeria as part of government's investment drive worsened the situation.

> *PA 4: Actually before now… Obasanjo brought BAT. BATN used to be part of the Nigerian tobacco company (NTC) in those days. Then they went back and Obasanjo [Nigeria's immediate past president] went to bring them back in 1999 as foreign investors because they claimed that they will uplift Nigerians' lives and so he was very friendly to them and then he gave them tax rebate. Actually they were not paying taxes…they were…I think at a point he gave them tax holiday or so, then tax rebate, they were not paying as much as they were suppose to pay…I mean he was virtually pampering them. Giving them so many things and they were riding on the backs of government…the government of the day.*

It was evident however that most respondents believe that the government is not doing enough towards curbing the rate of smoking especially among the youth. Respondents noted that there is currently no comprehensive law being implemented by the government to achieve this. Some young smokers were however of the view that there is really nothing the government can do on this issue while others believe that the government is doing enough already by the health warning on the cigarette pack and in jingles which come after tobacco adverts.

> *YS-OS 4: I don't think that they are doing anything. There is nothing they can do actually from my point of view because… because the population of those smoking right now is increasing and is kind of much. So I don't think there is any way that the government can find a solution to stop that. My only point of view is that the government*

154

should find a way…as in…to do something…to dilute the effect whenever someone smokes. That's the only thing I think that they can do right now.

SWCL 1: *Well I think they have done something by writing on the pack and telling the smoker that smoking is endangering their health but many people are being employed into that company where they produce the cigarette. So automatically if you tell the government to quit them from this country, it might not be doing any good to the economy of the country.*

Participant PA4 particularly highlighted the fact that the government is doing nothing to help people who are interested in stopping smoking especially in the form of smoking cessation clinics.

PA 4: *They have not done enough to discourage smoking…I think they should have done more because I don't see any….I don't even know…I have been in tobacco control for four years now. I don't know what a cessation clinic looks like in this whole country.*

Generally, among young smokers interviewed, there was low level of awareness about the past and current laws on tobacco control in Nigeria. Many respondents were of the view that such laws if they exist may not be able to curb the rising prevalence of smoking especially among the youth.

YS-US 2: *The laws are not really there…the laws are not there…It will be almost impossible to be implemented or to enforce them.*
INTERVIEWER: *Do you think like other aspects of the law like sending people to buy, emm…not selling to minors…do you think those laws if they are in place in Nigeria, they can help?*
YS-US 2: *For now, those things cannot work in Nigeria. Let us be realistic.*

The youth were more aware about the age restrictions imprinted on cigarette packs as well as health warnings but they noted that age restrictions exist only on the cigarette packs as that too is not being enforced.

YS-SW 3: Almost every time, people under 10 years sell cigarette to me… to me from their mother's shop.

YS-SW 2: Yeah…if there is probably a law for that, we don't implement that because you see a child of 2, 3yrs he or she will be sent to go and buy cigarette.

Envisaged impact of tobacco legislation on culture

On their perception of what the effect of tobacco laws will be on the culture of the people, respondents highlighted that the new law if being implemented will infringe on certain cultural values like the right of parents and adults over children. This, according to them, would mean that parents or older adults who smoke will no longer be able to send children on errands to buy cigarettes. They perceive that this will breed disrespect in the community.

PA 4: If you do not send your children, naturally, children are supposed to go on errands for their parents. If they don't go who else will go? So what will happen is that it will affect the…that law of respect. Hmm…I'm afraid…at that level what we have to do is more sensitization, more and more sensitization. When a father ceases to smoke as a result of being sensitized, then he will stop sending the children. But as long as the father is smoking, you can't stop him from sending his child when they are at home. Can you go to his home to enforce the law? Not possible. How are you going to monitor that?

However, for the use of tobacco and tobacco products in traditional cultures, respondents are of the view that this can be replaced with money or other items equally priced by the community. Creating awareness was highlighted as the only way issues that could stall the implementation of the new bill (when it finally comes into law) can be handled. This is in order for these highlighted possible challenges not to serve as setbacks to the implementation of the NTCB when it is to be enforced.

INTERVIEWER: So what about the culture of providing cigarettes during marriages? Do you think there are some that hold tenaciously to their culture…

PA 4: No I think they will have to replace it with kola nut or something else…or alligator pepper.

The lack of an operational tobacco control legislation also impacts on the availability of cigarettes in the society.

Availability of cigarettes

Cigarette availability is largely controlled by pricing and other tobacco control laws which border on tax and marketing restrictions on cigarette sales. Availability of cigarette here means the proximity of points of purchase, ease of purchase and low price of cigarette within the communities in Nigeria.

i.   Proximity of points of purchase of cigarette: It was discovered in this study that cigarettes are sold in stores and kiosks which are located all around the environment in Nigeria. Some points of purchase are located in stores which are located in the seller's houses. Participants PA2, SECL and YS-US 2 give the picture in these excerpts.

PA 2: Cigarettes are available everywhere …on the counter, if you walk out of the place now, you will see cigarettes…

SECL: Yes people can buy cigarette…cigarette is a common thing obviously…you buy it anywhere...get it anywhere.

YS-US 2: …around my area. I told you it's a common phenomenon around here. Nearly all the kiosks, all the shops around here sell cigarettes.

Participant YS-OS4 however explains that the sale of cigarette is done to promote business as it is a fast selling commodity. He however mentions that some stores do not sell for religious reasons.

> **YS-OS 4:** *Well normally, nowadays some stores do sell but some stores do not sell. Those that are practicing Christianity they feel they are not that type while some do sell to promote their market because you see nowadays, the number of smokers are more than those who are not smoking. Most people do sell cigarette to promote their market…so you can get cigarette from those stores.*

Participant YS-SW1 spoke on the influence of the availability of cigarette on picking up the habit of smoking while growing up. He ascribes one's ability to resist this influence to the grace of God.

> **YS-SW 1:** *I'm from the ghetto…I mean a place whereby just a stone throw, you would see a beer parlour. You will see where they sell this Indian hemp…you can even be smoking on the streets and…no….nobody gives a damn, nobody cares…you understand? It takes the grace of God…it takes the grace of God…*

Availability of cigarette for sale at social functions was also mentioned by most participants. Such social ceremonies include burials, marriages, and parties of all kinds. Many participants were of the view that this also serves to influence the youth to smoke due to ease of access to the commodity.

> **YS-SW 3:** *Yeah…there is no occasion you will go to that you won't see hawkers or people with tables having cigarettes on them.*
>
> **INTERVIEWER:** *Okay. So emm…would you say that somehow that could influence such people to pick up the habit one day?*
>
> **YS-SW 3:** *Actually yes…definitely!*

YS-SW 4: Whenever there is any function, marriage ceremony, burial…that one is normal. There are people around who sell cigarettes…

ii.   Ease of purchase of cigarette: What could not go unnoticed during the course of this study was the ease with which cigarettes can be purchased by or sold to minors. It was found that even children who could not yet adequately communicate verbally are sent on errands to purchase cigarettes. Participant SSCL describes this phenomenon which is a widely acceptable practice in the society.

SSCL: Just like the age of my boy [referring to his 3 year old son playing in the courtyard]…I can give him an empty cigarette packet and ask him to give the woman who sells at the counter [a kiosk] so that she could sell cigarette to him. I will give him…where he does not know the brand of cigarette I need…I will give him the empty packet…and say; go to the woman who sells and buy for me.

The influence of this and other similar factors will be discussed further in the section on the influence of collectivist culture.

iii.   Affordable price of cigarette: The price of cigarette also influences to a very great extent its availability. It was found that not only are cigarettes readily available to individuals of all age groups and at virtually all locations within the society, cigarettes are very cheap and loose cigarettes are also being sold in Nigeria, making them even more affordable. Participants mentioned that the price of a stick of cigarette ranged from ₦5 to ₦10 which is the equivalent of about $0.03 to $0.07 (about R0.25 to R0.5).

YS-US 3: One stick is ₦10 but when you are buying the packet, you have a discount of like say ₦30 or ₦40.

The price of cigarette makes it affordable to persons who do not even have jobs. Participant YU-US3 could afford to finance his smoking habit from his pocket money as a student.

YS-US 3: Cigarette is not too expensive you know and since I'm a student, I just take from my allowance.

The influence of the cheap and available cigarette on the uptake of smoking among the youth cannot be over emphasized. When asked about whether the availability of cigarette leads to an increase in the prevalence of smoking especially among young people in the society, participant YS-US1 was very definite about this.

YS-US 1: Yes, I would think so because since we see it or since we get it easily…in an easy way and at a cheap rate, it influences our choice to go for it.

e. *Influence of the tobacco companies (the "big capital")*

In diverse ways the presence of tobacco companies and their efforts at staying in business has influenced the youth to pick up the habit of smoking. The influence of the big capital in lobbying to stall the formulation of a comprehensive tobacco control bill was also highlighted. Also, the influence of various advertisement strategies by these tobacco companies disguised as either corporate social responsibilities (CSR) or loyalty rewards is also presented.

i. *Presence of tobacco manufacturing companies*

Tobacco manufacturing companies are present in south-western Nigeria as well as in the North. When asked how their presence influences the youth to smoke directly or indirectly, participant

SWCL1 opines that it has a direct influence on the rate of smoking in the community in this excerpt.

> **SWCL 1:** *Directly…Because as far as cigarettes are being produced in that environment… surely the children growing up in that place will want to taste what type of thing it is. So…emm… automatically, it influences them to smoke so because it is being produced there undermining that even…the doctor wrote or even the maker wrote on the cigarette that it is dangerous to their health, yet they feel they want to smoke.*

ii. *"The big capital" and tobacco policies in Nigeria*

Tobacco companies were also accused of lobbying the government to slow down the passage of the Nigeria National Tobacco Control Bill which was on the floor of the senate for 25 months and is yet to receive presidential assent. Participant PA4 also explained that these companies actually succeeded in removing some important parts of the current bill.

> **PA 3: …**So that is last week [when the bill was passed by the senate]. It was passed last week after 25months.
>
> **INTERVIEWER:** *What do you think was responsible for the delay of the passage of the tobacco control bill?*
>
> **PA 4:** *A lot of lobbying from the tobacco multinationals. I think that was the main thing.... The want the bill to favour them…(laughs) you know they do that… they actually removed some things from this law. There was supposed to be litigation, there was supposed to be pictorial warning.*

iii. *Media advertisements and promotional events by tobacco companies*

With regards to the advertisement of tobacco products, many respondents reported that they still see tobacco adverts in one form of media or the other especially on bill boards and the print media. Television adverts however were said to have been stopped even though some

participants still remember vividly the words of such adverts and the effect they still have on them.

> **SECL**: *On newspapers and radio even though after that [the advert] they will say…emmm… "tobacco smoking is dangerous"… "smokers are liable to die young"…all those things…*

The effect of media and advertising depictions of cigarette smoking was expressed in the vividness of young smokers' account of media adverts and smoking scenes in movies and their descriptions of the impression it created on them about how "cool" it is to smoke.

> **YS-US 2:** *Yeah, because when I was growing up, there were still these things then. While I was growing up… there was still this emm…St Morris advert on TV. It was so, so spectacular…let me use that English. The guy was too cool, well dressed. In a very good house, good car and everything and at the end of the day he topped the whole thing with a stick of cigarette. So it was as if the important ones smoke.*
>
> **YS-SW 1:** *Well, it is… if I see some persons smoking most especially in the movies I will just say, "This guy is a Don, a real man". You understand? …and after watching the movie…wow! …most of the time I even put off the movie, stop it there just to go and have a stick of cigarette.*

The media depictions portray smoking as an identity for the successful or the "upward mobile", a sign of adulthood, independence and toughness and these influence the perception of the youth and their determination to smoke as seen in these excerpts. Participants also reported that due to these attractive adverts, the youth view smoking as what is portrayed in the media instead of the truth about the negative health effects of the habit.

> **YS-US 2:** *The impression they create is that…they make you believe that when you smoke, you are a big boy. You are a hard guy…a kind of person that makes things work…makes things tick…something like that.*

YS-USW 1: They act the key parts [in the movies] and even most of them, it is not that they do not have the money, they have the money but they still smoke. And those that smoke they look good.

PA 4: I think…maybe before now, it was seen as a way of emm…life for big people, for ambitious people. And that was how it was portrayed by these multinationals through aggressive advertisements. They tried to make it look as if it's a cool life for boys…for people that are advancing in life…for the upward mobile…there used to be…what do they call it now?… Campaign emm…I have forgotten. Their marketing slogan that they used in those days; "welcome to London" welcome to the big life…St Morris, Marlboro this and that…so many people especially in the past felt that it was something that was cool and that was to be identified with people who are upward mobile and strong.... I think many boys still see it as something that…especially because of peer pressure, as something that is attractive and something that makes them look like the tough guy especially from what they see in movies.

PA 2: Their adverts are always so beautiful. They do not really show the side of somebody who is already suffering from the consequences of smoking. They show an energetic person, somebody so well dressed and is smoking. It's showing to the youth that you can also be like him and smoke and it's not going to reduce anything and you know because these adverts are beautiful and attractive, they will attract the youth and you know smoking is addictive so once they get addicted to it,…actually, these adverts that they do are really so focused on the youth…on the young people. To show them that all these are beautiful things and once they are introduced to it and they get addicted, it is a difficult thing bringing them out of it.

One-on-one adverts: It was mentioned that tobacco companies also recruit beautiful ladies to carry out one-on-one advertisement of tobacco products. This is also done to attract young males to attend social functions organized by the tobacco companies. One-on-one advert was targeted at getting customers and non-smoking youth to attend parties organized by tobacco companies where free cigarettes and branded items are distributed to entice the youth to start or perpetuate smoking. This was also acclaimed as a very effective advertising strategy by participant PA1.

> *PA 1: I told you about the marketing styles of using beautiful young girls to induce people and they go to drinking spots when the young men would have gotten drunk they can easily get lured into smoking.*

Participant YS-US1 recounts how he was invited to a night party organized by the major tobacco manufacturing company in Nigeria through this means.

> *YS-US 1: That is what I was coming to. I was given an IV by the…will I say worker?*
> *INTERVIEWER: okay, they came around schools?*
> *YS-US 1: They came around schools, streets, they covered almost everywhere as in…that was how I got the IV. Yes, I really think the youth are the major targets.*

The programmes and promotional activities carried out by the tobacco companies which also serve the purpose of recruiting new entrants into the habit of smoking are outlined here supported with verbatim excerpts of participants.

Provision of scholarship: Tobacco companies were found to offer scholarships to the youth. This was targeted at university undergraduates and the qualifying examination was done within the premises of these companies as highlighted by participant YS-US2.

> *YS-US 2: You see…when I was in the university, I had friends that went to write scholarship exams that was being given out by these…emm…tobacco companies. And where did they write this exam? In the tobacco company's premises! And there were cigarettes lying around everywhere…*

Participant YS-US2 saw this gesture as a subtle way of initiating young people into cigarette smoking.

Fashion shows: These fashion shows were organized by the tobacco companies to showcase talents in the fashion industries. Though these fashion shows have been stopped according to participant PA4, they were targeted at initiating young females into the habit.

PA 4: *Yeah… they had emm…these fashion shows…it was one of their strategies to encourage women to smoke; the St Morris Fashion Show. Incidentally, I was a reporter in Newswatch [one of Nigeria's National magazines] and I covered about three of the events…. Each time I went, I would meet the organizers and ask; this thing you are doing is it really right? Are we not encouraging smoking? Something as dangerous as cigarette, you are encouraging it. They say "no, no, no" they are not encouraging smoking, they are not doing anything of that sort. All they are doing is to promote fashion. I say no, you are encouraging smoking because you go to the fashion show and they put cigarettes on all the tables and everybody will be smoking…*

Road shows: Participants reported witnessing road shows organized by tobacco companies to promote their products. Branded items were also distributed during these shows.

YS-USW 6: *Like Benson [Benson & hedges company], some time people working for Benson will come with their vehicle to do their show and advertise…about cigarette and they give out some gifts.*

Campus "jamz": Tobacco companies organize entertainment shows on university campuses where popular music artists are invited. This was targeted at university students.

PA 3: *That is why they still advertise in the billboard. You see them; Benson & Hedges, emm… even promotion. They go to campuses…Benson & Hedges go to campuses. I have forgotten the name of that promotion now.... There are so many ways…! Like I have told you before now, that by ways of advertising, by promotion, and emm…what again? Especially the so called campus jamz... Benson & Hedges campus Jamz.*

Night parties: Tobacco companies also organize parties for the youth as part of their promotional activities. Free cigarettes and branded items are usually given out during such parties. Two participants narrate their experiences at the parties they attended.

YS-US 1: *Yeah, I even attended a party organized by Benson and Hedges sometime last year so they do a lot of promotion.it was organized in Benin, it was a night party and emm…they offered free Bensons and free lighters…got a lot of artistes...people caught their fun…*

INTERVIEWER: *Can you describe what happened there at the party?*

YS-SW 2: *Ha men! Come and see ladies, boys, bubbling, drinking, smoking, playing…in fact they tried. They thrilled us the smokers. Their lighters and…beautiful lighters and…I mean it was really fun. You need to see their…is it emm…sales representatives and whatever. Their sales girls and sales boys…whatever they call them. Their uniforms, their cap, and the way they walk…in fact they came with beautiful ladies.*

The experience at such parties tends to encourage smoking as the youth look forward to such events. Participant YS-SW2 also explains this: *"…there is no time I hear about this type of party that I will not attend…except I didn't get to hear of it"*.

iv.   *Assisting government through corporate social responsibility (CSR) programmes and providing Foreign Direct Investment (FDI)*

Corporate Social Responsibility involving the provision of some basic amenities in communities and aids to farmers are carried out by the tobacco companies. These are however targeted at the tobacco farmers and the communities where tobacco is cultivated as well as the government in order for the tobacco companies to maintain their relevance in the Nigerian market. The tobacco companies are said to provide jobs for the youth, vehicles for government parastatals and modern farming equipment for tobacco farmers. This is perceived to be done in exchange for a better business climate from the government and to encourage increased cultivation of their raw material i.e. the tobacco plant.

> **PA 4:** *Yeah…they had tax rebate and so many things and they were really romancing with government officials. BATN bought a lot of emm…so many things, patrol vehicles and were sponsoring so many events…*

> **PA 1:** *They actually do some corporate social responsibility like making bore hole (providing water) in the area where they do the farming and all that…the tax that the*

166

government procures from them...the opportunities that they also bring in foreign direct investment (FDI) into the country.

SWCL 1: *Many people are being employed into that company where they produce the cigarette. So automatically if you tell the government to quit them from this country, it might not be doing any good to the economy of the country...*

YS-US 2: *I have just told you one; through this emm...corporate social responsibly, scholarships stuff and at the end of the day when they do these things, they of course...may be after they made borehole, building or the hospital, they will put their tags saying: this particular thing was constructed or was built by so and so company. And when they do that, people now have this impression; okay this people are kind of responsible in as much as...you accept them.*

Contributions of tobacco companies- positive or negative?: According to some participants, the tobacco companies contribute in some positive ways to the Nigerian economy in ways that include the payment of tax, provision of jobs and providing Foreign Direct Investment (FDI) and CSR. However, all participants believe that the positive contribution of the tobacco multinationals to the Nigerian economy cannot be compared with the harm cigarette smoking causes to the nation's citizens in the long term.

PA 1: *Both negatively and positively. Negatively...because the rate of cancer is increasing in the country and it weakens the labour/human resource force of the country and you become dependent once you are sick and because the hospital infrastructure will now have to be put under pressure as a result of this tobacco related illness and that is not very good for the economy of the country. They say human resources are the important component of the economy of the country.*

PA 4: *The impression they tend to give and what they claim in their propaganda is that they provide jobs. They say they've provided jobs for about 2,000 Nigerians and emm...that they do a lot of cooperate social responsibility, scholarship, farmers' day but of course looking at it critically, they are not uplifting the lives of Nigerians. They are just here purely for business and whatever they do is just like a façade. It is just to show that they are not as bad as the world portrays them to be because they've lost all the marketing giants in the west and so they are making up for their losses in developing countries and Nigeria because of our economy and especially because of our large*

population, they are trying to factor in and capitalize on those resources to make their own share or money, or profit especially because there has been a lot of back slash against them in the west… They just do those things to claim that they are uplifting Nigerians and the question I ask people on radio everywhere I go; how can you claim to be uplifting people…the citizens of a country when you give jobs to 2,000 of them and every year you kill more than 20,000 of them? How can we call that upliftment? Of course it's not upliftment…it's just a façade they put up to deceive people so basically, they are not uplifting people's lives.

f. Smoking specific primordial culture

This study also found cultures within southern Nigeria which required the provision of cigarette (for the youth) and snuff (for older adults) during ceremonies such as marriages and burials. It was reported that such ceremonies could be stalled by the youth or older adults as the case may be, for failure to provide the cigarettes or snuff.

> **SECL**: *Many things, many things where we use it as a culture that is…mine that demands especially emm…in the area of marriage. If one is giving a daughter in marriage, there are things you must do. This eh…cigarette, tobacco that is the leaf and the other ingredients…they call it 'akanwu' and other things…you must present it for the marriage to the in-law that is coming.*
>
> **INTERVIEWER**: *What if the person refuses to provide the cigarette?*
>
> **SECL**: *The youth will spoil that marriage….the youth will spoil that marriage. The drink they will break the drinks. The cigarette must be there…*

As part of the traditional marriage in south-eastern Nigeria, cigarettes provided are specifically given to the youth in the community of the bride. Similarly, cured tobacco leaves are provided for the elders in that community. The cured tobacco leaves are however processed together with some local ingredients to make the snuff. Participant SECL explains how these items are shared in the community.

INTERVIEWER: So who do they give the emm…the snuff to, or the cigarette to or the tobacco leaves?

SECL: Okay…let me start with the cigarette.... Cigarette is mainly for the youth. There are other things associated with it like drinks.... the youth, that is boys…you give them that cigarette... Yes…one of the youth leaders will come and take it on behalf of the youth. Even there they will share it among themselves there and smoke.

INTERVIEWER: And smoke… Okay…so what about the snuff, who do they give it to?

SECL: Yeah…the tobacco leaves will be received by the in-laws… when you must have gone, that thing will be given to about four elders... the most senior four elders. Those are the people that share that tobacco leaves and emm…maybe this 'akanwu' ...the native salt is what they use to prepare that snuff….

It should be noted that this group of individuals called the "youth" in such communities exclude females as emphasized by the south-eastern community leader in one of the extracts above.

Participant YS-SW2 who is a young smoker from south-eastern Nigeria, recounts his participation in one of such ceremonies recently where his sister got married.

YS-SW 2: Yes, in my place there is no way you can marry…a man is coming to marry in my place…to marry a woman. Among the list they will give to him, he must provide at least two rolls of Benson [Benson & Hedges]. Emm… From what I experienced then, after sharing it [the cigarettes], at least I got about two or three packs... even the one I'm talking about is when my sister got married.

It was found that while traditional cultures involving the use of tobacco and tobacco products in traditional ceremonies are gradually wearing out in south-south Nigeria, the south-west only has the use of snuff by old men while traditions involving the use of cigarettes and other tobacco products appear to still be held strongly in many parts of south-eastern Nigeria.

SSCL: It was presented in any occasion, during marriage ceremonies in times past…during the time of our forefathers. There is a long pipe called "koko" used for smoking cigarette. Any person who visits at home…just as you have visited now, I must

give you the tobacco, that is, the pipe; koko to smoke….But it is not being presented at present…that tradition no longer exists.

SWCL 1: In yorubaland, as far as Yoruba culture is concerned, there is nothing related to cultural heritage or cultural practices…concerning tobacco. Tobacco is not used…the old smoke it in tobacco pipe, the young smoke it the English type which is factory reformed cigarette. The old people smoke it fresh when it is plucked from the bush and dried. They now use their finger to cut and arrange it into the …tobacco pipe, put fire on it and smoke, while the young now smoke it English type. So emm…tobacco as far as yorubaland is concerned, whether in marriage, whether in any ceremony there is nothing that is done that relates to them saying; go and bring tobacco for the ceremony…

Other past and current traditional uses of the tobacco plant and its products are addressed in their subthemes below.

i.   *To welcome visitors*

In some cultures in southern Nigeria, snuff which is a tobacco product is usually presented to welcome guests just as the kola nut is presented in many cultures in Nigeria.

PA 3: So I discovered that they use snuff…I don't know whether it is culture or whatever but I discovered that nearly everybody snuff in that place. You know that is also tobacco? **INTERVIEWER:** *yes that is tobacco. It is a tobacco product… and I saw that they present this thing as kola.*

ii.   *Snuff for elders*

Snuff is usually used by the aged members of the community and its use is well accepted. It is sometimes presented to them as gifts as a sign of respect.

PA 4: I think in some places especially in the east, I think people use emm…exchange tobacco products especially snuff as a gift item or even the local tobacco, the one that is prepared locally and wrapped…it could be used as a form of gift for naming ceremonies, for marriages for funerals. In my place, I'm from Benue state, many old people take snuff…they still take snuff around there. My father takes snuff and my father's wife takes

snuff and my father's wife happens to live in one of his other houses so she comes occasionally and they will just exchange it. Incidentally, they are the only two people that take that snuff; my dad and his first wife. And most times they quarrel, they will be insulting themselves and then part of how they settle is; "give me snuff jare"; "let me take" and that is the end of the quarrel. It is mainly light, adult quarrel. So it is still very...it's still prevalent among old people especially in the middle belt and in the east [of Nigeria].

SECL*: Apart from this marriage which is the most important one...like for example if I have an aged person in my community... I may go to him anytime I wish to present that thing [snuff] to him as a sort of respect...but it is not compulsory...*

One of the community leaders explained the use of snuff. It should be noted that this is similar to what some of the youth said the cigarette does for them.

SSCL: *What it does in my body? (laughing)...what it does in my body... let me just say my own, because as I finish eating, I will feel the hunger for it [snuff], so I take it and it makes my food to settle well in my system.*

iii. Smoking tobacco in pipes

Smoking tobacco products in the form of dried tobacco leaves has been in several cultures in communities within southern Nigeria for a long time. The dried leaves of tobacco are crushed and loaded in pipes and smoked by the old men and this was done with a sense of pride as noted by participant PA2.

PA 2: *It has been in our culture [tobacco smoking]. But maybe not in the refined form you have as cigarette. But now it is refined and... Because I remember my uncle used to take Eric More. That is a tobacco product and he will load it into this pipe. The pipe has a shape...a curved shape and with a stick. And it was with a sense of pride they smoked it and emm...there was class in doing so... The big people, the rich,...the affluent people they take the cigar and the Eric More, this tobacco. Then the local people will also pipe away with the local version but these actions excluded the youth.*

Tobacco consumed in the form of dried leaves and snuff by old men was meant to make their bodies strong as explained by SWCL1 and SWCL3.

> **SWCL 1:** *We see the youth that smoke now...many of them, we see them as abusing smoking. Seeing the youth that smoke, many of them you see them smoking.....Without regard or even control...over what they are doing. Like before you see an elderly man smoking that pipe that I'm telling you so, he must be a very old...old man. So...but unlike nowadays...(**SCLW 3** cuts in): it **makes their body strong**. They have reasons for taking it...to make them strong and to make them feel okay but nowadays these children moving around the streets everywhere, anytime any day... they kind of abuse the tobacco so this is why we are wondering where they will end up. So it baffles us the elders but since at times you have control over some certain things and at times you have no control over some certain things, you leave them to their fate...*

iv.   Tobacco for medicinal uses and to wade-off dangerous reptiles

One of the elders being interviewed had snuff with him during the interview. He demonstrated how it is used and explained the medicinal value of his snuff.

> **SWCL 3:** *Look at me here...(showing us his snuff from his pocket)...look at me here...That is what I am putting into my nostrils...(SWCL 3 putting snuff into his nostrils). It's good to cure catarrh...it is good for the eyes.*

It is believed that the tobacco plant when cultivated around houses, wards off dangerous reptiles especially snakes. The researcher caught sight of some of these houses with tobacco plants grown around on camera (see Figure 10). This is also mentioned by many of the older participants in this study.

> **SWCL 2:** *It's good to cure catarrh, it is good for the eyes...It kills the worms of the eyes. It kills the worms of the eyes. If you have eye problems...It is good to cure catarrh. You also put it on the legs that are injured. If we plant it around our house, snakes, scorpions...will not come near there. These are the things it can be used for. You can put it into your mouth. They also use it to cure tooth decay. You will put the water inside the tooth. They are also useful in making local medicine i.e. concoctions. It works very well.*

If a child has convulsion, you put some other things inside the leaves of tobacco. It can be used to cure convulsion and it will work.

SSCL: *So my mother also gives it [mixture of tobacco and other ingredients] to pregnant women when they want to give birth.*

The leaves of the tobacco plant cultivated around the house can also be dried, crushed and

smoked in pipes by old men and women in parts of southern Nigeria as seen in this extract.

PA 2: *It is used as medicine, but emm…you know there is another form of tobacco; the local tobacco. Some people say you can plant around your house, it drives away snakes and other things and that one…I don't think they still smoke it. People used to smoke it…the old men and old women. Even in Edo State, old people used to smoke that old local tobacco. The one they say the smell drives away reptiles from the house.*

Figure 10: Tobacco plant in front of a residential apartment in Nigeria, cultivated to ward off dangerous reptiles

g. *Socialization of children under collectivist cultures*

Africans have been known to have certain traditions that encourage communal living. Such collectivist cultures tend to bestow some rights on adults over the children of the community. Such cultures which tend to enable older persons (whether related biologically to the child or not) to command certain amount of respect was found to also negatively influence the youth to smoke. It was reported that it is a common practice for adults who smoke to send children on errands to buy commodities including cigarettes. A Social practice such as this which particularly stems from the socialization of children within collectivist orientation was discovered to expose children to cigarettes at an early age. It should be noted that children are left with no choice other than to obey their elders in this situation irrespective of whether such errands (as buying cigarettes) may serve to influence their choice to pick up health risking habits such as smoking later in life.

> **SWCL 1:** *Well… yes, they do because anybody can send any child to go buy cigarette or to go and buy anything or even to sell… according to the …at times when the family has a shade (store) where they are selling cigar even the little person can sell to the older person and they can still send another person to buy for them. So that is there basically.*
>
> **YS-SW 3:** *My uncle use to send me to buy cigarette when I was younger.*
>
> **INTERVIEWER:** *How old were you then?*
>
> **YS-SW 3: …***In primary school, like 10.*
>
> **YS-USW 3:** *Eh… when I was in primary school, I used to learn how to be a mechanic. Where I was learning the work, the seniors I met at the place, some of them were smoking. And I was the junior among them. So sometimes they use to send me to go and buy cigarette and when I buy it, they will say I should taste it so that I know how it is and when I started tasting the cigarette and I saw that I am interested in it that was how I started to smoke.*
>
> **YS-US 1:** *…. I remember how emm…I see little kids who their elder brother send to go and buy cigarettes for them and the person selling is not even concerned if it is the*

174

kid that is smoking it or the brother. He just sells and collects money and whatever you want to go and do with the cigarette is your business.

Since there are no operational laws restricting the sale and purchase of cigarettes to and by minors, the practice of sending children on errands to purchase cigarette thrives within the society. Most of the young smokers interviewed had been sent when they were minors to buy cigarette by persons ranging from their fathers, brothers, uncles to occupants of the same compound. Many too had also sent minors on such errands.

> **INTERVIEWER:** *Okay, ...you said you have sent people to buy, have you ever sent an underage person? When I say underage, I mean a minor...someone below 18?.*
> **YS-US 2:** *Yes...I did it today. I have been doing it, I did it today.*
> **SECL**: *They allow them [minors] to sell and they allow them to buy because I can send any small child to go and buy me anything.*

There are also reports indicating that children are sometimes told to light up the sticks of cigarettes they are asked to buy at the point of purchase. Participants SECL and SWCL1 noted that this attitude can and does encourage children to smoke the cigarettes they are sent to purchase.

> **INTERVIEWER**: *Do you think that somehow a child can start smoking through that kind of message?*
>
> **SECL**: *Yes...It does cause, because some might say "light it o when coming" (laughs) that is another way (laughs)… "Light it o! There is no match here so you light it there"*
>
> **SWCL 1:** *...A child that is being sent to go and buy all the time or at times they will say "okay...no match stick here, just light it when you are coming"... so automatically you are encouraging that child to smoke.*

Inability to communicate verbally was no barrier to sending a child to buy cigarette as such, children are given the cigarette pack of the brand that the sender needs. Seeing the pack, the seller is said to know what brand of cigarette the child has been sent to purchase.

> **SSCL:** *Just like the age of my boy (referring to his 3yrs old son playing in the courtyard)...I can give him an empty cigarette packet and ask him to give the woman who sells at the counter so that she could sell cigarette to him.*

Participant YS-SW1 recounts how he found a boy of about 9 years trying to smoke on one of such errands. He also explains how the youth could go to buy their own cigarettes in pretence of having been sent by an older person.

> **YS-SW 1:** *Yes...because...it depends on...it could affect a lot... like I remember there was this kid that I saw. This kid is not up to 9...he is not up to 9. Let me say 9 or so. In my compound, someone sent him to go and buy cigarette. Behold I saw this child trying to ...you know, doing it the way 'bros' [a slang for an older male] was doing it. I was like; "oh Jesus Christ just imagine this kid" I now shouted "stop it". The guy was shocked and I was like; who sent you? He said "bros"...."now take it to bros". I was just like..."God have mercy"!...you know by the time they keep sending this baby. Then by the time you know...there is going to be a time that he would like to...you know. He would like to say...okay madam, give me Benson. Who send you? (the seller asking), 'Bros'...unknowingly to madam, the cigarette belongs to the kid. He will look for anywhere just to hide and be doing it the way bros is doing it...you know.*

The sending of children on errands to sell or buy cigarette was found to be an issue which is intertwined with the culture of respect for parents and elders. Many participants saw this as "a hard nut to crack" for the prevalence of smoking to be reduced. This is because it is viewed as a sign of disrespect and outright disobedience if a child refuses to go on an errand for an older member of the community.

PA 4: *If you do not send your children...naturally, children are supposed to go on errands for their parents. If they don't go, who else will go? So what will happen is that it [law on age restriction] will affect the...that law of respect.…. So they have to really work on it so that children can have the right to refuse what is not really good for them. But it will be really really difficult.*

YS-SW 1: *I believe…in my environment then, the community in which I was. There is this emm…would I say, like a culture there that you must respect your elders. The ones that are senior to you in the town… if they ask you to go and do anything for them, you will go ahead and do it for them or else they will think maybe you are disrespecting them so we will just go ahead and do it. "That is what they want so let's go and do it for bros...bros sent me so we do it".*

h. Hybridized/ mediatised culture

Hybridized culture here includes social practices that have been adopted to be part of the way of life of the youth due to the influence of media or exposures to other cultures. Among the youth in some parts of southern Nigeria, there seem to be a practice of requesting cigarette for favours done as a group. Participant PA3 gives an instance where youth in his community requested for packets of cigarettes in order to carry out some traditional roles during a burial ceremony. Where the celebrant does not agree with their demands (for personal and religious reasons), they ask that it be monetized and cigarette is bought with the money by the youth to be shared among themselves.

PA 3: *Yes…like emm…I think I witnessed one ceremony… especially the age group society [usually composed of young men]. Any time they want to bury somebody.*
INTERVIEWER: *Any time they want to bury somebody?*
PA 3: *Yes, they demand some items like packets of cigarettes like two…two packets of cigarettes, two cartons of …maybe drinks, kola and some other things so I think…especially among age group. Like the other day we buried one of our aunties so they demanded two packets of cigarettes so I asked them; "what are you going to do with cigarettes", they insisted that I must provide that cigarette. Some miscreants among them, some among them may decide to plan [to disrupt the occasion]…but if you are*

holding on to your ground to say no…like a woman the other time recently…she said no I am not buying cigarette for anybody. I will represent it with money.

Cigarettes have also become common sights at cultural celebrations as highlighted by participant YS-OS1 and he explains the manner in which this influences young people to start smoking.

> **YS-OS 1:** *Any cultural whatever…maybe burial in itsekiri, urhobo… any culture…any cultural celebration, they sell cigarettes*
>
> **INTERVIEWER:** *Do you think this can influence the youth to smoke?*
>
> **YS-OS 1:** *Most definitely…because cultural activities bring what we call high spirit… If you were not smoking before, and there is this happiness in you, when you see your friends are smoking, there is always the possibility that you'll smoke. You might want to start it there.*

Social gatherings like marriage and burial ceremonies and parties are a very common phenomenon in Nigeria. It was however found that these occasions are used as opportunities to have "fun" by smoking.

> **YS-SW 1:** *No…I don't think it is part of the ceremony [marriages and burials]. It's part of the…it's part of the groove (having fun).*
>
> **YS-US 1:** *Like sometimes, I'm with my friend in a social gathering or an outing and all of them are smoking. I wouldn't want to be left out so I smoke. Not really that it gives me anything…no.*

Such social gatherings are also opportunities to socialize by sharing cigarettes among themselves (friends and strangers alike) as seen in this excerpt from participant YS-USW 3.

> **YS-USW 3:** *Yes sometimes when we have an occasion like party, party night…sometimes I used to buy like two packets, one packet at hand so that when we get there everybody will take.*

Attendance and socializing at social gatherings therefore serve as opportunities to the youth to perpetuate smoking.

Cigarettes are also usually generously consumed together with alcoholic drinks in some traditional feasts by active participants at such feasts who are usually young boys.

> **YS-OS 4:** *Because during our feast [traditional festival of his local community], normally you will see the young ones, mostly we the boys… mostly the indigenes …before we can be with the masquerade we need to get 'high'. We need to smoke so that…the things we will be doing will be different from the things others will be doing. So we get to fill ourselves first before we go out to dance. That is how it is.*

The smoking of cigarette has found its way into social activities and some traditional functions (this was non-existent before now) especially those where the youth have special functions to carry out. It is fast becoming an acceptable part of such ceremonies and as such the society.

i. *Societal norms versus societal attitudes towards smoking*

The society is seen to send two different and contrasting messages with regards to the use of cigarette and other tobacco products among various age groups and genders in the communities studied. PA2 highlights this in the following extract.

> **PA 2:** *Within the southern community and Edo State in particular, We frown at it… but left with adults sometimes to frown at things and then do not have the will power sometimes to stop the youth from doing these things. We actually know that it is not good. It is injurious to health…*
>
> **INTERVIEWER:** *But you are aware that some adults actually are engaged in the habit?*
>
> **PA 2:** *Yes, a lot of…a lot of adults are. You know like in Africa and Nigeria particularly what the adults do that may be wrong and injurious to their health, youth or children are not allowed to do the same. Some of them hide to smoke. And you also find that why you*

will believe that smoking is permitted… not allowed fully. There are series of home videos we watch here. Something like soap opera, we call them home videos. There are scenes where you see young people smoking and parents sit down and watch with these children.

In the past, it was regarded as a thing of pride for older men and women to use tobacco in its finely ground form (snuff) or to smoke its dried leaves in pipes. However, tobacco use in the form of cigarette by youth has always been frowned upon. As discussed earlier, it is perceived as an irresponsible behaviour and a sign of deviancy. However, it is part of this same society which requires the provision of cigarettes for the youth during some traditional ceremonies.

> ***PA 2: …****They have models who smoke especially in the entertainment world. Musicians smoke! There are musicians who are celebrated as legends in Nigeria who smoked even the Indian hemp till they died yet they are celebrated as legends…so in our society you find somebody talking from both sides of the mouth. Saying something positive this way and saying something negative the other way. So even sometimes the youth get entangled in this clusters of not being able to…it becomes cloudy, not being able to distinguish actually what is good or bad. Even when they know within, they play along and say because this is allowed, I can do it.*

At the cultural/ environmental stream of influence, findings from this phase show that policy and cultural issues greatly dominate the influences for young people's smoking behaviour.

Interpersonal (social) risk influences

Interpersonal or social risk influences according to Flay, Petraitis and Snyder (2009) are the social context or micro environment contributing to social normative beliefs about smoking and related behaviours. This stream of influence therefore includes factors that act as or contribute to the social pressure faced by adolescents to smoke cigarettes. These social influences are presented hereunder.

a. *Peer influence to smoke*

Values of peers tended to have very strong influence on the youth's decision to smoke. Many young respondents had to smoke to identify with their friends as seen in this extract.

> **YS-US 2:** *Yeah, you learn it from friends…from friend generally. Because when you see them smoke, they make you…when your friends start smoking you want to feel among, you want to have this…"big boy attitude" you understand?. So you start playing with it.... So from there, before you know it, you are hooked.*

The young participants tended to admire the smoking behaviour of their friends before they picked up the habit themselves and this also influenced their decision to smoke as earlier described by Participant YS-US2. Participant YS-SW1 also mentions this in this extract;

> **YS-SW 1:** *You know...the way the guy was just puffing out the smoke from his mouth…so he then stretched it…like...[shows a lot of admiration expressed by a brightened face and a smile while demonstrating how his friend smoked].*

The smoking behaviour of peers shows to be of a very strong social influence on the youth who smoke.Young smokers described also how they were urged by their peers to continue smoking after they just picked up the habit.

> **YS-SW 1:** *My age mates. Some of them that were into this thing [smoking] for a long time so they know how to do it…you understand? Most of the time they would be saying like; "guy, smoke this thing now...what's wrong with you? you…smoke this thing…"*

Young smokers were found to be directly or indirectly encouraged by their peers to pick up the habit of smoking. Among the 18 young smokers who participated in this study, 13 were directly influenced by friends to start smoking. Their narration of how this took place showed that this tend to happen when they socialize outside their homes and at school or work. Participants YS-

USW3 and YS-USW5 were particularly influenced at their workplaces. For participant YS-US2, it all started as stolen cigarettes with friends, then it became a habit. He explains how it all started and how he also encouraged another friend of his to pick up the habit.

> **YS-US 2:** *Yeah, it started with my friends, then we were having this "stolen cigarette" we were having this one or two sticks at the back of the house…not really at the back of the house, at our usual hangouts then. So along the line, it was not a habit then, it was just a normal thing. We really did not see it as something wrong. We were just playing normal…but before you knew what happened, I went to Lagos, I had a friend that smoked… and as a matter of fact, I introduced that friend to smoking. So you see the influence of peer pressure now? ….From my own friends to me and from me to somebody else. So I introduced him to it, he was not too keen about it but right now, believe you me, he has migrated to the next level. He has migrated to marijuana now… So he…it's that bad.*

Participant YS-SW2 who had tried quitting also attributed his relapse to the influence of his friends.

> **INTERVIEWER:** *what do you think is responsible for your going back?*
> **YS-SW 2:** *Just because I am still moving with my friends that smoke*

b. Influence of significant others

The smoking behaviour of family members and role models like student mentors ('school fathers') teachers and other professionals were also identified as a direct influence or pull factor towards picking up the habit.

Among young smokers interviewed in this study, five (5) were influenced by a member of their family. Participant YS-OS3 mentions how he started smoking on the day he saw his father

smoke. Participant YS-US3 however started smoking in sympathy with his older brother who was a smoker but who was depressed as a result of experiencing financial loss in a business deal.

> **YS-US 3:** *Okay… I know generally in life everybody has his or her own philosophy of life but as for me, emm…smoking…I never…I never…I hated cigarettes but I started smoking because of my elder brother because he smokes… so there was one day…he is a FOREX trader…he just lost his own money about…let me say ₦1.5million just went down that day. My immediate elder brother…so he came home and he was like down…so he just brought cigarettes…he was just smoking and…so that was where I got my first stick of cigarette from.*

> **YS-OS 3:** *I started smoking on the day I saw my Dad smoking in his room, he was hiding. So when I perceived the aroma of the cigarette, I felt… I loved it the way it is coming out from his mouth. I was very very happy, that's why I started smoking.*

Some participants mentioned that though there was no direct influence of the smoking specific behaviour of some of their family members, it had an indirect influence on them as it contributed to their seeing smoking as acceptable behaviour and thus seeing nothing wrong with the habit.

> **YS-US 2:** *The thing is that…the truth is; because of the fact that my father smoked, I really did not see anything wrong in smoking. …But it did not influence me into smoking but I did not see anything wrong in smoking. I did not see anything wrong in buying cigarette for anybody.*

Participant YS-US1 believes that peer pressure is the strongest influence on young people's smoking behaviour but noted that the smoking behaviour of family members also plays a strong part.

> **YS-US 1:** *I think it is peer pressure. Peer pressure and emm…family background. If there are a lot of smokers in the family, that could also make youth see smoking as a trivial thing or a part of family tradition but most importantly,… I think it is peer pressure.*

Participants YS-USW2 and YS-USW3 were given their first cigarette to smoke by their role models at school ('school father') and at work respectively. The influence of the smoking behaviour of such role models made these youth to initiate smoking.

> **YS-USW 2:** *Yes…it was my school father…one of our school fathers who gave me cigarette.*

> **INTERVIEWER:** *Okay…so that was one of the reasons why you felt your school father was teaching you a good thing?*
> **YS-USW 2:** *Yes…I started thinking that smoking is the current trend…as long as he too was smoking.*

> **YS-USW 3:** *Eh… when I was in primary school, I used to learn how to be a mechanic. Where I was learning the work, the seniors I met at the place, some of them were smoking. And I was the junior among them. So sometimes they use to send me to go and buy cigarette and when I buy it, they will say I should taste it so that I know how it is and when I started tasting the cigarette and I saw that I am interested in it that was how I started to smoke.*

The smoking behaviour of professionals like doctors, bankers and lawyers also serve to influence the youth to smoke as the youth expects that with a higher education and exposure, they should be more knowledgeable about the health consequences of smoking. Their smoking behaviour was therefore seen by some youth as an indication that the health warning on cigarette packs and adverts may not be true. YS-US2 narrates this in this extract.

> **YS-US 2:** *You see, when I was in Lagos, there is this popular place, University of Lagos Teaching Hospital, their student emm…SUG block. Their Student Union Government Block. We go there, me and my friends, we go there on a daily basis to drink and smoke. It is a normal hang out for us…so when you seat there, it's unlike your regular beer parlour. This one is more of…how do I put it now?…it has a class of its own. There you come…every evening in that place, you see bankers, you see doctors that work in the hospital there...You see doctors, bankers…men that are…have a stable job…that are responsible. They come there, we sit, we chat, and we smoke. It's a normal thing you see…. Nobody sees anything wrong. I believe if the doctors can be smoking…let us be*

frank. Even some of them when they buy this cigarette, they tell you; 'smokers are liable to die young' but they are putting this thing in their mouth but they are telling you smokers are liable to die young...so I believe that...I really have questions about that warning...

Participant YS-US3 however, thinks his inclination to imitate the smoking behaviour of his teacher whilst he was about 10 years old (in primary four) was a sign that smoking could be genetic since his own father also smoked. He recounts this experience in the following extract.

YS-US 3: Yeah like when...when we were small, my dad use to smoke.... I just remembered something now...why I'm saying that this smoking might be a thing of inheritance or genetic is that, like when I was small...when I was in primary school...I remember in primary four then...I was gathering filters of cigar [stubs] from the ground because then, one of my teachers smokes. So I started gathering the filters from the ground. I now said; okay when I get home, I was going to smoke them...at that time as a small boy...so my mum caught me.

In the opinion of Participant YS-US3, seeing his teacher smoke when he was in primary four also influenced him to smoke later on in his life.

YS-US 3: My teacher's smoking behaviour also influenced me too.

Stronger influence of peers than parents
Young smokers tend to show a greater loyalty to their peers than their parents in deciding and continuing to smoke. This is expressed in the strong attachment and strong desire to please their peers than their parents. While it is easy to disclose their smoking status to friends (whether these are smokers or not), many young smokers interviewed conceal this from their parents. Some

parents who are aware about the smoking habits of their children got to know through the physical signs of smoking noticed in them like darker lips and fingers.

All the young smokers interviewed reported that all their friends are aware that they smoke. However, when asked about their family members' awareness of their smoking behaviour, only two (2) of the smokers who are students eight (8) of the smokers who are workers said all members of their family are aware that they smoke. This implies that five (5) of the smokers who are students still conceal their smoking behaviour from the majority of their family members. It is possible that more students conceal their smoking behaviour from their family because they are still financially dependent on their parents. Taking the entire population of young smokers interviewed (n=18), ten (10) agreed that all their family members were completely aware that they smoke. Some young smokers however explained that though they conceal their smoking habit from their family members, these got to know through the "tell tale" signs of smoking as seen in this extract.

> **YS-US 2:** *Yeah, my family members…all my family members know I smoke, in as much as I hide it from them, they know…. It's not something you can hide. The 'tell tale' signs are there so it's not something you hide*

> **YS-USW 1:** *They don't see me smoking but they see it in my eyes.*

Young smokers reported that most of their friends are tolerant of their smoking behaviour especially those who smoke. Among smokers whose family members are aware that they smoke, seven (7) said their family members showed a negative attitude towards their smoking habit while three (3) said their family members were indifferent about it. This suggests that more peers

than parents have a negative attitude towards the youth's smoking behaviour and the youth seem to be more inclined to do what their peers approve of than that of their parents.

One reason why the attitude of peers may tend to have a stronger influence on the youth's smoking behaviour than that of parents could be the social alienation such youth may suffer for not smoking. Young smokers explained that they sometimes feel socially alienated from their peers or are negatively tagged when they do not smoke and this sometimes pushes such persons to start smoking cigarette.

> **YS-OS 4:** *Well…you can see nowadays, maybe we are 6 in number, and in that place only four do smoke and we want to go clubbing…then maybe we are now at a club, there, everybody is catching fun…do you understand? Then looking around, those people left behind that are not smoking they will take it as a pain. As in maybe they are left behind. That is, they are left behind from what others are enjoying. I think that do influence youth to smoke*

> **YS-USW 2:** *Because they used to tell me that, if I don't smoke, I'm a jew guy… (a slang which means a coward)...a local person...you don't belong to their class…*

c. *Perceptions and attitudes of the society towards smokers*

Cigarette smoking is generally perceived as a socially unacceptable behaviour in many southern communities in Nigeria. There is a general perception that cigarette smokers (especially the youth who smoke) are "irresponsible" and "bad". Participant SWCL1 (a community leader) explains that the youth are seen as abusing tobacco smoking which was originally reserved for old men in the past (in the form of snuff and dried leaves in pipes) and which was consumed specifically to make the bodies of the old men strong.

PA 2: ...Within the southern community and Edo State in particular, we frown at it [cigarette smoking]... but it is left with adults sometimes to frown at things and then do not have the will power sometimes to stop the youth from doing these things.

SWCL 1: ...We see the youth that smoke now - many of them; we see them as abusing smoking. Many of them you see them smoking.....without regard or even control...over what they are doing. Like before you see an elderly man smoking that pipe that I'm telling you about, he must be a very old...old man ... unlike nowadays... (SCLW 3 (cuts in): ...it makes their body strong. They have reasons for taking it [for smoking the pipe]...to make them strong and to make them feel okay.

YS-SW 3: Hmm...not that smokers are not really good people... they [the society] sees it as though you are not responsible. They don't see it as a sign of responsibility. It is the general perception.

The prevalence of smoking was however not seen to be affected by the negative perception the society has of smokers. What was however found was that due to this negative perception, smokers tend to conceal their smoking habit from their significant others whom they expect not to approve of smoking. Parents who smoke also tend to hide their smoking status from their family members.

YS-OS 2: Hmmm...family members? Not really...only my younger brother knows. For my friends, most of my friends do smoke. They all know I smoke.

YS-US 2: Depending on the ones I want to...they know!...my friends they know too...you see, I don't do it in their presence. I tend to hide when I'm doing this thing. I tend to go to a closet where nobody sees me except those that smoke too.

YS-OS 3: I saw my Dad smoking...in his room, he was hiding.

Many parents and youth who smoke also refrain from smoking in public places to prevent being seen by people or from being stigmatised. Some young smokers reported having strained relationships with their family members who are aware that they smoke.

YS-US 3: Yeah, there is a reason why I don't do it publicly and the reason is that I'm a kind of person…as in I try my best to…to be in the best position of humility and when people see me now, maybe people see me smoking or stuff like that, it won't portray me as a good person and you know in Nigeria…Nigeria is not like maybe South Africa where you are or like the white nations…once you are smoking here, what they just tag you is that you are a bad boy or you are a bad person so because of stigma, even currently, my mum doesn't know…it's only my elder brother that knows that I smoke…if she knows she will be very disappointed in me.

YS-US 1: My family says it's bad they don't like it. My mum has a problem with smoking and because of that we are not so much in good terms. My Dad…he as a man, understands a bit but he hates it because like I told you, he smokes occasionally so he is trying to tell me to quit it. My elder brother, he smokes too emm…my sisters, they don't like smoking at all so I would say they see it as not such a good behaviour of mine. My friends, some of them who don't smoke, they don't like it too for some reasons, the smell they say is offensive and emm…some say it is not responsible while those of my friends who smoke, they can tolerate it because they do it with me too.

On occasions where members of the family got to know about their smoking behaviour, smokers reported that they expressed their disappointment through negative emotional responses like crying. Participant YS-SW1 mentioned that his mother and sisters cried when they found out that he smokes while participant YS-US3 believed that his mother would be very disappointed if she ever finds out about his smoking behaviour. Participant YS-USW1 however reported that his father got him arrested when he found he was smoking cigarette.

YS-SW 1: When Mum first discovered, she cried a lot…

INTERVIEWER: *she was not happy?*

YS-SW 1: No hmm…she cried and cried and cried…so I now looked for a means to make sure that they don't take it that horrorfully. So whenever I smoke, I always look for sweets. I always like…go to a friend's house that has perfume…I must look for something …just to make sure that that odour is not there. Then I will confidently speak with mum and dad and my brothers and sisters but my sister, our last born…she is the last…the first day she discovered, she was crying and crying and crying…

INTERVIEWER: What did they say when they saw it in your face that you smoke?
YS-USW 1: They asked me to stop this thing… even my father locked me up at the police station.

Interpersonal influences for smoking found in the qualitative phase of this study include the influence of peers and significant others like family members, teachers and other role models. Among young smokers, there seems to be a greater influence from peers than parents and the society as the latter were more inclined to show a negative attitude towards smoking.

Intrapersonal (personal) risk influences

Intrapersonal risk influences in the context of cigarette smoking has been described as characteristics which contribute to a person's self efficacy regarding cigarette smoking (Flay, Snyder & Petraitis, 2009). These are factors which seem to lower an individual's self efficacy to refrain from smoking as well as increase their likelihood of initiating the habit. Factors found to influence smoking within this stream (type) of influence are presented.

a. ***Sensation seeking and sociability characteristics***

Youth with characteristics associated with sensation seeking, sociability and clubbing were reported as being more likely to smoke. Participant YS-SW5 pointed out that smoking is more prevalent among a class of youth who are outgoing, fun-loving and those who enjoy clubbing as seen in this extract;

YS-SW 5: Within a particular social people anyway. Emm…maybe people that like to party, people that like this emm…

fun kind of life…. For instance people that you usually would find in drinking joints and clubs.

The sensation-seeking nature of such youth also makes them prone to being in the situations where they will be required to smoke. This is because some clubs sometimes request youth to show evidence that they smoke before being allowed entrance without considering their age. YS-OS4 started smoking as a minor so he could be allowed into one of these clubs.

> **YS-OS 4:** *Well, I started smoking at the age of 16 when I was in secondary school. Then, we used to go to club…with my friends, and there normally before you are allowed to enter the club, you must be with your packet of cigarrette….*

This fun-seeking attitude of YS-OS4 can be said to have exposed him to a situation where he had to smoke to be granted access to a club.

b. *Fatalistic attitude – the "anything can kill a man" syndrome*

A fatalistic attitude among young smokers was found expressed in the slogan "anything can kill a man" or "a man must die of something". This slogan was used by some participants when asked how the negative health implications of cigarette smoking impacts on their own smoking behaviour.

> **YS-SW 5:** *Well, I have this conception that emm…anything can kill a man.*

> **YS-SW 2: …***I know that man must die of something. Either he dies through working, accident, smoking, drinking water, drinking beer, malaria…a man must die of something.*

This slogan which connotes a resignation or a readiness to face the health consequences of smoking if they eventually set in, is also used by smokers to dissuade those who try to educate them about the health consequences of smoking as explained by SECL (a community leader) in this extract.

191

INTERVIEWER: Okay…can you remember any person you have discouraged and what the person responded to you?

SECL: There are many. You will talk to some, they say emm…one thing must kill a man (all laugh).

c. Hedonic values

The youth were found to smoke just for the fun of it. Some youth even have games they play with other smokers using their lit cigarettes. Participants YS-OS4 and YS-SW2 describe their experiences in the extracts below.

YS-OS 4: Well, from my own point of view, I see cigarette smoking as a way of catching fun …

INTERVIEWER: okay, it gives you joy?

YS-SW 2: Yeah joy, especially when I'm using the smoke to play. We draw it in…(laughs) when we are smoking, at times we say; let's see where your smoke is coming from…, when you swallow it, you try as much as possible to bring it out of your ear, nose, mouth just like that. Yeah…or we can stand and see how you raise your head up, you hold it there till you finish it [demonstrates this]…the ash will never fall…as a 'big boy'…if you don't handle it well, you will burn yourself so you handle it well with your mouth.

d. Motivators for smoking

Many other push factors were identified as motivators for smoking among the young smokers who participated in this study. These factors were identified as young smokers recounted why they smoked and what a stick of cigarette represents to them. Such factors which lie at the intrapersonal level of influences include among others: anxiety, stress, depressed mood, agitation and anger. These influences are discussed further.

i.   Smoking to kill depression

Smokers who find themselves depressed reported turning to cigarette to bring them out of their sad mood and in order to feel better.

> **YS-US 3:** *Yeah I do, ...a stick of cigarette?...it doesn't really mean anything to me. Most times I just do it when I feel very bad; to kill depression.... Yes, to free myself and forget about it [the offence of a friend]...and be in a good mood. When I'm depressed, I smoke to just...to make me feel better...*

ii.   Smoking to relieve stress, quell anger and ward-off worries

Many smokers reported smoking cigarette in order to relieve the stress they face.

> **YS-SW 1:** *Yeah, there are sometimes whereby maybe if I am stressed up. If I am stressed up like...I just feel like... okay I have to go and take a rest...just rest. The first thing that will come into my mind will be; as you are going to like take a rest, you need a stick of cigarette to go along with it...you understand? I just believe that by the time I lit a stick of cigarette, wow...I will just be relaxed...*

Young smokers also reported smoking in order to quell their anger.

> **YS-USW 4:** *... Sometimes if I'm annoyed, I will go and buy cigarette...then I will forget emm....that thing making me to be angry.*
>
> **YS-USW 5:** *Any time I am angry, I go to buy cigarette. I will no longer mind about that thing that causes the problem.*

Some young smokers also mentioned that smoking helps them to reduce worries.

> **YS-USW 6:** *When I am thinking of many things. I will take cigar and it will stop*

iii.   Smoking to aid relaxation and sleep

Young smokers reported using cigarette to relax when agitated and to help them have better sleep.

YS-US 1: The only effect is that it could actually relax your nerves.

YS-US 2: It's more of emm…a relaxant…let me use that English. It relaxes my nerves when I am kind of agitated. It tends to…It aids relaxation, sleep…

iv.   Smoking to help in digesting food after eating

It was reported by smokers that smoking tends to aid their digestive process especially when done immediately after eating.

YS-USW 3: the reason why I smoke is because when I started smoking I saw that…it is as if it has already combined with my blood. Even when I finish eating, if I don't smoke, it will be a problem for me maybe sometimes…emm…I will be feeling pains in my stomach.

v.   The cigarette – a "thinking" companion; a friend

Cigarette was described as a thinking companion and an object which helps smokers to organise (their) day and make decisions especially when taken first thing in the morning. Participant YS-SW3 pointed out that the cigarette has become like a friend to him.

YS-SW 1: I just believe that when I am taking it, I will be reasoning normally…like wow!…okay after this, I'm gonna do that [scheduling his day]…

YS-SW 3: It is a habit I picked up some years ago and it became like a friend to me especially when I'm alone and thinking. So when I try to be in that realm of what I need to do, I hold my cigarette and it's like company to me, nothing more.

vi.   Smoking to regulate the body temperature

Young smokers also reported smoking cigarette in order to regulate their body

temperature when the weather is cold.

> **YS-USW 1:** *Yes, and if I am beaten by the rain sometimes and I feel cold, I will smoke cigarette.*

> **YS-USW 6:** *When I feel cold or when I am thinking of many things. I will take cigar and they will stop.*

> **YS-US 3:** *When the weather is hot I do not smoke, then at times I do it to regulate my body temperature when the weather is excessively cold…like when I smoke…the cigarette…it relieves me.*

e. Poor coping skills

Poor coping skills to manage everyday life challenges some of which have been discussed earlier

were found to be push factors which tend to make the youth initiate or perpetuate smoking.

Stressful situations, feelings of sadness, depression and anger as well as other challenges in the

family and society were some of the factors reported by young smokers. They therefore turned to

cigarettes to aid them in coping with these challenges. Stress, anger and depression as motivators

for smoking have been earlier discussed.

> **YS-OS 1:** *Like I said before, when I was still in school [secondary school], a little thing came up that we [referring to himself and his younger brother] could handle without smoking but…we started smoking… copying people. Something pushed me.*

> **INTERVIEWER:** *Something like stress?*

> **YS-OS 1:** *Yes! But it was what I could have handled without it but…because then I was still very young.*

> **YS-OS 3:** *Hmmm….cigarette of a thing…if for example, (name withheld) here has offended me in the way I don't like and I can't fight him? I can't do him back what he has*

done to me, I will just leave him, sit down in a quiet place and smoke, smoke 2, 3 cigarettes and forget about it.

> *YS-OS 4: In my own way, sometimes when I'm sad when I have nothing doing, I will just feel like... for me not to go into much stress of thinking, I just go to the shop...to get cigarette. I just take one or two. When I smoke then I'll forget about that thing... and my thinking will be different from the bad thinking after I have taken that cigarette.*

Smoking to cope with social challenges: Young smokers reported smoking as students of tertiary institutions in order to cope with the social challenges of campus life. Participant YS-US3 reports that in a university environment, cigarette smoking is most often identified with membership of secret cults. According to him, a student who smokes can give the impression that he already belongs to one of the cults. This he said wards off cultists who are interested in intimidating young undergraduates and sometimes compelling them to join their secret cults.

> *YS-US 3: Smoking...like I said before, smoking is mainly done to feel big...to boost up an ego...emm...among young people, some they smoke not to be oppressed.*
> *INTERVIEWER: in order for their mates not to oppress them?*
> *YS-US 3: Yeah...like generally among guys now...like even in the school environment, you know this issues of cultism and all that and emm...this smoking and drinking is one of their major characteristics so most times if you smoke and drink, even though you are not in anything...even though you are not in any cult they stay clear off you because they just feel you are also a strong man...*

The attribution of smoking to activities of cult members was also highlighted by participant PA2 as she explained why there is an increasing prevalence of smoking among the youth.

> *PA 2: Yes...even those who are still within the university, because even this age bracket, some of them are in the university. Because of the influence of cultism, they do a lot of things and that includes smoking. So I would say within the last 10yrs, it has become very prevalent among young people between 18 and 24 years to get involved in smoking. They even have street cults of people within this age bracket who are not even students who are just...I don't want to use the word*

"lay-about" but something like that; not getting occupied properly. They are on the streets, they smoke, they drink and most times when they drink, it is followed up with smoking.

Smoking to cope with the lack of parental warmth and support: Results from this study show that lack of parental warmth can also serve to push young people into smoking. Participant YS-USW4 whose father died when he was still very young, explains that his not getting family members to care for or support him through school pushed him to seek out a life for himself. According to him, he picked up the habit because of this lack of warmth and care in his life.

> **YS-USW 4:** *Because my father died when I was very young…as I am now, I don't know my father.*
>
> **YS-USW 4:** *I was very young at that time. So my relatives refused to sponsor me.... Yes…that was why I left [home].*
>
> **INTERVIEWER:** *okay…so you are self employed to help yourself?*
>
> **YS-USW 4:** *Yes, to help myself… yes…that was when I started smoking.*
>
> **INTERVIEWER:** *So was there no one who introduced you to cigarette smoking?*
>
> **YS-USW 4:** *Nobody…nobody, nobody introduced me to smoke but I just learnt it.... No friend gave me. I just bought by myself and smoked.*

f. Low levels of self efficacy

Young smokers showed low levels of self efficacy and poor refusal skills when they were first offered cigarettes to smoke. The low level of self efficacy was noticed among participants irrespective of whether they were offered their first cigarette by their friends or family members. Their poor refusal skills and low levels of self efficacy made them less able to handle the pressure from friends to smoke.

YS-SW 1: Yes, then he was talking about cigarette…you know then I already had that concept…the mind that "this hemp of a thing is a very very, very bad thing… really bad! It is even worse than cigarette so you don't have to do it [talking to himself]. Okay just do cigarette so that you will just 'feel among' so that it will not look like you are that Mummy's boy stuff like that. You can just go ahead [still talking to himself]", then I said…okay let them give me St. Morris. I remember vividly, it was St. Morris I asked them to give me. I was with the St Morris; I was just looking at it. The lighter was there…I…the…the…the…I did not really have the mind to smoke…it was my first time…okay, I was just like…guy just go ahead and lit this thing[still talking to himself here]…

YS-SW 4: Well, most of the friends I go out with are smokers. Once in a while I go out with them and I try to resist it but there is no way. I still end up smoking with them so I had to get used to it.

Poor refusal skills also made participant YS-US3 (who was influenced to start smoking by his brother) to progress from smoking cigarette to smoking more of marijuana. He found it difficult to resist smoking marijuana when he found himself in the midst of friends who smoked marijuana.

YS-US 3: Marijuana is different, marijuana…what really made me to go into it…like when you just see everybody gathered now, your friends, it's hard to resist that you won't take and all that… you join them.

g. Determination to smoke

Young smokers expressed a determination to smoke even before they picked up the habit. Smokers reported being determined to smoke at an early age for many reasons ranging from admiration of older persons and peers who smoke to submissiveness to role models and elders who are smokers. While the influence of such significant others on the youth's

determination to smoke may fall within the interpersonal level influences, the decision young

smokers made that they would want to smoke at a future date was a personal one.

> *YS-OS 4: Well.... Though when I was younger ...when he [his senior brother] came from school; he attends University of Benin. When he came from school, we both go together... we went to a shop, he will buy the cigarette, he will be smoking so because of the cigarette aroma that I perceive I would say to myself; I will make sure that I smoke one day...*

> *YS-US 1: Yes, he [his friend] smokes a lot and I used to hang out with him and he used to smoke a lot and... he could smoke like a pack of cigarette in front of me. So I was like...I wish I could smoke like this guy and stuff like that.*

> *INTERVIEWER: all these exposures are a part of why you started smoking I suppose?*
> *YS-USW 2: Yes...all these gave me the courage to say; yes I can smoke cigarette, as long as it is human beings who smoke it.*

Some young smokers whose family members had tried to discourage from continuing with the

habit, showed a strong determination to continue smoking believing that no one could stop them

from smoking against their wish. This attitude highlights a rebellious characteristic which is also

related to the adolescent developmental stage.

> *YS-USW 1: My father cannot stop me. I alone will ...if the cigarette smoking starts disturbing me, I will...will stop myself...not my father...even if he forces me, I will not be stopped by force.*

> *YS-USW 2: They advised me [family members]...they cannot stop me.*

Participant YS-USW1 recounts how in a bid to stop him from continuing smoking, his father

went to the extent of locking him up in a police cell but this attempt was also unsuccessful.

> *YS-USW 1: They asked me to stop this thing... even my father locked me up at the police station.*

h. Expected costs of not smoking – dealing with addictive symptoms

Young smokers reported feeling unwell when they did not smoke for some reasons. This can be viewed as a motivation to perpetuate the habit because they usually were relieved from this feeling of being sick when they smoked again. However, most of these physiological motivators for perpetuating smoking seem to be the result of an addiction to nicotine.

> *YS-USW 1: Sometimes if I don't smoke cigarette, my body will not feel well.*

> *YS-USW 3: When I just wake up before I do anything in the early morning, I used to smoke one stick of cigarette before I do anything. But if I don't get the chance because for example when I travel to my father's house, I don't always get the chance to smoke. When I go there sometimes I will be feeling sick because I did not see cigarette to smoke.*

Other physiological motivators of perpetuating smoking reported by young smokers ranged from inability to reason properly, feeling that food eaten has not been digested, feeling of weakness etc. This also serves to pull them back to the habit whenever they attempted to stop smoking.

> *YS-SW 1: I just believe that when I am taking it, I will be reasoning normally…like wow…okay after this, I'm gonna do that…A stick of cigarette…just drag it like…(demonstrating how he would smoke it)…it is so funny, it is so funny…*
> *YS-USW 3: The reason why I smoke is because when I started smoking I saw that…it is as if it has already combined with my blood. Even when I finish eating, if I don't smoke, it will be a problem for me maybe sometimes…emm…I will be feeling pains in my stomach. In my own opinion, I can't say cigarette is good and I can't say it's not good because sometimes when I don't smoke I will feel weak…*

i. Attitude towards smoking

Most of the young smokers had a positive attitude towards their smoking behaviour but only showed worry about how they smell after smoking and the fact that the society has a negative perception about those who smoke. This worry makes them want to quit the habit. Of the eighteen (18) young smokers who participated in this study, eleven (11) felt there was nothing

wrong with smoking while seven (7) felt it was a bad habit. However most of the smokers (i.e. 16) have attempted quitting the habit before.

> **YS-SW 5:** *Hmm…my own perception I will say, well, I don't see anything bad about it [smoking], it is all about lifestyle.*

> **YS-US 2:** *Hmm…my view is that…you see…my view about cigarette smoking…well I see it as something that is not really right. It is not good. The society frowns at it. So generally, whatever the society does not like, people tend to have this negative perception about people that do it.*

Participant YS-SW1 who was one of those who perceived smoking as a bad habit particularly expressed his disappointment that he could not find help to quit smoking, as he is not aware of the existence of any smoking cessation clinics in Nigeria.

> **YS-SW 1:** *What I want to say is; like smoking of a thing…smoking really is a very bad habit…it's a bad habit and I would really love to…I would really love to stop it and emm…I would really love to be...maybe in an organization or something or create an organization that will enlighten the youth to see reasons why they don't have to even go closer to cigarette or even touch a pack or something. It's deadly. Cigarette is a very bad thing. It's like you putting a bullet in a gun and putting the gun in your head and shooting…you know, press the trigger. You understand? Every second you are killing yourself. Maybe if I'm going to be in a position, have the opportunity to help…wow! I would really love to do it. Cigarette is a bad thing. It's a very very bad habit!*

It can be said that some smokers showed contradictory perceptions about their smoking behaviour. They perceived it as a behaviour that is not good because of how they said the society perceives it as well as the negative health effects of smoking but they also held simultaneously positive associations with smoking i.e. being a high achiever and being rich. However, the perception of smoking as an identity marker could also be seen as depicting a low self esteem among the youth (who eventually picked up the habit) leading them to want to compensate for this by involving in a behaviour that they perceive will raise their status among their peers.

PA 4: I think…maybe before now, it was seen as a way of life for big people; for ambitious people. And that was how it was portrayed by these multinationals through aggressive advertisements. They tried to make it look as if it's a cool life for boys…for people that are advancing in life…for the upward mobile…

YS-SW 1: You know, they believe maybe by the time you…most of them believe by the time you add smoking….after dressing up, being in a club, sitting down like a Don… you know…Lit your stick of cigarette…you are there…

YS-US 2: Like I told you before, my friends influenced me to smoke and emm…it was our usual…you know…boy's hanging out so along the line, one of them…I don't know how he started smoking. Along the line when he was doing it, we saw it as something…something "biggish" let me use that language. So…we wanted to be big, we wanted to feel…like the "Mr. Biggs stuff" [Mr. Biggs is a fast food outlet in Nigeria and eating in one of such outlets is generally perceived as a mark of being wealthy].

Some youth saw smoking as a means to boost their ego among their peers and a sign of maturity and attainment of adulthood as seen in the following excerpts. Smoking therefore was used by these youth to aid their desire to live out an image characteristic of those they desired to be like.

YS-OS 2: Somehow it's like that because people that smoke, some people might look at it like a sign of maturity or something like that.

YS-US 1: In summary, I just feel that emm…smoking is emm…a habit that youth cultivate when they are trying to become adults…you know.

YS-US 3: Yeah, it's very common [i.e. smoking]…emm like in Nigeria, I will say that like 60 to 70% of the people that smoke are all young people and it is usually being done most times to boost one's ego or something.

j.   *Awareness and attitude towards health hazards of cigarette smoking*

There was generally a low level of awareness about specific health hazards associated with smoking across participants in this study. Most respondents were however able to mention one or more health hazards associated with the habit. Some of these health challenges as mentioned by

respondents include; various types of cancers, cough, tuberculosis, "heart problem", "kidney problems", hypertension, glycoma etc. Though the young participants reported being aware that smoking is dangerous to health, some believe that some people's body systems are less tolerant to cigarette smoking than others making it dangerous for such.

> **YS-OS 1:** *Of course there are… my uncle stopped smoking because he had emm…emm…glycoma and I think it causes lung problem too.*

> **YS-OS 2:** *Health hazard?...depending on the person. Some people their blood does not want that kind of smoking so it depends ....like those people that their blood does not want it, they could have plenty diseases and the rest.*

Smokers were however not deterred from smoking by the health challenges attributed to cigarette smoking. A few of the young smokers interviewed however reported reducing the number of cigarette sticks they smoke in a day as a way of forestalling the impact it will have on their health. YS-US1 reports taking precautionary measures against these health risks by eating foods that are known to reduce the risk of cancer.

> **YS-USW 3:** *Emm, how has it affected how I smoke?...before I can smoke like 20 sticks per day...but after I read the message, I wanted to stop smoking but I couldn't stop because I'm now addicted to it...so I then reduced the number I smoke. Now, sometimes…7, 6...but I don't smoke more than 7 in a day.*
> **YS-US 2:** *From what I heard about garlic, vegetables, fruits, you see…they tend to reduce your chances of having cancer so if smoking...if cigarette smoking tend to increase your chances of getting cancer, and these food items tend to reduce your chances of getting cancer, so at the end of the day you are where you…if this one pushes you to the left and this one to the right, at the end of the day, you are where you…you remain where you are [i.e. healthy]. Yeah I eat fruits a lot. It's not really about…I like eating it but it's not really about reducing my chances but I know it's one of the reasons why I eat them but I like eating fruits a lot...particularly garlic. Garlic is not a fruit but you know the qualities of…garlic*

On another hand, some young smokers expressed a complete disbelief of the health warnings written on cigarette packs and adverts. Participant YS-OS2 believes that smokers even live longer than non-smokers in contradiction to the health warning on cigarette pack; "The Federal Ministry of Health warns that smokers are liable to die young".

> **INTERVIEWER:** *Does knowing the health hazard associated with smoking affect you smoking behaviour?*
> **YS-US 2:** *No it does not. It will not. It does not and it will not in the sense that…I have told you about the LUTH…that is the Lagos University Teaching Hospital. How doctors come there to smoke. So if doctors could smoke…doctors that are so aware about this health hazards…they are in this too. They are in the medical field so they should be…they are supposed to know these things so if some of them are nonchalant about it, that means probably in the research there are some loop holes they themselves have noticed…have discovered so that's one. Two is that…emm…I really don't know…I really don't think so. It [the health warning] is not convincing enough. It is not correct in the sense that, my father smoked till he died and he was about 70 plus when he died. 70yrs plus…and it was not even the cigarette smoke that killed him, it was the alcohol. He had stroke and cigarette does not come with stroke*
>
> **YS-OS 2:** *My own perception is this; they say smokers are liable to die young but finally, I believe smokers even live longer than non-smokers.*

k. Weak commitment to conventional values

Among young smokers who participated in this study, there seemed to be a general weak commitment to the conventional values in the society that seek to discourage smoking. However, smokers sought to shield themselves from criticism from the society by concealing their smoking behaviour from their significant others especially those family members and friends who do not smoke.

This weak commitment to societal values was said to have resulted from the youth not getting a clear picture of what is right or wrong due to the contradictory message they get from the

society. Participant PA2 attributes this weak commitment to the fact that the society speaks from "two sides of the mouth". She describes this scenario as a society which seems to disapprove of smoking on one hand, but on the other hand, approving of the behaviour indirectly by celebrating smokers. This according to her serves to give an indication to the youth that smoking is permissible in the society.

> *PA 2: … They have models who smoke especially in the entertainment world. Musicians smoke! There are musicians who are celebrated as legends in Nigeria who smoked even the Indian hemp till they died yet they are celebrated as legends…. So they are role models…so in our society you find somebody talking from both sides of the mouth. Saying something positive this way and saying something negative the other way. So even sometimes the youth get entangled in this clusters of not being able to…it becomes cloudy, not being able to distinguish actually what is good or bad. Even when they know within, they play along and say because this is allowed, I can do it.*

l. *Weak commitment to religious values*

A weak commitment to religious values was mentioned to facilitate smoking behaviour as religion may serve as a reason not to smoke. Participant PA2 explains that many Christian Churches preach against the habit of smoking against the backdrop of the health consequences of smoking as a habit which goes against the Christian tenet of the body being the temple of God.

> *PA 2: Well emm…I could only say…except for what I know, I'm speaking out of what I know…and from the circle of friends I have, for a Christian family, the youth will not want to smoke…Although it is not there in the bible directly that smoking is a sin, many Christian youth will not smoke…. They do not smoke because it is injurious to their health. That is why I said although it is not in the Bible; it is taught to the Christian folds that it is not good to smoke... that it is a dirty habit. So they are told to drop it. Especially those who now come into Christianity but had been smoking, they make so much effort to drop the habit because they see it as a bad habit and if they are already in the Christian fold, they do not want to smoke but that's not to say one or two may not experiment. You*

know youth is an age of experiments; they may want to experiment and have a taste and later say; oh it is wrong.

INTERVIEWER: *It is wrong?*

PA 2: *It is not in the bible but it is injurious to health and anything that is injurious to health, any child of God should beware. Like the way they will teach it is like: your body is the temple of God and because it is the temple of God, you must respect it, you must honour it and smoking will defile your body.*

Participant YS-US3 expresses shock at the fact that he now smokes despite the fact that he had been a very committed Christian when he was younger.

INTERVIEWER: *You think it's in the gene because your daddy smokes too?*

YS-US 3: *Yeah...something like that because...because like when I was younger, I used to be...I was in prayer band, they call me pastor and all that things but I'm so surprised that this is me now...it's hard for me to believe.*

Several Intrapersonal risk factors which serve as push and/or push factors for young people to smoke were reported among southern Nigerian youth. This include among others: sociability and sensation seeking characteristics, fatalistic attitude, poor coping and refusal skills, low self efficacy, positive attitude towards smoking and weak commitment to religious and conventional values. The youth were also motivated to initiate or perpetuate smoking as a means of handling various life challenges like depression, stress, campus life as well as to aid relaxation, sleep, digestion and ward-off worry.

Immediate influences for smoking behaviour

The theory of triadic influence identified three factors (trial behaviour, related behaviour and decision or intention to smoke) that were classified as immediate predictors of smoking. Results from the qualitative phase of this study also identified these three factors among young smokers.

The qualitative phase of this study did not seek to investigate these factors as predictors of youth's smoking behaviour. They are therefore presented as immediate influences to ensure clarity in the usage of this term; predictor.

a. Trial behaviour

In this study, it was discovered that youth's attempt at smoking usually started from a very young age. This was majorly influenced by exposure to cigarette smoking by role models in the society, family members and peers. Participant YS-OS2 did this with stubs from his father's cigarette while YS-US3 recounts how he attempted smoking cigarette stubs thrown around his school premises by his teacher many years before he started smoking.

> **YS-OS 2:** *Ehnnn…it influenced me because after he finished smoking, I do pick the…*
>
> **INTERVIEWER:** *After your father finishes smoking?*
>
> **YS-OS 2:** *Yes, I do pick the filter (stub) and I will light it and will just try to be smoking it*
>
> **YS-US 3:** *When I was in primary…I remember in primary four then…I was gathering… filters of cigar from the ground because then, one of my teachers smokes so I started gathering the filters from the ground. I now said okay when I get home, I was going to smoke them…at that time as a small boy…so my mum caught me. My mum now beat me very well and advised me.*

b. Related behaviour

Smoking of marijuana and drinking of alcohol were found to be closely related behaviours to cigarette smoking in the society. Smokers explained that they could not drink without smoking and vice versa.

> **YS-OS 1:** *We started by drinking and emm…from that drinking we crossed into smoking and emm and I enjoyed it when they smoked.*

> **YS-SW 2:** *Like me, at times when I'm hot [angered], I can't drink without smoking.*

> **YS-SW 5:** *Yes, it goes with alcohol. It just makes it 'blend'…let me use another slang*

One very disturbing finding however is the gradual replacement of cigarette smoking with marijuana. This is being done under the guise that nicotine which young people presume to be the actual component which causes the health hazards associated with smoking is not found in marijuana. Participant YU-US3 explained how he was cajoled by his friends to start smoking marijuana through this myth.

> **INTERVIEWER:** *Okay, so how does this knowledge of the health hazard affect your smoking behaviour…?*
> **YS-US 3:** *Yeah, it affects it very well because I…what made me…what really made me to start smoking emm…marijuana and all that, according to smokers…as in…some of my friends they said it was better than cigarette because cigarette contains nicotine and marijuana does not…yeah…so that was why…. Marijuana is like natural. That was what prompted me into… marijuana…*

c. Decision/intention to smoke

Youth's intention and decision to smoke were found to span across factors that influence their admiration of the habit in friends and role models and in family members who smoke. Participant YS-OS3 started smoking in admiration of his father's smoking behaviour.

> **YS-OS 3:** *So when I perceived the aroma of the cigarette, I felt… I loved it the way it is coming out from his mouth. I was very very happy, that's why I smoke.*

Participant YS-US1 expressed how he longed to smoke like his friend who used to smoke a lot of cigarettes while participant YS-USW3 decided to pick up the habit in admiration of the smoking behaviour of senior apprentices at a place where he was learning a skill.

> **YS-US 1:** *Yes, he smokes a lot and I used to hang out with him and he used to smoke a lot and…he smokes a lot, he could smoke like a pack of cigarette in front of me. So I was like…I wish I could smoke like this guy and stuff like that.*

> **YS-USW 3:** *I liked the way they smoke that's why they gave me.*

Close exposure to cigarette smoking at a very young age tend to influence youth's intention to smoke. Participant YS-OS4 narrates how he accompanied his brother to buy cigarettes and had the intention to smoke later in life.

> **YS-OS 4:** *Well... my friends and also my senior brother. Though when I was very young… when he [his brother] came from school, we both together go to a shop, he will buy the cigarette, he will be smoking so because of the aroma that I used to perceive, I would say I will make sure that smoke one day…*

Suggested solutions to curbing the increasing prevalence of smoking among youth in Nigeria

Recommendations made by participants as to how the prevalence of smoking especially among the youth in Nigeria can be curbed can be categorized into four suggestions. These include creating awareness, making effective laws, establishing cessation clinics and providing job opportunities for the youth. Some respondents believe however that the government has done enough already while some are of the view that there is nothing the government can actually do to curb the increase in the prevalence of smoking especially since the government cannot stop the tobacco companies from doing business in the country. A representation of the frequency of respondents' suggestions is presented using a pie graph (see Figure 11).
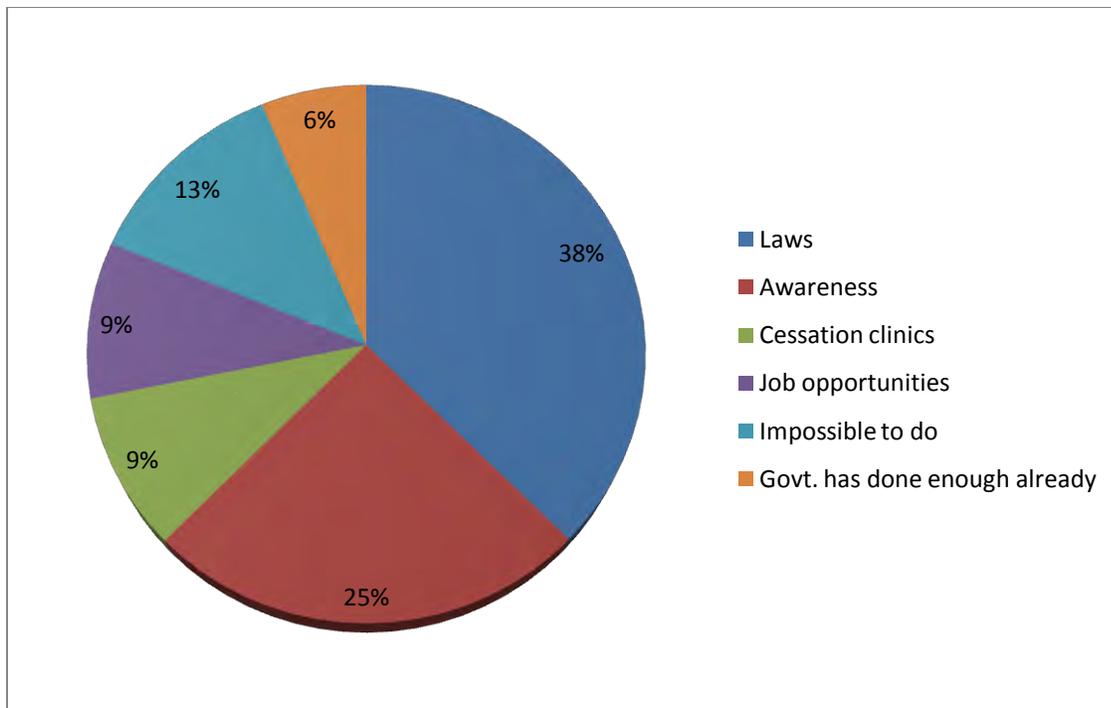
Figure 11: Distribution of respondents' suggestions to curb smoking among Nigerian youth

i. *Making relevant and effective laws*

The making of relevant laws (tobacco control policy) and establishing appropriate agencies to monitor the implementation of such laws as well as prosecute defaulters made up 38% of respondents' suggestions as to how the government can reduce the prevalence of smoking. As can be seen in the pie chart above, this was the most mentioned suggestion towards curbing the rising prevalence of smoking among Nigerian youth. Participants suggested that such laws should include increase in taxation, total ban of advertisements by tobacco companies, regulation of sales and purchase of cigarettes, ban on importation of cigarettes and a reduction in the nicotine content of cigarettes. It is not unusual that most suggestions were on the creating of laws on tobacco control since at the time of this study there was no functional law in Nigeria on tobacco regulation in the entire country except for one state and the FCT (Osun and Abuja) who

had to make their own laws. The extracts from participants PA1 and PA2 tried to capture these and other suggestions.

> **PA 1:** *It's through emm…aggressive public awareness, special documentary to show the effect …the health effect of smoking. And then making it as part of our civic education…and also making stringent rules that will regulate the activities of the companies that are dealing on tobacco and if possible, putting them out of business by increasing the tax, they will be out of business.*

> **PA 2:** *I believe that if government will after passing that bill, set up an agency that will monitor the implementation, then it will work out. So we need an agency to monitor the sales of cigarette. To control its use by the youth because we need to preserve our youth or else we will not have a good and bright future.*

Participant PA4 also explained that enacting the *Child Right Act* will serve to discourage parents and older adults from sending children on errands to buy cigarette.

> **PA 4:** *The government may have to again emphasize on the child rights act. I don't think that has been passed… so they have to really work on it so that children can have the right to refuse what is not really good for them. But it will be really really difficult.*

ii.   Creating awareness

Awareness campaigns in the form of seminars, lectures; targeted enlightenment programmes starting from primary schools to universities were suggested as ways by which new entrants can be discouraged into the habit of smoking. This suggestion formed a quarter of all the suggestions made by participants of this study.

> **YS-US 1:** *Well, they can sensitize the public more you know…do adverts, carry out emm…seminars that would advocate against smoking you know. That is what I will always say…sensitizing the people and trying to empower them. They have different programmes they could always create for them to just have an idea. But I think sensitizing the public, the people and constant adverts about the ills of smoking, seminars and programmes on TV can actually help to stop it.*

PA 3: Enlightenment…local government,…from federal, state and local governments. Even from local governments to districts.

Teaching children refusal skills was also seen as a means to help children refuse errands which expose them to cigarette without being disrespectful to their elders. Also, participants PA2 and PA4 suggested enlightening parents especially those who smoke in order to educate them on the dangers of sending their children to purchase cigarette for them. In the opinion of participant PA4, if the parents who smoke cannot be stopped from smoking, it will be difficult to get them to stop sending their children to buy cigarettes.

PA 2: We will need to be working with parents and then working also with the…below 18s because even on issues like human trafficking, we were also working with the below 18s to let them know…and teach them refusal skills. So from the NGO angle, we are already teaching our adolescents and youth refusal skills and refusing in a way that will not hurt your parents so we can approach it from two angles; talking with the parents and then also talking…teaching the youth refusal skills because in teaching them refusal skills we teach them assertiveness skills so they are assertive and while making their opinions known, they are also not emm…they are also not being rude to their parents. Because it is a core value in Africa for children to respect their parents and even for me who is a social worker and in the NGO world, no matter my interaction with any other person outside Africa, it is a value I hold so dearly but in wanting my children to respect me, I also want them to know that they have rights but for their rights and my rights to be able to work harmoniously, we have to be responsible. So I as a parent should know that I have some responsibilities. Even the child who is enjoying the right should know that he or she also has some responsibilities. It is going to be a long walk. But then…it is walkable.

iii.   *Smoking cessation clinics for current smokers*

Currently, there is no known tobacco cessation clinic in any part of Nigeria. This was confirmed by participant PA4 who has been working on tobacco control (in an NGO) in the country for many years. Respondents (smokers and non-smokers alike) suggested that this should be

established for the "thousands" who would like to be helped to give up their addiction to cigarette. The establishment of tobacco cessation clinics formed 9% of suggestions made.

> *PA 4: To curb it; more awareness and to provide cessation clinic for people who are already in it and would want to stop…*

> *YS-SW 1: I know that there are thousands of youth out there like me who really want someone to… be of assistance to them to like emm…just to help them…it is a very bad habit.*

iv.   Job opportunities

Provision of job opportunities for the teeming Nigerian youth was also put forward as a possible solution to the increasing prevalence of smoking in Nigeria. Of all the suggestions made, 9% were for an increase in job opportunities for the youth so that they can spend their time more productively.

> *YS-SW 2: Well, for them to stop smoking…I think they should create more opportunities, I mean for jobs…for the youth. I'm sure if they are being tied down with their work, I don't think they will have all that time for that pleasure…*

v.   Curbing smoking prevalence may not be possible to achieve

Many young smokers felt that stopping the prevalence of smoking is not a possible mission that the government can accomplish due to the complexity of the issues surrounding smoking and cigarette availability, sales and purchase in Nigeria. This notion of tobacco control being an impossible mission carried 13% of the responses from participants on how to find possible solutions to the rising prevalence of smoking among Nigerian youth.

> *YS-OS 4: There is nothing the government can do.*

INTERVIEWER: Why do you think there is nothing they can do?

YS-OS 4: Because the population of those smoking right now is increasing and is kind of much. So I don't think there is any way that the government can find a solution to stop that…

vi.   *Government has done enough*

Some respondents who were mainly older adults believe that the government has done enough to educate the public about the health hazards of smoking by the health warnings on the cigarette packs. This according to these respondents should be enough for everyone to know that cigarette is not good for them and so stay away. Responses who believe the government has done enough already carried 6% of the responses received.

SECL: There is nothing they can do now that they have not done. It is just that the enforcement is not much emmm…you can see that they smoke in other places people from the west they smoke and our people copy the thing from them so and emm…govt is trying by asking tobacco companies and all these emm… emmm…advert people to put all that clause. These are things they are doing. Emm just that…can we listen? Can we learn from the message?

Summary of qualitative findings

From data collected in the first phase of this research, many factors which span across all the streams of the influences proposed in the Theory of Triadic Influence (TTI) emerged. Results were summarized here according to the three streams of influence and the immediate predictors (influences) of the TTI as presented. These were cultural/environmental, interpersonal (social) and intrapersonal influences and they formed the superordinate themes of the findings in this study.

Various factors were found to influence the youth to initiate and perpetuate smoking at the cultural/environment stream of influence. Social norms around gender and smoking seem to be responsible for discouraging females to smoke thus keeping the prevalence of female smokers low. The lack of jobs for even the self-employed youth was pointed out as a reason why the youth have the time to spend at smoking joints.

A defunct tobacco control act and a new tobacco control policy which has not yet been signed into law leaves Nigeria without any currently functional policy on tobacco control. Osun state in south-west Nigeria is the only government entity (in the south) with a state promulgated law and this is just one out of the seventeen (17) states making up southern Nigeria. The lack of an operational tobacco control policy was found to lead to a myriad of issues ranging from the unchecked activities of the tobacco industry to easily available, cheap and close proximity of points of purchase of cigarettes. The very cheap price of cigarettes especially as it is still commonly sold in single sticks and the ease of purchase as a result of a lack of age restrictions on sale and purchase were found to increase the accessibility and affordability of cigarettes to the youth. The media in the form of movies as well as advertising depictions of cigarette smokers as role models has strong influence on youth's decision to smoke.

The influence of the big capital of tobacco multinationals was highly visible in their sponsorships of entertainment shows and government programmes and offering of scholarships to indigent students. These though carried out in the name of Corporate Social Responsibility (CSR) are being used as avenues to recruit or entice youth to smoke cigarette. Fashion shows, night parties,

road shows and campus shows targeted at women and youth were popularly organized by tobacco companies doing business in Nigeria as a way to recruit new and young entrants to the habit of smoking. The government is also constrained to allow some of these subtle adverts to go on since the tobacco multinationals are seen as providing foreign direct investments (FDI) to the country and jobs to some of her citizens. Government's current efforts aimed at tobacco control were found to be majorly on two aspects; health warnings and "age restriction" (which is restricted to the cigarette packs). No enforcement of age restriction is being done either in terms of selling or purchasing cigarette in the country.

Primordial cultures which require the provision of packets of cigarettes and other tobacco products for traditional ceremonies still abound especially in south-east and south-south Nigeria. Tobacco products like dried or fresh tobacco leaves and snuff were also popularly consumed or used in making traditional medicines as the case may be in all three regions of southern Nigeria. The socialization of children in a collectivist oriented society like Nigeria ordinarily serves to promote communal living and collective care for children growing up in the same community. This also makes it traditionally mandatory for children to run errands for older members of the community whether they are related to such persons or not. However, the practice of sending children on errands to purchase cigarettes and light then up for adults (including parents) was also found to expose children to cigarettes and promote smoking initiation among children. Culture which has metamorphosed due to interactions with other western cultures and the media was found to also influence youth's norms surrounding smoking.

At the Interpersonal (social) stream of influence, factors which were found to influence smoking behaviour include; the smoking behaviour and attitudes of peers, family members and significant

others. Participants also mentioned that smoking is fast increasing especially among young people. This view was shared by young smokers, community leaders and political analysts who participated in this study. The belief that youth's significant others encourage smoking either through their own smoking behaviour or through a perceived permissiveness was also found to motivate youth to smoke. In some situations, youth who did not smoke are said to be socially alienated and stigmatized. This was also found to motivate some of the youth to start smoking.

Among the intrapersonal influences, sociability and sensation seeking traits as well as fatalistic attitude expressed in the slogan; "anything can kill a man" were particularly observed among young smokers. The youth were also found to smoke in order to: kill depression, aid relaxation and sleep, aid digestion of food, quell anger, ward-off worries, cope with stress and other social challenges, think properly and to regulate their body temperature when the weather is cold. Other factors found in this stream that make the youth prone to initiate smoking include poor refusal skills, poor coping skills, determination to smoke, weak commitment to religious values, weak commitment to conventional values, positive attitude towards smoking by self, low risk perception of experiencing the health hazards associated with smoking and low self-efficacy to refuse smoking. Smokers' awareness and attitude towards the health hazards associated with smoking were found to elicit varied responses among smokers including reducing the number of cigarettes smoked per day and eating foods recommended to reduce the risk of cancer. The negative health effects of smoking however did not motivate smokers to successfully quit the habit.

Among the immediate influences of smoking found in the narration of smokers experiences were: trial behaviour at a young age, related behaviour which was predominantly alcohol

consumption and smoking of marijuana as well as intention or decision to smoke. However, it was found that there is a growing trend among the youth to switch from smoking cigarette to marijuana as this is perceived to pose lesser health challenges to smokers.

Participants made various suggestions as to how to curb the increasing prevalence of smoking especially among the youth. These suggestions have been categorized into four groups which include; instituting the appropriate and effective tobacco control policies, creating more awareness, establishing cessation clinics for current smokers and creating more jobs. Some participants however believe that there is nothing the government can do since cigarette smoking is very complicated and widespread among the population. Some other participants were also of the view that the government has done enough already by the health warnings written on the packs and similar warning placed alongside tobacco adverts.

CHAPTER SIX

QUANTITATIVE (SURVEY) FINDINGS

Introduction

This chapter presents results from the quantitative phase of this research. A cross sectional

survey was conducted among four categories of young respondents namely; university

undergraduates, college students (students of other tertiary institutions), skilled workers and

unskilled workers. This was to ensure that results represented a wide range of the youth in

southern Nigeria. The results from the analysis of data collected in this phase are presented in

this chapter under the following headings; demographic characteristics of the sample, smoking

behaviours, cultural/environmental risk influences, interpersonal, intrapersonal and immediate

influences for smoking (trial behaviour, related behaviour and intention to smoke), best

predictors of smoking and a summary of quantitative findings. When reference is made to

smoking it implies the use of cigarettes unless otherwise indicated.

Demographic characteristics of respondents

The age of the survey participants ranged from 18 to 24 years. This falls within the defined range

of youth (15 to 24 years) according to the Pan American Health Organisation (PAHO) and

World Health Organisation (WHO) in Breinbauer and Maddaleno (2005). Five hundred and

fifty-seven (557) participants returned the questionnaires in this study. However, a total of five

hundred and fifty (550) participants formed the actual sample used in the analysis. The ages of

seven participants were found to be above 24 years. The mean age of participants was 21.9 years

and the modal age was 24 years (32.1%, n=169). A summary table of respondents' demographics

is presented in Table 7.

Table 7: Demographic characteristics of survey participants

Variable	Categories	n	Percent (%)
Age	18	21	4.0
	19	49	9.3
	20	84	16.0
	21	58	11.0
	22	56	10.6
	23	89	16.9
	24	169	32.2
	Total	526	100
Gender	Males	376	70.3
	Females	159	29.7
	Total	535	100
GPZ of origin	South-East	181	33.2
	South-South	158	28.9
	South-West	173	31.7
	Other	34	6.2
	Total	546	100
GPZ of residence	South-East	170	30.9
	South-South	204	37.1
	South-West	176	32.0
	Total	550	100
Educational attainment	Primary Education	14	2.6
	Secondary Education	415	75.7
	Tertiary Education	119	21.7
	Total	548	100
Employment Status	Students	303	55.1
	Skilled Workers	119	21.6
	Unskilled Workers	128	23.3
	Total	550	100

The distribution of respondents according to their employment status shows 55.1% (n=303) are students (of tertiary institutions), 21.6% (n=119) are skilled workers and 23.3% (n=128) are unskilled workers. Non-students therefore made up 44.9% (n=247) of the sample.

Smoking behaviours of respondents

The prevalence rate of active smokers obtained in this study is 29.7% (n=160) (see Figure 12). Gender distribution of current smokers shows that 85.3% (n=133) of the smokers were males while 14.7% (n=23) were females (see Table 8). The gender of four active smokers were undisclosed. The ratio of male to female smokers was therefore 5.8 to 1. The prevalence of smoking by gender was 35.9% among males and 15% among females (see Table 9).
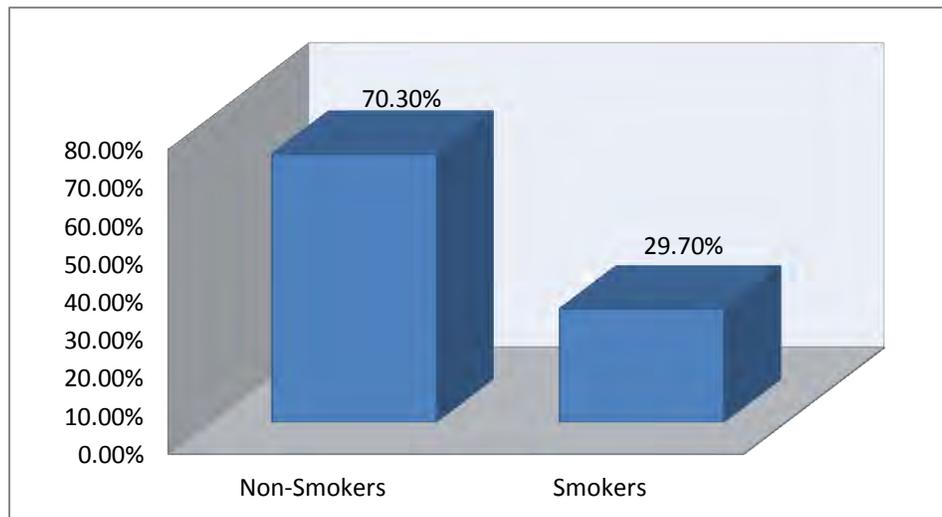
Figure 12: Youth smoking prevalence

The mean age of current smokers was found to be 22 years. The distribution of current smokers by age shows a sharp jump from 17.1% (n=27) among the 23 years age group to 34.8% (n=55) in the 24 years age group (see Table 7). There were more smokers from the south-east GPZ (48.7%,

n=77) than the other GPZs. Considering respondents' GPZ of residence, more smokers also

reside in the south-east GPZ (48.8%, n=78) than the other GPZs.

Table 8: Distribution of smokers by demographic characteristics

Variable	Categories	Smokers (n)	Smokers (%)
Age			
	18	8	5.1
	19	13	8.2
	20	24	15.2
	21	16	10.1
	22	15	9.5
	23	27	17.1
	24	55	34.8
	Total	158	100
Gender			
	Males	133	85.3
	Females	23	14.7
	Total	156	100
GPZ of origin			
	South-East	77	48.7
	South-South	37	23.4
	South-West	32	20.3
	Others	12	7.6
	Total	158	100
GPZ of residence	South-East	78	48.8
	South-South	43	26.9
	South-West	39	24.4
	Total	160	100
Educational attainment			
	Primary Education	9	5.7
	Secondary Education	124	78.0
	Tertiary Education	26	16.3
	Total	159	100
Employment Category	Students	67	41.9
	Skilled Workers	26	16.3
	Unskilled Workers	67	41.9
	Total	160	100

The results also show that of 546 respondents i.e. 41% (n=224) have ever tried smoking. Investigating the age of those who have ever tried smoking (n=220), the results revealed the modal age for the first trial of smoking to be '16 years and older' (47.7%, n=105). However, 12.3% (n=27) first tried smoking between ages 12 and 13 years while 20.9% (n=46) first tried between ages 14 and 15 years (see Figure 13).
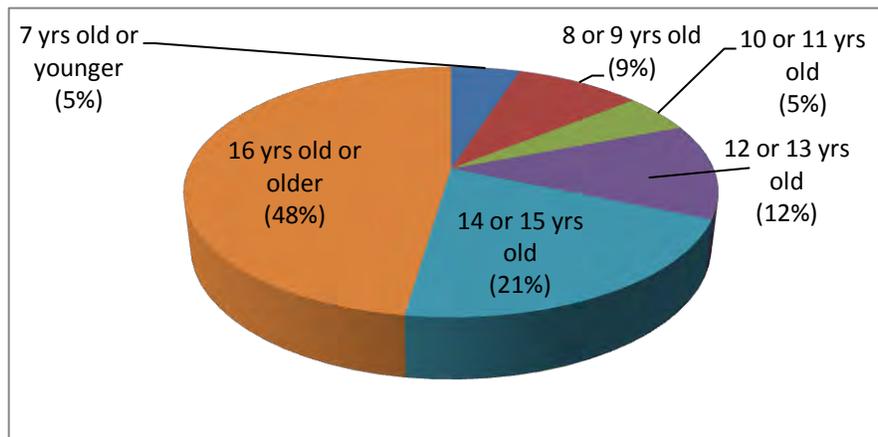
Figure 13: Age of first experiment with cigarette

From Figure 13, a sharp increase is noted in the experimentation with cigarette smoking from age 10 onwards with more than 200% jump from the '14 to 15 years' age group (21%) to the '16 years and older' group (48%).

Chi-square test was used to investigate the associations between smoking status and the other demographic variables. Cross-tabulation results are presented in Table 9.

Table 9: Smoking prevalence among Southern Nigerian youth by demographic characteristics

Variable (N)	Categories	Non-Smokers (%)	Smokers (%)	Group 'n' (100%)	Group (%)
Age (N=515):					
	18	13 (61.9%)	8 (38.1%)	21	4.1
	19	34 (72.3%)	13 (27.1%)	47	9.1
	20	59 (71.1%)	24 (28.9%)	83	16.1
	21	40 (71.4%)	16 (28.6%)	56	10.9
	22	41 (73.2%)	15 (26.8%)	56	10.9
	23	60 (69.0%)	27 (31.0%)	87	16.9
	24	110 (66.7%)	55 (33.3%)	165	32.0
Gender[*] (N=523):	Males	237 (64.1%)	133 (35.9%)	370	70.7
	Females	130 (85.0%)	23 (15.0%)	153	29.3
GPZ origin[*] (N=534):	South-east	101 (56.7%)	77 (43.3%)	178	33.3
	South-south	117 (76.0%)	37 (24.0%)	154	28.8
	South-west	138 (81.2%)	32 (18.8%)	170	31.8
	Others	20 (62.5%)	12 (37.5%)	32	6.0
GPZ residing[*] (N=538):	South-east	88 (53.0%)	78 (47.0%)	166	30.9
	South-south	156 (78.4%)	43 (21.6%)	199	37.0
	South-west	134 (75.5%)	39 (22.5%)	173	32.2
Educational attainment (N=536):	Primary education	5 (35.7%)	9 (64.3%)	14	2.6
	Secondary education	283 (69.5%)	124 (30.5%)	407	75.9
	Tertiary education	89 (77.4%)	26 (22.6%)	115	21.5
Employment Category[*] (N=538):	Students	229 (77.4%)	67 (22.6%)	296	55.0
	Skilled workers	89 (77.4%)	26 (22.6%)	115	21.4
	Unskilled workers	60 (47.2%)	67 (52.8%)	127	23.6

*significant at p<.05; **p<.01; ***p<.001 (two-tailed) (χ^2 test for independence)

Age: Results show no statistically significant relationship between respondents' smoking status and their age (χ^2 [6, n=515] = 1.93, p=.93; φ_c =.06).

Educational attainment: There was also no statistically significant association between respondents' smoking status and their educational attainment. (χ^2 [1, n=536] = 3.49, p=.06; ϕ=.08).

Gender: The Chi-square test for independence to explore gender and smoking status showed a significant relationship between these two variables (χ^2 [1, n=523] = 22.3, p<.001). Males were more likely to be smokers than females (See Table 9). The phi (ϕ) effect size (.21) for this relationship shows a small to medium effect.

Geopolitical zones: The Chi-square test for independence revealed a significant relationship between youth's smoking status and their GPZ of origin (χ^2 [d3, n=534] =28.67, p<.001, ϕ_c=.23) as well as with their GPZ of residence (χ^2 [d2, n=538] =34.22, p<.001, ϕ_c=.25). Youth who are from the south-east GPZ (52.7%, n=77) as well as those residing in the South-east GPZ (48.8%, n=78) were more likely to be smokers. The Cramer's V effect sizes obtained for both relationships show a small to medium effect.

Employment category: Among the smokers (see Table 9), there were more students and unskilled workers (41.9%, n=67 for both groups) and less skilled workers (16.3%, n=26). Chi-square test for independence showed a significant relationship between respondents' smoking status and their category of employment (χ^2 [2, n=538] = 42.15, p<.001). Unskilled workers were more likely to be smokers (52.8%, n=67) than students and skilled workers (22.6%, n=67 and 22.6%, n=26 respectively). The Cramer's V effect size (.28) shows a small to medium effect.

225

Investigation of the number of cigarettes consumed by smokers showed that nearly half of the smokers (43.8%, n=70) smoked between two to five cigarettes per day while 17.2% (n=26) consume more than five cigarettes per day. Respondents who smoked between less than one (<1) and one cigarette per day were 21.9% (n=35). A graphic representation of the percentage of smokers and the quantity of cigarettes smoked per day is presented in Figure 14.
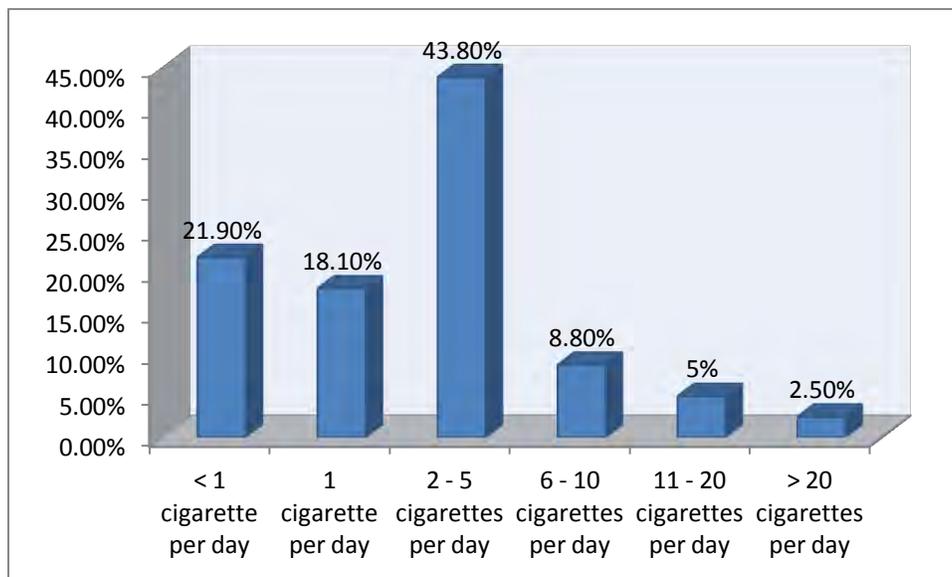
Figure 14: Quantity of cigarettes smoked per day

Other results on respondents' smoking behaviour show that the majority of the smokers (67.9%; n=108) reported sourcing their cigarettes from stores, shops or street vendors. Also, the four most popular brands of cigarettes consumed among the youth were Benson & Hedges (32.7%, n=52), St Morris (14.5%, n=23), Rothmans (13.8%, n=22) and White London (12.6%, n=20).

With regards to preferred smoking sites, young smokers most often smoked at their own homes (27.8%, n=44) followed very closely by at their friends' homes (26.6%, n=42). Fewer

respondents (16.5%, n=26) indicated smoking in public places i.e. parks, shopping centres and street corners. Just 10.8% (n=17) indicated smoking at social events while 9.4% (n=15) indicated smoking at school.

Smokers' intention to quit and quit attempt in the past year:

A substantial group of the smokers (34.4%; n=55) indicated an intention to quit smoking while 39.4% (n=63) attempted to quit in the past year. The chi-square test for independence showed that there is a significant relationship between smokers' employment category and their intention to quit (χ^2 [2, n=106] = 7.14, p=.028). Unskilled workers were less likely to indicate an intention to quit smoking (38.8%, n=19) than students and skilled workers (59%, n=23 and 77.2%, n=13 respectively). The Cramer's V effect size (.26) showed a small to medium effect. The chi-square test for independence also showed that there is a significant association between employment status and smokers quit attempts in the past year (χ^2 [2, n=120] = 13.17, p=.001). Skilled workers were more likely to attempt quitting (70%, n=14) compared with students (66%, n=31) and unskilled workers (34%, n=18). The Cramer's V effect size (.33) showed a medium effect.

Cultural/environmental risk influences

The influence of several cultural and environmental factors on youth's smoking behaviour was also investigated using the modified GYTS questionnaire. These include youth's exposure to second hand smoke (SHS) at home and places other than the home, the social acceptance of smoking behaviour among boys and girls, presence of cultural practices involving tobacco products as well as youth's perceptions regarding the effectiveness of tobacco policy.

Youth' smoking status and exposure to second hand smoke (SHS)

Youth's exposure to SHS was measured using the exposure to SHS scale (ESHSS). As expected, 88.4% (n=138) of respondents who are smokers reported a moderate to high exposure to SHS. Expectedly also, smokers were more likely to report a high exposure to SHS (72.8%, n=59) compared with non-smokers (27.2, n=22). The chi-square test for independence (see Table 10) showed a significant relationship between respondents' smoking status and their level of exposure to SHS (χ^2 (2, n=528] = 151.35, p =<.001, φ_c=.54). The effect size (φ_c) obtained indicated that the strength of the relationship between these two variables is large. The high level of exposure to SHS among non-smokers is however worrisome as 34.9% (n=130) of them reported a moderate to high exposure to SHS.

Table 10: Cross-tabulation of smoking status and exposure to SHS

Variable (N)	Category	Respondents' smoking status		Group total (100%)
		Non smoker (%)	Smoker (%)	
Exposure of SHS scale*** (N=538)	Low	242 (93.1%)	18 (6.9%)	260 (100.0%)
	Moderate	108 (57.8%)	79 (42.2%)	187 (100.0%)
	High	22 (27.2%)	59 (72.8%)	81 (100.0%)

*significant at p<.05; **p<.01; ***p<.001 (two-tailed) (χ^2 test for independence)

Social acceptance of smoking by gender groups

To investigate how smoking is viewed by the gender groups, an independent samples t-test was conducted to compare the social acceptance of boys' and girls' smoking behaviour using the social acceptance of boys and girls smoking scales (SABSS and SAGSS respectively). With regards to the social acceptance for boys smoking behaviour, there was no significant difference in the mean scores of males (M=3.26, SD=1.31) and females [M=3.09, SD=1.18; t (533) =1.50,

p=.14 two-tailed]. This was also reflected in the very small magnitude of the difference between the means (mean difference=.17, 95% Confidence Interval (*CI)*: -.05 to .40; η^2=.004). For the social acceptance of girls' smoking behaviour, there was also no statistically significant difference in the scores of males (M=2.87, SD=1.27) and females [M=2.77, SD=1.18; t (533) =.90, *p*=.37, two-tailed]. There was a very small magnitude of the difference between the means (mean difference=.11, 95% *CI*: -.13 to .36, η^2=.002). This result showed that male and female respondents did not differ significantly in how they viewed the smoking behaviour of boys and girls in the society. The effect sizes also indicate that for social acceptance of boys' and girls' smoking behaviour, only .4 % and .2 % of the variance is explained by gender respectively.

To investigate the difference (if any) in respondents' perception of boys' and girls' smoking behaviours, the difference in the respondents' scores between the SABSS and SAGSS was investigated using a paired sample t-test. There was a statistically significant difference in the scores for social acceptance for boys' smoking behaviour (M=3.22, SD=1.27) and that for girls' smoking behaviour [M=2.85, SD=1.24; t (549) =7.8, *p*<.001, two-tailed]. With a higher mean score in the SABSS, there seemed to be greater acceptance for smoking among boys than girls in southern Nigeria. The mean difference in the scores was .37 with a 95% *CI* ranging from .28 to .46. The eta squared value (η^2=.10) indicated a moderate effect size.

Cultural influences for smoking in the three GPZS in southern Nigeria

To investigate the presence of some cultural practices which could serve as influences for smoking in the three GPZs in southern Nigeria, the modified GYTS questionnaire was also used. The results are presented in Table 11. Note that only the GPZs of origin is used in this analysis as the cultural norms at the place of origin are likely to have a stronger influence on individuals.

The results of the chi-square test for independence investigating the use of tobacco products for traditional ceremonies in the three GPZs, showed a statistically significant association (p ≤ .05) between these variables (χ^2 [2, n=484] = 41.51, p<.001, φ_c=.29). This association had a medium effect size. The youth from the south-east GPZ were more likely to report the use of tobacco products for traditional ceremonies (58.6%; n=75) compared with those from the south-south and south-west GPZs (21.1%, n=27 and 20.3%, n=26 respectively).

Table 11: Cross-tabulation of the presence of cultural practices involving the use of tobacco products by GPZ of origin

Variable	Response	Geopolitical Zone of Origin			Group total (100%)
		S. East	S. South	S. West	
Use of tobacco products for traditional ceremonies*	Yes	75 (58.6%)	27 (21.1%)	26 (20.3%)	128
	No	96 (27.0%)	120 (33.7%)	140 (39.3%)	356
	GPZ total	171 (35.3%)	147 (30.4%)	166 (34.3%)	484
Use of tobacco products for traditional medicine*	Yes	98 (41.9%)	68 (29.1%)	68 (29.1%)	234
	No	68 (28.5%)	75 (31.4%)	96 (40.2%)	239
	GPZ total	166 (35.1%)	143 (30.2%)	164 (34.7%)	473
Availability of cigarettes at social functions*	Yes	87 (45.3%)	62 (32.3%)	43 (22.4%)	192
	No	83 (28.5%)	85 (29.2%)	123 (42.3%)	291
	GPZ total	170 (35.2%)	147 (30.4%)	166 (34.4%)	483
Minors' contact with cigarettes through buying or selling	Yes	112 (36.1%)	91 (29.4%)	107 (34.5%)	310
	No	57 (32.8%)	57 (32.8%)	60 (34.5%)	174
	GPZ total	169 (34.9%)	148 (30.6%)	167 (34.5%)	484

*significant at p<.05; **p<.01; ***p<.001 (two-tailed) (χ^2 test for independence)

The results of the chi-square test for independence used to investigate the use of tobacco products for traditional medicines in the three GPZs, also showed a significant association between these two variables (χ^2 [2, n=473] = 10.49, p=.005, φ_c=.15). Respondents from the south-east GPZ were more likely to report the use of tobacco products for traditional medicines (41.9%; n=98) compared with those from other GPZs (29.1%, n=68 for both zones). This association however had a small effect size.

In the same light, the same test was carried out to investigate the availability of cigarettes at social functions in the three GPZs. The results show a significant relationship between the availability of cigarettes at social functions and the GPZs (χ^2 [2, n=483] = 22.92, p<.001, φ_c=.22]. This association had a small to medium effect. The youth from the south-east had a higher probability of reporting the availability of cigarettes at social functions (45.3%, n=87) compared with those from the south-south and south-west GPZs (32.3%, n=62 and 22.4%, n=43 respectively).

To investigate the cultural practice of sending children on errands to buy and/or sell cigarettes according to GPZ of origin, the results of the chi-square test for independence showed that this practice is not significantly associated with any of the three GPZs (χ^2 [2, n=484] = .79; p=.68, φ_c=.04). This may be interpreted as being a common practice in the three GPZs under study.

Smoking status and cultural practices

Chi-square tests for independence (with Yates continuity correction) were carried out to investigate the relationship between respondents' smoking status and the various cultural

practices involving the use of tobacco products (see Table 12). Results showed that there was no statistically significant relationship between respondents' indication of the use of tobacco products for traditional ceremonies in their community and their smoking status (χ^2 [1, n=511] = 2.27; p=.11, ϕ = -.07). There was also no association between respondents' smoking status and their indication of tobacco products usage for traditional medicine in their community (χ^2 [1, n=499] =2.86; p=.07, ϕ = -.08).

However, results were statistically significant for the relationship between respondents' smoking status and the availability of cigarettes at social function (χ^2 [1, n=510] =4.28; p=.03, ϕ = -.10). Smokers were more likely to indicate the availability of cigarettes at social functions than non-smokers (46.3%, n=69 versus 36%, n=130). The strength of the relationship was however small. Also, there was a statistically significant relationship between respondents' exposure to cigarettes as a minor and their smoking status (χ^2 [1, n=511] =23.05; p<.001, ϕ = -.22). Smokers were more likely to report having had some exposure to cigarettes at a young age (79.9%, n=119) than non-smokers (56.9%, n=206). The strength of this association was found to be small to medium.

Table 12: Cross-tabulation of respondents' smoking status and the existence of cultural practices involving the use of tobacco products in their community

| Variable | Response | Youth's smoking status | | Group total (%) |
		Non-smoker	Smoker	
Use of tobacco products for traditional ceremonies	Yes	85 (23.6%)	46 (30.5%)	131 (25.6%)
	No	275 (76.4%)	105 (69.5%)	380 (74.4%)
	Total (100%)	360	151	511
Use of tobacco products for traditional medicine	Yes	162 (46.3%)	82 (55%)	244 (48.9%)
	No	188 (53.7%)	67 (45%)	255 (51.1%)
	Total (100%)	350	149	499
Availability of cigarettes at social functions*	Yes	130 (36%)	69 (46.3%)	199 (39%)
	No	231 (64%)	80 (53.7%)	311 (61%)
	Total (100%)	361	149	510
Minors' contact with cigarettes through buying or selling*	Yes	206 (56.9%)	119 (79.9%)	325 (63.6%)
	No	156 (43.1%)	30 (20.1%)	186 (36.4%)
	Total (100%)	362	149	511

*significant at p<.05 (two-tailed) (χ^2 test for independence)

Cultural practices which best predicts smoking status

Direct logistic regression analyses were carried out to assess the impact of various cultural practices on the likelihood that respondents would report being smokers. The initial model contained the four variables used in assessing cultural practices in the modified GYTS questionnaire. This model did not meet the requirement for the Hosmer-Lemeshow test. The least significant variable (availability of tobacco products at social functions) was therefore

233

removed from the model. The final model which comprised of the other three variables (see Table 13) had a good model of fit with a Chi-square value (for Hosmer-Lemeshow test) of 2.55 (5, n=488), p=.77. This model was statistically significant (χ^2 [3, n=488] =28.7, p<.001) indicating that it was able to distinguish between smokers and non-smokers. However, the entire model which correctly classified 70.3% of cases could only explain between 5.7% (Cox and Snell R square) and 8.1% (Nagelkerke R square) of the variance in smoking status. Among the cultural practices involving the use or exposure to tobacco products, the strongest predictor of respondents' smoking status was their exposure to cigarettes as a minor (either through buying or selling) after controlling for all other variables in the model. With an odds ratio (OR) of 2.99, results indicate that respondents who had contact with cigarettes as minors were 3 times more likely to be smokers (see Table 13).

Table 13: Logistic regression results for the strongest cultural predictors of smoking behaviour

Variable	B	S.E.	Wald	df	Sig	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Use of tobacco products for traditional ceremonies	.168	.233	.521	1	.470	1.183	.750	1.867
Use of tobacco products for traditional medicines	.296	.207	2.038	1	.153	1.345	.895	2.019
Exposure to cigarette as a minor	1.098	.236	21.672	1	.000	2.999	1.889	4.761
Constant	-1.813	.230	61.934	1	.000	.163		

*p significant at ≤.05
**Dependent variable: smoking status (Yes=1; No=0). Independent variables: Use of tobacco products for traditional ceremonies (Yes=1; No=0); Use of tobacco products for traditional medicines (Yes=1; No=0); Contact with cigarette as a minor (Yes=1; No=0)

Tobacco control measures

Based on the results from the qualitative phase of this research as well as from other studies, Nigeria currently does not have a functional national tobacco control policy in place. The modified GYTS questionnaire was therefore used to explore the perceptions of the youth regarding the effectiveness of a tobacco control policies in stemming smoking prevalence as well as youth's compliance to such laws if put in place. Results are presented in Table 14.

Table 14: Youth's perceptions on tobacco control policy related matters

Questions	Yes n (%)	No n (%)	Uncertain n (%)	Total n (100%)
Will an increase in the price of cigarette help to reduce smoking in Nigeria?	221(42.5)	299 (57.5)	-	520
Will banning the manufacturing of cigarettes in Nigeria reduce smoking in Nigeria?	352 (67.4)	170 (32.6)	-	522
Will the enforcement of the regulation of the sale and consumption of cigarettes and other tobacco products help to reduce the prevalence of smoking among youth in Nigeria?	300 (58.1)	89 (17.2)	127 (24.6)	516
Will the youth in Nigeria comply with a law banning the consumption of cigarettes and other tobacco products?	266 (52.1)	245 (47.9)	-	511

The results show that the majority of the youth (57.5%, n=299) do not believe in the effectiveness of price regulation in decreasing smoking prevalence. However, more youth

believe that banning the manufacturing of cigarettes in the country (67.4%, n=352) and enforcing regulatory laws on tobacco sales and consumption of cigarettes (58.1%, n=300) will be effective in decreasing smoking prevalence. Just over half of the respondents (52.1%, n=266) think that the youth will comply with a ban on the consumption of cigarettes and other tobacco products.

Interpersonal (social) risk influences for smoking

The interpersonal risk influences on youth's smoking behaviour which were investigated included the smoking status of their closest friend(s) and that of their parents.

Closest friends' smoking status and youth's smoking status

The Frequency distribution of the smoking status of respondents' closest friends (Table 15) shows that more than half of the youth (57%, n=304) indicated that at least some of their friends smoke.

Table 15: Smoking status of respondents' closest friends

Smoking status of closest friends	Frequency (n)	Percent (%)
None of them	229	43.0
Some of them	240	45.0
Most of them	39	7.3
All of them	25	4.7
Total	533	100.0

The results of the chi-square test for independence conducted to detect the association between the youth's smoking status and that of their closest friends indicated a statistically significant association between respondents' smoking status and that of their closest friends (χ^2 [3, n=522] = 115.13, p = <.001). A Cramer's V (φ_c) value of .47 was obtained indicating a medium to large effect size between these variables. Smokers were more likely to indicate that 'most' (63.2%, n=24) or 'all' of their friends smoke (62.5%, n=15) compared with non-smokers. See Table 17.

The modified GYTS questionnaire was also used to explore the context in which smokers felt the strongest urge to smoke. One-third of the smokers (33.3%, n=59) reported feeling the urge to smoke when with friends who smoke. Results are represented graphically in Figure 15.
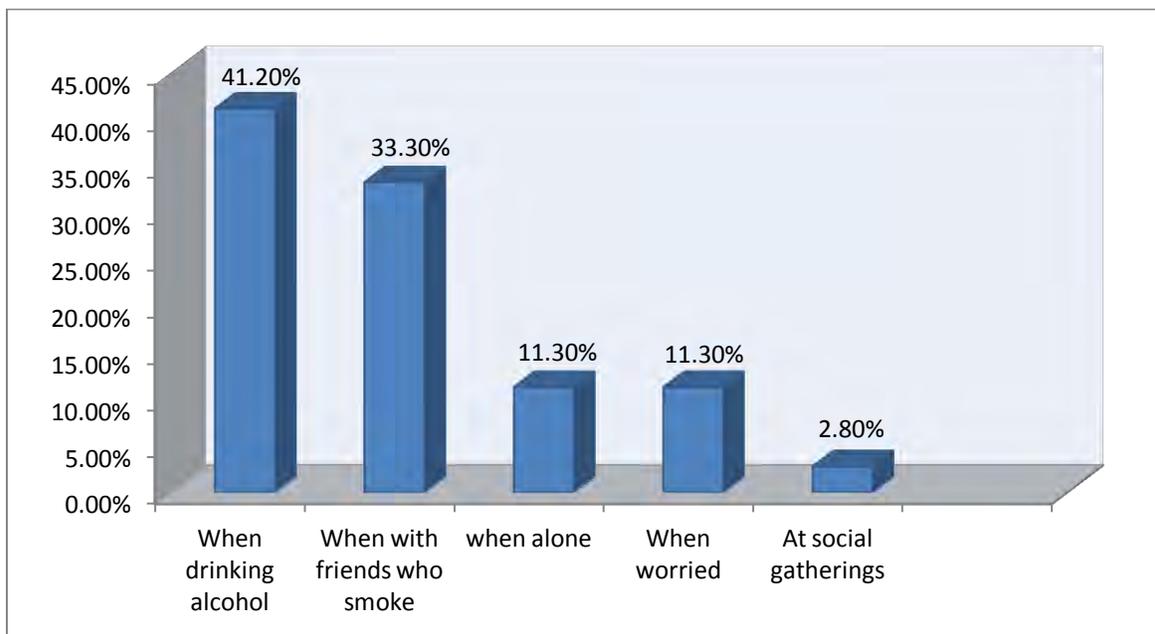
Figure 15: Influences for perpetuating smoking

Parental smoking status and smoking status of youth

A relatively small group of youth (15.5%) indicated that either one or both parents smoke while 4.8% do not know the smoking status of their parents (see Table 16).

Table 16: Frequency of smoking status of respondents' parents

Parents' smoking status	Frequency (n)	Percent (%)
None	436	79.7
Both	9	1.6
Father only	74	13.5
Mother only	2	.4
I don't know	26	4.8
Total	547	100.0

A closer investigation of parental smoking status showed that fathers accounted for 66.7% (n=74); mothers, 1.8% (n=2) while 8.1% (n=9) of the respondents reported that both their parents smoke. Respondents who do not know the smoking status of their parents were 23.4% (n=26). A pie chart representation of this distribution can be seen in Figure 16. For the purpose of statistical analysis, parents whose children did not know their smoking status were grouped as smokers since it was found in this study that parents are wont to hide their smoking status from their children. It could be possible that the reason why such respondents answered in this regard was because they may have likely had genuine suspicions about the smoking status of one of both of their parents.
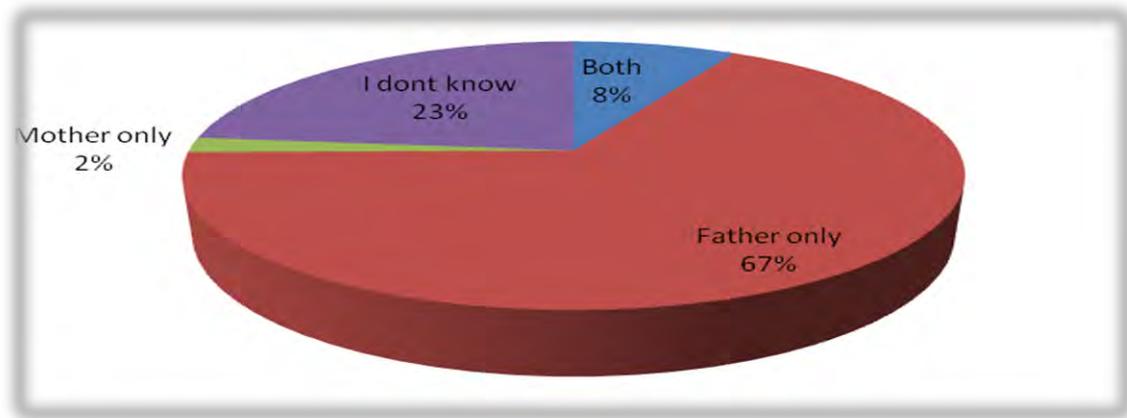
Figure 16: Distribution of respondents' parents who smoke

The chi-square test for independence (see Table 17) also revealed a statistically significant relationship between youth's smoking status and that of their parents (χ^2 [1, n=535] = 64.84, p =<.001, φ_c=.35). Smokers were more likely to have one or both parents who smoke (61.1%, n=66) than non-smokers (21.5%, n=92). The strength of this relationship is medium.

Table 17: Cross-tabulation of youth's smoking status with parental and closest friends' smoking status

Variable (N)	Category	Respondents' smoking status		Group total (100%)
		Non-smoker (%)	Smoker (%)	
Closest friend's smoking status (N=522)***	None	210 (93.8%)	14 (6.3%)	224
	Some	131 (55.5%)	105 (44.5%)	236
	Most	14 (36.8%)	24 (63.2%)	38
	All	9 (37.5%)	15 (62.5%)	24
Parent's smoking status****	Non-smoker	335 (78.5%)	92 (21.5%)	427
	Smoker	42 (38.9%)	66 (61.1%)	108

*significant at p<.05; **p<.01; ***p<.001 [two-tailed] (χ^2 test for independence)

239

Intrapersonal risk influences

The intrapersonal risk factors that were explored include youth's level of knowledge about the impact of smoking on health and well-being as well as their self-efficacy to refuse smoking. These aspects were considered in relation to their age, gender, smoking status, employment category and educational attainment.

Knowledge about the negative impact of smoking on health and well-being

Descriptive statistics of this measure (using the knowledge index) showed that respondents' level of knowledge of the negative impact of smoking on health and well-being was generally high with slightly more than half (56.1%, n=305) falling within the high knowledge category, 32.4% (n=178) had a moderate level of knowledge while 11.2% (n=61) had lower level of knowledge. In comparing various groups of respondents, it should be noted that a high group percent for 'low knowledge' translates to a lower knowledge level for that group (see Table 18). Chi-square test for independence was used in investigating respondents' knowledge levels with their demographic characteristics and smoking behaviours. Cross-tabulation results are presented in Table 17. Note that to determine the strength of the association between the various variables; all effect sizes in this section are that of Cramer's V (φ_c).

Smoking status: Comparing smokers and non-smokers on their level of knowledge, the results show that non-smokers were more likely to have a higher knowledge of the negative impact of smoking on health and well-being than smokers (66.8%, n=250 versus 31.4%, n=50). The chi-square test for independence showed a statistically significant association between smoking

status and knowledge levels (χ^2 [2, n=533] = 79.30, p<.001). The effect size (φ_c=.39) revealed that the strength of the association is medium.

Gender: Regarding gender and knowledge levels, females were more likely to have a high knowledge about the negative impact of smoking on health and well-being than males (65.4%, n=102 versus 51.7%, n=193). The results of the chi-square test for independence showed a significant association between gender and knowledge levels of the respondents (χ^2 [2, n=529] = 11.98, p=.003). The effect size (φ_c=.15) however showed a small association between these variables.

Age: An investigation of respondents' knowledge level by age showed that more youth aged 21 years fell within the high knowledge category (63.8%, n=37) followed closely by those aged 22 years (62.5%, n=35). The chi-square test for independence however found no significant relationship between age and knowledge levels among the respondents (χ^2 [12, n=520] =11.88, p=.456, φ_c=.11).

Employment status: Considering youth's employment status and their knowledge levels, students were more likely to have obtained high knowledge levels about the impact of smoking on health and well-being (65.1%, n=196) than skilled and unskilled workers (58.3%, n=67 and 32.8%, n=42 respectively). There was a statistically significant association between the respondents' employment status and their levels of knowledge based on the results from the chi-square test of independence (χ^2 [d4, n=544] =56.63, p<.001, φ_c=.23). The effect size obtained however indicated a small association.

Trial behaviour: In comparing the levels of knowledge among the youth who have ever tried smoking with those who have not, it was found that those who have never tried smoking were more likely to have a higher level of knowledge than those who have tried (68.6%, n=218 versus 37.8%, n=84). The chi-square test for independence used to explore respondents' trial behaviour and their knowledge levels regarding the negative impact of smoking on health and wellbeing, revealed a statistically significant relationship between these variables (χ^2 [2, n = 540] = 64.56, p<.001, φ_c=.35). The strength of this relationship was found to be medium.

Geopolitical zones (GPZs): The results of the chi-square test was also conducted to investigate the level of knowledge among the youth from the three GPZs showed a significant relationship between youth's GPZ of origin and their knowledge levels (χ^2 [6, n=540]=13.13, p=.041, φ_c=.11). The youth who come from the south-west GPZ were more likely to have a high knowledge level (63%, n=109) than the youth from the other GPZs (60.6%, n=94 for the south-south and 46.9%, n=84 for the south-east). The results also showed a significant relationship between the knowledge levels and respondents' GPZ of residence (χ^2 [4, n=544] =10.47, p=.033, φ_c=.10). The youth residing in the south-south GPZ (60%, n=120) as well as those in the south-west (60%, n=105) were more likely to have higher knowledge levels than those residing in the south-east GPZ (47.3%, n=80). The effect sizes between the respondents' level of knowledge and their GPZ of origin as well as with their GPZ of residence indicated a small effect for both relationships.

Table 18: Cross-tabulation of knowledge levels with demographic measures and smoking behaviours

Variable	Category	Rated level of knowledge			Group total (100%)	N
		Low (%)	Moderate (%)	High (%)		
Smoking Status*	Non-Smoker	17 (4.5%)	107 (28.6%)	250 (66.8%)	374	533
	Smoker	42 (26.4%)	67 (42.1%)	50 (31.4%)	159	
Gender*	Male	52 (13.9%)	128 (34.3%)	193 (51.7%)	373	529
	Female	8 (5.1%)	46 (29.5%)	102 (65.4%)	156	
Age	18 years	5 (28.3%)	7 (33.3%)	9 (42.9%)	21	520
	19 years	7 (14.3%)	15 (30.6%)	27 (55.1%)	49	
	20 years	12 (14.5%)	30 (36.1%)	41 (49.4%)	83	
	21 years	5 (8.6%)	16 (27.6%)	37 (63.8%)	58	
	22 years	7 (12.5%)	14 (25.0%)	35 (62.5%)	56	
	23 years	9 (10.3%)	27 (31.0%)	51 (58.6%)	87	
	24 years	13 (7.8%)	62 (37.3%)	91 (54.8%)	166	
Employment Category*	Student	20 (6.6%)	85 (28.2%)	196 (65.1%)	301	544
	Skilled worker	7 (6.1%)	41 (35.7%)	67 (58.3%)	115	
	Unskilled worker	34 (26.6%)	52 (40.6%)	42 (32.8%)	128	
Trial behaviour*	Yes	48 (21.6%)	90 (40.5%)	84 (37.8%)	222	540
	No	13 (4.1%)	87 (27.4%)	218 (68.6%)	318	
GPZorigin*	South-east	27 (15.1%)	68 (38.0%)	84 (46.9%)	179	540
	South-south	14 (9.0%)	47 (30.3%)	94 (60.6%)	155	
	South-west	15 (8.7%)	49 (28.3%)	109 (63.0%)	173	
	Others	5 (15.2%)	13 (39.4)	15 (45.5%)	33	
GPZresiding*	South-east	28 (16.6%)	61 (36.1%)	80 (47.3%)	169	544
	South-south	18 (9.0%)	62 (31.0%)	120 (60.0%)	200	
	South-west	15 (8.6%)	55 (31.4%)	105 (60.0%)	175	
Educational attainment	Basic education	53 (12.4%)	137 (32.1%)	237 (55.5%)	427	542
	Tertiary education	7 (6.1%)	41 (35.7%)	67 (58.3%)	115	
Smokers' intention to quit‡	No	23 (45.1%)	15 (29.4%)	13 (25.5%)	51	106
	Yes	4 (7.3%)	33 (60.0%)	18 (32.7%)	55	
Smokers' attempt to quit in past year‡	No	30 (52.6%)	16 (28.1%)	11 (19.3%)	57	120
	Yes	6 (9.5%)	33 (52.4%)	24 (38.1%)	63	

*significant at p<.05; **p<.01; ***p<.001 (two-tailed) (χ^2 test for independence);
‡only smokers used for cross-tabulation and χ^2 test

Educational attainment: In the cross tabulation of knowledge levels by educational attainment, it is noted that slightly more respondents who have attained a tertiary education (58.3%, n=67) fell within the higher knowledge category than those who have had a basic (primary and secondary) education (55.5%, n=237). However, the chi-square test of independence found no significant relationship between respondents' educational attainment and their knowledge levels (χ^2 [2, n=542] = 3.75; p=.15, φ_c =.08).

Intention to quit smoking: More smokers who indicated an intention to quit smoking were found to have higher knowledge levels than those who indicated no intention to quit (32.7%, n=18 versus 25.5%, n=13). A significant relationship was detected by the chi-square test between smokers' intention to quit and their knowledge levels (χ^2 [2, n=106] = 20.81; p<.001, φ_c =.44). The effect size obtained showed that the relationship had a medium to large effect.

Quit attempt in the past year: More smokers who had attempted to quit in the past year were in the high knowledge category than those who had not attempted to quit (38.1%, n=24 versus 19.3%, n=11). A significant relationship between smokers' quit attempt in the past year and their levels of knowledge was detected by the chi-square test for independence (χ^2 [2, n=120] = 26.49; p<.001, φ_c =.47). The effect size showed a medium to large effect.

Self-efficacy to refuse smoking

The Mann-Whitney U test was conducted to investigate the self efficacy to refuse smoking among smokers and non-smokers. Results showed a significant difference in the self efficacy to refuse smoking among non-smokers (mean rank=220.32, n=378) and smokers [mean rank=385.68, n=160), U=11651.5, z=-13.74, p<.001, r=.59]. The effect size (*r*) of .59 indicated a

large effect between these two groups. The higher mean rank for smokers is not surprising as it is expected that smokers may more likely accept cigarettes from others. One very promising result is that the overwhelming majority of non-smokers (88.6%) were 'definitely not' willing to accept cigarettes from friends (see Table 19).

Table 19: Non-smokers' willingness to accept cigarette from friends

Responses	Frequency (n)	Percent (%)
Definitely not	334	88.6
Probably not	14	3.7
Probably yes	10	2.7
Definitely yes	19	5.0
Total	377	100.0

Immediate influences on youth's smoking behaviour

The theory of triadic influence (TTI) identified related behaviour, trial behaviour and the decision/intention to smoke, as immediate predictors of smoking. These were also investigated using the modified GYTS questionnaire despite the fact that their predictive ability of smoking was not part of this investigation at this point.

Related behaviour

The GYTS questionnaire was not used to explore related behaviour as a predictor of smoking as mentioned earlier; it was however used to explore various influences that perpetuated smoking. Results revealed that the majority of smokers (41.2%, n=73) reported they feel the urge to smoke when consuming alcoholic drinks (see Figure 15).

Trial behaviour

A comparison of respondents' past experimentation with cigarettes and current smoking status showed that 72.1% (n=155) of them who experimented with cigarettes in the past are currently smokers while 27.9% (n=60) are currently non-smokers.

To assess the predictors of ever having tried smoking, a logistic regression model with twenty-six (26) initial variables (8 variables in their dummy versions and 2 other variables) was carried out following a backward variable selection procedure. These variables include gender, intention to smoke and three (3) dummy versions of each the following variables; employment category, GPZ residing, GPZ of origin, knowledge beliefs on smoking, exposure to pro-tobacco media adverts, exposure to anti-smoking media messages, exposure to SHS, perceptions regarding tobacco policy and cultural uses of tobacco. The final model with all significant variables is presented in Table 20.

The final logistic regression model was composed of gender, low and moderate knowledge levels, moderate pro-tobacco media exposure, low exposure to SHS, no and moderate exposure to anti-smoking media messages, moderate cultural use of tobacco, the intention to smoke and being a student. This model thus contained these ten independent variables with trial behaviour as the dependent variable. The model was found to have a good fit with Hosmer and Lemeshow test (χ^2 (df 8, N=501) =9.40, p=.31) and was statistically significant, χ^2 (df 10, N=501) =181.87, p<.001 indicating that the model was able to distinguish between respondents who have tried smoking from those who have not. The model explained between 30.4% (Cox and Snell R square) and 41.0% (Nagelkerke R square) of the variance in the respondents' trial behaviour, and correctly classified 77.0% of cases. As shown in Table 20, the strongest predictor of trial

246

behaviour was the intention to smoke after controlling for all variables in the model. With an odds ratio (R) of 4.30, respondents who have the intention to smoke were 4 times more likely to have tried smoking than those who do not. Results also showed that males are three (3) times more likely to have tried smoking than females and those with low knowledge levels about the negative effects of tobacco use are also four (4) times more likely to have tried smoking than those with moderate or high knowledge levels.

Table 20: Logistic regression model for best predictors of trial smoking

Variable	B	S.E.	Wald	df	Sig	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Gender	1.249	.267	21.957	1	.000	3.487	2.068	5.881
Low knowledge	1.415	.460	9.458	1	.002	4.115	1.670	10.138
Moderate knowledge	.765	.237	10.399	1	.001	2.149	1.350	3.421
Moderate pro-tobacco media exposure	.515	.233	4.879	1	.027	1.674	1.060	2.643
Low SHS exposure	.676	.231	8.596	1	.003	1.966	1.251	3.089
No antismoking media exposure	.991	.390	6.451	1	.011	2.695	1.254	5.790
Moderate antismoking media exposure	.663	.263	6.385	1	.012	1.941	1.160	3.247
Moderate pro-tobacco culture	.687	.232	8.805	1	.003	1.988	1.263	3.129
Intention to smoke	1.459	.312	21.868	1	.000	4.302	2.334	7.929
Students	.672	.233	8.327	1	.004	1.957	1.240	3.089
Constant	-4.324	.543	63.380	1	.000	.013		

*p significant at ≤.05 (two tailed)
**Dependent variable: trial behaviour (Yes=1, No=0); Gender (Male=1, Female=0); Low knowledge (Yes=1, No=0); Moderate knowledge (Yes=1, No=0); Moderate pro-tobacco media exposure (Yes=1, No=0); Low SHS exposure (Yes=0, No=1); No anti-smoking message exposure (Yes=0, No=1); Moderate anti-smoking message exposure (Yes=0, No=1); Moderate tobacco culture (Yes=1, No=0); Intention to smoke (Yes=1, No=0); Students (Yes=0, No=1)

Intention to smoke

The intention to smoke among the smokers should be interpreted as an intention to 'continue' smoking the future, but among non-smokers, it is an intention to initiate smoking in the future. Among non-smokers, 6.9% (n=26) were found to have a moderate to high intention of smoking in future. More than half of the smokers (53.4%, n=85) reported a moderate to high intention to continue smoking at least in the next 12 months. As expected, the chi-square test for independence (with Yates continuity correction) indicated a significant association (p ≤ .05) between youth's intention to smoke and their current smoking status (χ^2 [1, n=538] =146.83; p<.001). These variables were found to have a large effect (ϕ=.52). Smokers were more likely to report a moderate to high intention to smoke in the future than non-smokers (see Table 21).

Table 21: Chi square statistics of respondents' intention to smoke by smoking and employment categories

Variable	Category	Intention to smoke		Row total (100%)
		No/low Intention	Moderate/high Intention	
Smoking status*	Non-smoker	352 (93.1%)	26 (6.9%)	378
	Smoker	75 (46.9%)	85 (53.1%)	160
	Group total	427 (70.3%)	111 (29.7%)	538
Employment category*	Students	258 (85.1%)	45 (14.9%)	303
	Skilled worker	104 (87.4%)	15 (12.6%)	119
	Unskilled worker	77 (60.2%)	51 (39.8%)	128
	Group total	439 (79.8%)	111 (20.2%)	550

*significant at p<.05 (two-tailed) (χ^2 test for independence)

With regards to respondents' employment status and their intention to smoke with respect to their smoking status, results show that among smokers, those with a medium to high intention to smoke at least in the next 12 months were: students (32.9%; n=28) students; skilled workers (15.3%; n=13) and unskilled workers (51.8%; n=44). Among the non-smokers, those with a medium to high probability of smoking at least in the next 12 months were also found to be students (65.4%; n=17); skilled workers (7.7%; n=2) and unskilled workers (26.9%; n=7). The results of the chi-square test for independence revealed no significant difference for the intention to smoke and employment status for non-smokers (χ^2 [2, n=378] = 5.23; p<.07, φ_c=.12). However, the results showed that for smokers, a significant difference existed between respondents' intention to smoke and their employment status (χ^2 [2, n=160] = 7.79; p<.02, φ_c=.22). This relationship had a small to medium effect. Among smokers therefore, unskilled workers were thus more likely to have indicated a medium to high intention to smoke.

The chi-square test for independence conducted to investigate the relationship between respondents' intention to smoke and their employment category irrespective of their smoking status, results showed that there is a significant relationship between these variables (χ^2 [2, n=550] = 40.30; p<.001, φ_c=.27). Unskilled workers were more likely to indicate a moderate to high intention to smoke (39.8%, n=51) compared with students (14.9%, n=45) and skilled workers (12.6%, n=15) irrespective of their smoking status. The strength of the association was small to medium.

Graphical investigation of respondents' intention to smoke and their employment category with respect to their smoking status showed that among smokers, more unskilled workers fell within the moderate/high intention to smoke group (intention to continue smoking) than students and

skilled workers (see Figure 17). Among non-smokers, more unskilled workers also fell within

the moderate/high intention (to initiate smoking) group compared with the students and skilled

workers (see Figure 18).
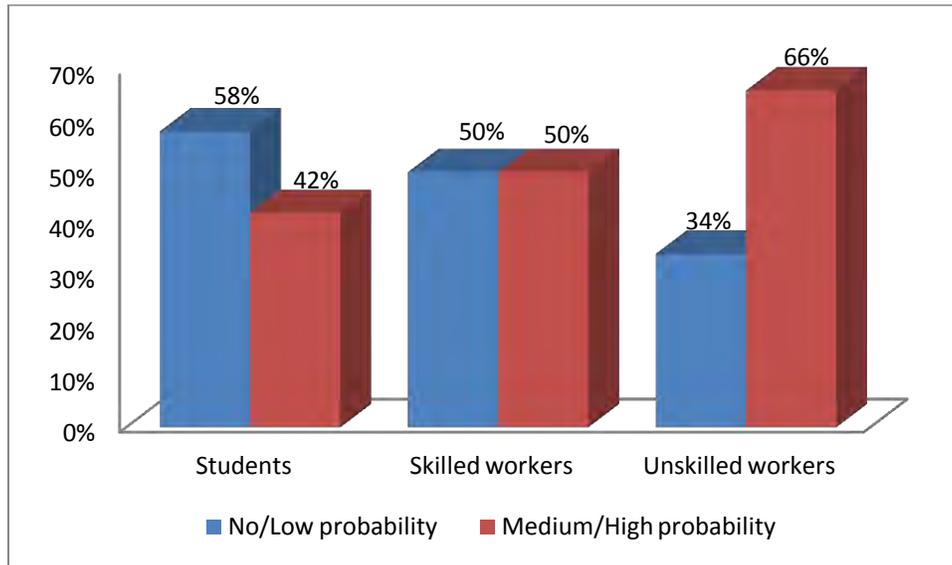
Figure 17: Smokers' intention to smoke by employment status
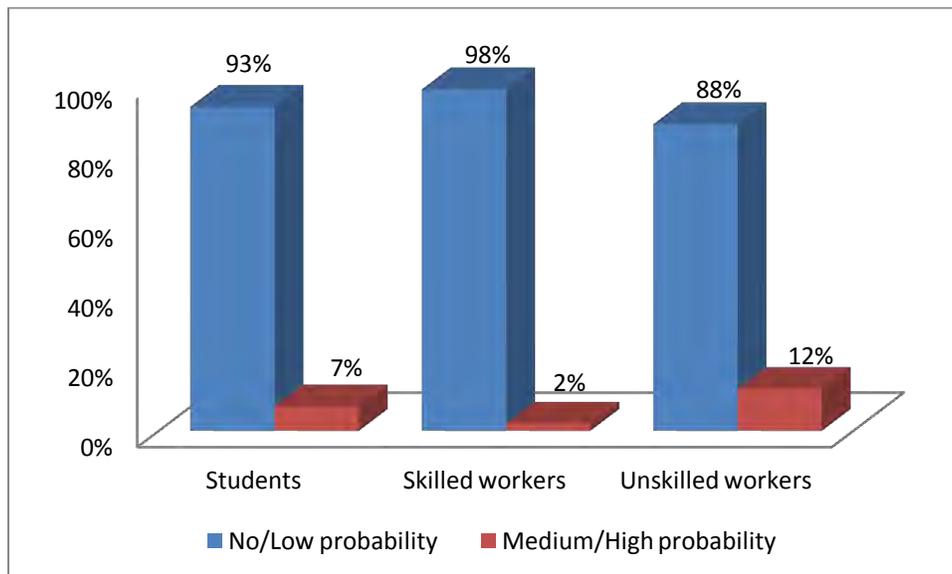
Figure 18: Non-smokers' intention to smoke by employment status

250

Predictors of smoking behaviour

In order to find the predictors of smoking in this study, a logistic regression analysis using a backward variable selection procedure with an initial sixteen variables was carried out. The final model yielded four (4) variables contributing significantly to the regression model fit (Smoking status was the dependent variable). These factors were; high exposure to SHS, moderate exposure to SHS, high exposure to antismoking messages and intention to smoke. This final model with these four predictors had a good model fit with a Chi-square value for the Hosmer-Lemeshow test of 5.55 (5, n=521), p=4.02. It was also statistically significant [χ^2 (4, n=521) =237.40, p<.001] indicating that the model was able to distinguish between smokers and non-smokers. The model as a whole explained between 36.6% (Cox and Snell R square) and 52.0% (Nagelkerke R square) of the variance in smoking status and correctly classified 81.6% of cases.

As shown in Table 22, the strongest predictor of smoking status was respondents' high exposure to second hand smoke (SHS) with an odds ratio (OR) of 18.87 indicating that respondents who had a high exposure to SHS are about 19 times more likely to be current smokers. Also noteworthy is the odds of smoking for those with a moderate to high intention to smoke and those with moderate exposure to SHS. Respondents who indicated a moderate to high intention to smoke are 8 times more likely to report being smokers while those who have moderate exposure to SHS are 7 times more likely to be smokers (see Table 22). These results should however be interpreted with caution due to the wide confidence intervals obtained in some of these relationships (see Table 22).

Table 22: Logistic regression for best predictors of smoking behaviour

Variable	B	S.E.	Wald	df	Sig	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Moderate exposure to SHS	2.007	.312	41.473	1	.000	7.443	4.041	13.711
High exposure to SHS	2.937	.386	57.816	1	.000	18.867	8.849	40.230
High exposure to Antismoking adverts	1.088	.278	15.336	1	.000	2.968	1.722	5.115
Intention to smoke	2.112	.297	50.514	1	.000	8.266	4.617	14.800
Constant	-5.315	.457	135.363	1	.000	.005		

*p significant at ≤.05
**Dependent variable: smoking status (Yes=1; No=0). Independent variables: moderate exposure to SHS (Yes=1; No=0); high exposure to SHS (Yes=1; No=0); high exposure to antismoking adverts (Yes=1; No=0); intention to smoke (moderate/high=1; no/low=0)

Respondents' perception on influences for youth's smoking behaviour

The modified GYTS questionnaire was also used to sample respondents' perception about the influences for youth's smoking behaviour in Nigeria. The results in percentage responses are represented in Figure 19.
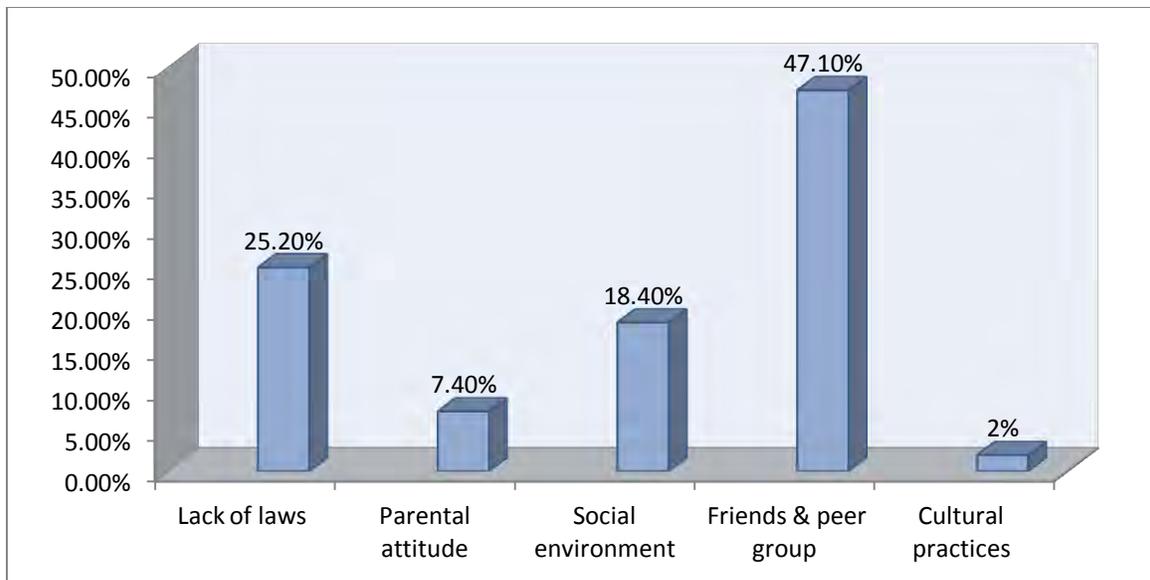
Figure 19: Influences for youth smoking behaviour in Nigeria

Of the five options provided to respondents, the influence of friends and peer group was rated highest (47.1%, n=241) followed by lack of laws regulating the sale and consumption of cigarettes (25.2%, n=129). Cultural practices involving tobacco use was rated to have the lowest influence (2.0%, n=10).

Summary of quantitative (survey) findings

Smoking behaviour: The prevalence rate of smoking among youth aged between 18 and 24 years was 29.7%. Gender distribution of these smokers showed 85.3% are males while 14.7% are females. The prevalence of smoking by gender was however, 35.9% among males and 15% among females. The mean age of current smokers within this age group was 22 years. The modal age for first trial of cigarette was '16 years and older'. Among the three GPZs in southern Nigeria, the prevalence of smoking was highest in the south-east GPZ.

There was a statistically significant relationship between youth's smoking status and their gender, employment category, GPZ of origin and GPZ of residence. Smokers generally smoked between 2 to 5 cigarettes per day and the topmost brand of cigarette consumed is Benson & Hedges. One third of the smokers indicated their intention to quit smoking while 39.4% attempted to quit in the past year. There was a statistically significant relationship between smokers' employment category and their intention to quit and quit attempts. Unskilled workers were less likely to indicate an intention to quit while skilled workers were more likely to attempt quitting.

Cultural / environmental risk influences for smoking: As expected, smokers in this study were more likely to report a high degree of exposure to SHS compared to non-smokers. Smoking was also found to be more socially acceptable for males than for females. Traditional ceremonies involving the use of tobacco and its products which include among others; burials and traditional marriage ceremonies were found to be more prevalent in south-eastern Nigeria. More respondents from the south-east GPZ also reported the use of tobacco or tobacco products for making traditional medicines and their availability at social functions. The cultural practice of sending children on errands to buy or sell cigarettes seemed to be common practice in all three GPZs in southern Nigeria as this was not significantly associated with any particular GPZ.

On the relationship between these cultural practices and youth's smoking status, results were only significant for the availability of cigarettes at social functions and youth's previous exposure to cigarettes as a minor. The exposure to cigarettes during a young age was found to be the best predictor of youth's smoking status after controlling for all other cultural measures. The

youth who have had been exposed to cigarettes at a younger age were four times more likely to report being smokers.

With regards to tobacco control policies, more of the youth believed that banning the manufacturing of cigarettes in Nigeria and enforcing regulations on sale and consumption will help to reduce the prevalence of smoking in Nigeria. About half of the respondents believe the youth will comply with laws banning the consumption of cigarettes. However, more than half of the youth believed that cigarette price increases will not help to reduce smoking in Nigeria.

Interpersonal risk influences for smoking: This study also found that the smoking status of parents and closest friends influence the youth to smoke. Smokers were more likely to report having parents (mostly fathers) and close friends who smoke. More than one-third of the smokers also reported feeling the urge to smoke when with friends who smoke.

Intrapersonal risk influences for smoking: Knowledge of the negative impact of smoking on health and well-being was generally high among participants. Results revealed a statistically significant relationship between knowledge levels and youth's smoking status, trial behaviour, gender, employment category, GPZ of origin and GPZ of residence. Non-smokers, respondents who have never tried smoking, females, students, youth who come from the south-west GPZ and those who reside in the South-south and south-west zones were more likely to have high levels of knowledge regarding the negative impact of smoking on health and well-being.

Also, smokers were found to have a lower self-efficacy to refuse cigarettes from friends.

Immediate influences for smoking: The immediate influences refer to the three behaviours identified by the TTI; related behaviour, trial behaviour and intention/decision to smoke. The urge to smoke was felt most strongly when alcohol was being consumed. Almost half of the respondents were found to have tried smoking in the past and the best predictor for this trial behaviour was found to be an intention to smoke and low levels of knowledge about the negative impact of smoking on health and well-being.

More than half of the smokers indicated their intention to continue smoking while 6.9% of non-smokers reported intending to smoke in the following year. Irrespective of their smoking status, unskilled workers were more likely to have indicated a moderate to high intention to smoke. With respect to respondents' smoking status, smokers who are unskilled workers were also more likely to indicate a moderate to high intention to smoke. There was no significant relationship between non-smokers' intention to smoke and their employment status.

Strongest predictors/influences of smoking: Using logistic regression analysis, the high exposure to SHS was found to be the best predictor of smoking. Youth who had a high exposure to SHS were 19 times more likely to report being smokers. However this result should be interpreted with caution due to the wide confidence interval obtained. Based on the question; what influences Nigerian youth to smoke the most? Most of the respondents reported 'friends and peer group' followed by the 'lack of laws' as the greatest influences of youth's smoking behaviour.

CHAPTER SEVEN

DISCUSSION OF RESULTS

Introduction

The use of a socio-cultural approach in this research was intended to enable the researcher to investigate what Flay, Petraitis and Hu (1995) termed the 'big picture". This approach enabled a deeper investigation into the risk influences of smoking among southern Nigerian youth. Risk influences for smoking which are both internal and external to the individual were identified. The theory of triadic influence (TTI) served to provide the framework for critically understanding the multiple influences on the phenomenon of smoking among the youth (Silverman, 2001).

The discussion of the study results is presented according to the three streams of risk influences of the TTI which are: Cultural/ environmental, Interpersonal (social situation) and intrapersonal influences as well as the immediate predictors (influences). Findings under each of these streams are discussed in relation to relevant research studies and the broader literature. This discussion draws on the findings from both the qualitative and quantitative (survey) phases of this research in order to gain a more holistic understanding of smoking among the youth in southern Nigeria. In some instances and for the purpose of clarity, the term 'doctoral research/study' is used here to differentiate a reference to the results obtained in this study from those obtained in other studies.

Youth's smoking behaviour

Results from the survey conducted in this study showed that 41% of the youth have experimented with smoking. The prevalence rate of smoking among the youth in southern Nigeria was found to be 29.7%. This figure is slightly higher than the 26% obtained for the same age group in the United States (Lawrence, Fagan, Backinger, Gidson & Hartman, 2007). It is however lower than the national prevalence rates in fellow West African countries; Gambia and Cote d'Ivoire with 36.1% and 33.6% respectively (WHO, 2008). The prevalence rate obtained in this study is also lower than the 41.7% rate obtained among college students in South Africa (Narula, Berg, Escoffery & Blecher, 2012). In their meta-analytical study of tobacco use among sub-Saharan youth, Townsend, Flisher, Gilreath and King (2009) found that South Africa has the highest prevalence of tobacco use in sub-Saharan region.

The distribution of smokers by gender in this doctoral study showed 85.3% were males and 14.7% were females. This is slightly different from the lower figure of 71.3% for males and higher rate of 27.7% for females obtained among the adult population in north-eastern Nigeria (Desalu et al., 2008). In this doctoral research also, the prevalence of smoking by gender was found to be 56.1% among males and 17.7% among females. The ratio of male to female smokers therefore stands at 5.8 to 1 in southern Nigeria. This result is higher than the global prevalence of 36% for males and 8% for females (WHO, 2008) and regional prevalence of 33.3% for males and 8.2% for females in Africa as well as 9.6% for males and 46.1% for females in Asia (Pampel, 2006). The prevalence of smokers by gender obtained in this doctoral research is also different from those obtained by Desalu, et al. (2008) in north-eastern Nigeria. They obtained a similar prevalence for females (18.4%) and a lower prevalence for males (45.3%). The

prevalence rate among females in this doctoral study is also higher than that in Japan (11%), lower than that in the UK (21%) but similar to the 17% rate for the United States (Eriksen, Mackay and Ross, 2012). Cultural negation of smoking by females may be responsible for the low prevalence of cigarette smoking among females especially in Africa, when compared with males. However, the qualitative results in this doctoral study as well as other recent research suggest that this trend may be changing (Fawibe & Shittu, 2011). Increasing prevalence of smoking among females has been largely attributed to the marketing strategies employed by tobacco multinationals which tend to portray smoking behaviour in relation to gender equality thereby making smoking more attractive for females (Ericksen et al., 2012).

The results from this study show that of the three GPZs making up southern Nigeria, the highest prevalence of smoking (48.7%) was found among respondents who are originally from the south-east GPZ when comparing them to those from the other two GPZs. Findings from the qualitative and survey phases of this research suggest that the cultural use of tobacco products is also strongest within the south-east GPZ. Researchers have constantly suggested a link between tobacco related cultural practices and the persistence of cigarette smoking in the society (Feinhandler, 1986; Nichter, 2003). However, statistical investigation of the predictors of smoking in this study did not show any significant relationship between the cultural use of tobacco per region and the smoking status of youth.

Students of tertiary institutions and unskilled workers (both being 41.9%) had a higher smoking prevalence rates compared with the rate among skilled workers (i.e. 16.3%). This is inconsistent with previous findings showing that young adults who are not currently in learning institutions are more than twice as likely to report being current smokers (Lawrence et al., 2007).

The mean age for current smokers obtained in this doctoral study was 22 years. This is marginally higher than the 21.36 years obtained among college students in South Africa (Narula et al., 2012). In this doctoral study however, a sharp jump (about a 200% increase) in the smoking prevalence by age was noticed between the 23 years and 24 years age groups with prevalence rates ranging from 17.1% to 34.8% respectively. It is likely that the social stigma attached to smoking in generally and especially among younger individuals, may contribute to this huge increase. However this calls for specific interventions targeted at youth aged 23 years and younger. The modal age for smoking debut was found to be '16years and older' in this doctoral study. This is consistent with results obtained by Desalu et al. (2008) and that reported by Fawibe and Shittu (2011) in Nigeria. It has also been affirmed that globally, more than 80% of male smokers begin smoking in their teens (Frieden & Blakeman, 2005). Fichtenberg and Glantz (2002) mention that "virtually all smokers smoke their first cigarette as teenagers" (p. 1088). The results obtained in this doctoral study however suggest that more youth may be initiating smoking in their late teens in Nigeria.

With reference to tobacco consumption, most young smokers were found to smoke between 2 to 5 cigarettes per day (43.8%). This result is similar to that obtained among students in institutions of higher learning in the Eastern Cape province of South Africa with 51% of the students smoking 1 to 5 cigarettes daily (Awotedu et al., 2006). Fawibe and Shittu (2011) however obtained a mean daily cigarette consumption of between 8 to 12 sticks among adults in North-eastern Nigeria. This amount of cigarette consumed per day found in this doctoral study indicates that most of the youth are light/ intermittent smokers (Schane, Ling & Glantz, 2010). However, Schane et al. (2010) who explained that light/intermittent smokers usually smoke less than 6 cigarettes on the days they smoked also mentioned that most of these smokers are social smokers

(tending to limit their smoking to social contexts like bars and nightclubs). These researchers also assert that this category of smokers pose a serious concern to health professionals because they tend not to regard themselves as 'smokers' and do not consider that they are at risk of the negative effects of smoking (Schane et al., 2010).

Qualitative findings of this study suggest that the British American Tobacco Nigeria (BATN) controls more than 75% of the tobacco market in Nigeria. Cigarette brands of BATN namely: Benson & Hedges, St Moritz, Rothmans and White London were also found to be the four most popular brands of cigarettes among young smokers in Southern Nigeria. These accounted for 73.6% of the cigarette brands consumed by young smokers in this study. Some young smokers interviewed were of the view that the presence of BATN and other tobacco companies doing business in Nigeria will hinder any effort aimed at reducing smoking prevalence in the country especially among her youth. While this may largely be true, revenue generation by government seems to take priority when decisions are being made on the need to regulate the businesses of tobacco companies. Tobacco companies are rather seen as investors in the economy than as a threat to the health of the populace.

With regards to the sites where cigarettes are consumed, the survey respondents in this doctoral study reported mainly consuming cigarettes in either their homes or in the homes of their friends (a total of 54.4%). This buttresses the researcher's observation during the fieldwork as cigarette smoking was not particularly a common sight in most public places, except at the places where cigarettes are sold like in motor parks, bars and some restaurants etc. Smoking of cigarettes at home also has negative health implications for members of a smoker's family as this will serve to dangerously expose members of the family to second-hand and third-hand smoking (Sarafino,

2002; Winickoff et al., 2009). This finding also tallies with results from the qualitative phase of this study which revealed that smokers are usually wont to conceal their smoking habits and would prefer to smoke in private or in places where there are other smokers. The stigmatization of smokers by the general society as people of "deviant or reckless behaviour" was mentioned by participants as being largely responsible for this behaviour. Stigmatisation of smoking has been found to cause some smokers to hide their smoking behaviour from others (Stuber, Galea & Link, 2009) and led to a decline in smoking rates (Bayer, 2008). It will not be out of place to say that in Nigeria, the stigmatization of smokers by some segments of the society may be responsible for keeping the prevalence rate of smoking (especially among the youth) from increasing geometrically considering the rate of pro-tobacco marketing activities taking place in the country. Whether stigmatisation should be employed as a strategy of tobacco control may however raise very many ethical issues concerning freedom and human rights. However, it could not be ascertained through this study whether such stigmatisation exists within communities where cigarettes are provided for the youth as part of some traditional ceremonies. While smoking (especially by young people) seems to be condemned by the general society, this study found that young males in Nigeria still associate smoking with success and prestige. This may be due to media representation of smoking in a positive light among other factors.

Cultural/Environmental risk influences

Findings in this study suggest that various cultural/environmental influences as identified by the TTI fuel the increasing prevalence of smoking among the youth in Nigeria. Factors ranging from national smoking prevalence rates, availability of cigarettes, tobacco policies, activities of tobacco multinationals, media and advertising influences as well as cultural practices were

aspects reported on during interviews and corroborated by the survey results in this doctoral research. These aspects will be discussed further subsequently.

Youth's smoking prevalence

Smoking prevalence in Nigeria was found to be about 32.8% among adolescents in North-eastern Nigeria by Salawu et al. (2010). However, the prevalence rate obtained among the youth in this doctoral study was 27.9%. Participants in the qualitative phase of this doctoral study seem to suggest that this might be higher considering the fact that many youth do not like disclosing their smoking status to others especially non-smokers and family members. Prevalence of smoking among the youth as compared with other national and international rates has been extensively discussed earlier in the section on smoking behaviour of the youth.

Unemployment

Unemployment as previously mentioned, may constitute a major stressor to youth acting as a 'push factor' towards smoking. This is in line with findings by Novo, Hammerström and Janlert (2000) suggesting that the youth tend to smoke in reaction to the psychological stress of being unemployed. Lawrence, Fagan, Backinger, Gibson and Hartman (2007) also found that the unemployed (described as those who are in the labour force but not currently working) and those with low annual household income were more likely to report current, daily and heavy smoking compared with their peers who are employed and those having a higher income.

Tobacco control legislations

This section addresses the first research question which focuses on the influence of the current policy environment on tobacco control in Nigeria on smoking among the youth.

In accordance to findings in this doctoral study, a weak national tobacco policy operates currently in Nigeria. Alli (n.d) explains that *the tobacco smoking (control) decree No. 20 of 1990* is Nigeria's first serious attempt to tobacco control legislation. Unfortunately, this decree is both largely non-operational and insufficient to meet current global trends in tobacco control. A new policy still undergoing legislative procedure was passed by the Nigerian Senate during the data collection period of this study in 2011. It has however not yet received presidential assent and is therefore still a long way off from being implemented. It is believed that the absence of viable tobacco control legislation in Nigeria leaves the youth vulnerable to exploitation by the tobacco companies as well as older adults who smoke. No actions are currently being taken to curb the activities of tobacco marketers and retailers who promote and sell cigarettes to minors in various forms and in single sticks (loose cigarettes). These activities are all expanding their markets by recruiting new entrants into smoking.

The qualitative findings in this doctoral study suggest that cigarettes are generally available and within the reach of all individuals, irrespective of age and location. This availability was said to increase youth's access to cigarettes thereby encouraging them to initiate and perpetuate smoking. Many participants were of the view that one sure way to curb the increasing prevalence of smoking among the youth in Nigeria is to enforce restrictions on sale and purchase as well as increase in the price of cigarettes. Some however were of the opinion that an increase in the price of cigarette will only make the product an expensive contraband. These opinions point to the need for a viable tobacco control policy and its effective implementation in Nigeria. The effects of policy on decreasing smoking prevalence will be further discussed subsequently.

Interview participants in this doctoral study attributed the current high smoking prevalence among youth to the ease of accessing tobacco, the very low price, and lack of government's regulation of tobacco companies' promotional activities and the influence from significant others who smoke. Results from the survey was also consistent with the qualitative findings as the lack of laws ranked second among the factors respondents perceived as responsible for the increasing prevalence of smoking.

The effect of tobacco control policies in reducing the prevalence of tobacco use has been well documented in literature and research. Several studies have indicated a decrease in smoking prevalence as a result of policies concerned with cigarette pricing, taxation and banning of advertising and sales to and by minors in several countries around the world (Hu, Sung & Keeler, 1995; Jamrozik, 2004; Levy, Nikolayev & Mumford, 2005; Taurus, 2005; Tworek et al., 2010). Effective tobacco control legislation has resulted in a reduction in the sales of tobacco products (Hu et al., 1995; Taurus, 2005) and greater smoking cessation and reduced daily smoking (Schnohr, et al., 2008).

Increasing cigarette prices has been found to substantially decrease the number of young adults who progress into higher intensities of smoking (Taurus, 2005). However, a study by Lance, Akin, Dow and Loh (2004) suggests that raising cigarette prices in poorer nations may not actually reduce smoking as suggested by many research in this area. Schnohr et al. (2008) also found no association between cigarette prices and adolescents' daily smoking prevalence. They however found an association between mandatory national bans on smoking and lower smoking prevalence. A study by Farrelly, Pechacek, Thomas and Nelson (2008) found that cigarette prices had stronger effect on the smoking behaviour of youth aged between 18 and 24 years.

A South African study by Taurus (2005) found that restrictions of smoking sites decreases moderate smoking uptake among young adults. Tobacco policies through restrictions of smoking sites also serves to protect non-smokers from exposure to second hand smoke [SHS] (Jamrozik, 2004). Second hand smoking has been identified to have as much effect on non-smokers as smoking has on smokers themselves especially when non-smokers are exposed for long periods (Bayer & Colgrove, 2002). Second hand smoking was found to be a common feature at social gatherings, bars and restaurants especially where cigarettes are sold in southern Nigeria and the researcher experienced this first hand during the interviews as some participants preferred to be interviewed in such settings.

This doctoral study also found that age restriction on smoking is currently written on cigarette packs in Nigeria but this too is not being enforced as the sales to and by minors is still a very common phenomenon. It should be noted that most issues concerning cigarette availability, activities of tobacco companies in the form of corporate social responsibility (CSR), promotional activities etc, media advertising of tobacco and exposure to SHS are usually controlled by tobacco control policies. Therefore, the non-existence of an operational tobacco control legislative framework greatly impacts on these and other issues and thus influences youth's initiation and perpetuation of smoking. A restriction on the sale of tobacco products to minors would not only prevent early exposure to the commodity but will forestall easy access of cigarettes to these minors who may not have been educated on the psychoactive nature and the negative health implications of cigarette smoking.

Influence of tobacco companies

As mentioned earlier, the issue of a defunct tobacco law as attested to by participants in this study indicates that tobacco companies still carry out many activities that have been banned in Western countries right under the watch of the Nigerian government. These activities include among others organising promotional events, sponsoring social events, advertisement and scholarships to indigent promising students in tobacco growing areas. The influence of tobacco multinationals have been reported to include among others: lobbying government to scale down efforts on tobacco control, foreign direct investment (FDI), Corporate Social Responsibility (CSR) programmes, advertising through organizing promotional activities targeted at women and youth like fashion and music shows (Esson & Leeder, 2004; Patel, Okechukwu, Collins & Hughes, 2009). Tobacco companies use various strategies to promote their products among individuals and communities including providing agricultural infrastructures and awards to farmers (Jakpor, 2012; Yach and Bialous, 2001). Evidences suggest that transnational tobacco giants are concentrating on expanding their markets in developing nations (Esson & Leeder, 2004). An earlier move by tobacco companies to encourage more Nigerian females to smoke through fashion shows was mentioned by one interview participant in this doctoral study. Esson and Leeder (2004) also identified this as one of the strategies of the 'big capital' to get women to smoke in contexts where it is culturally inappropriate for them to do so.

The award of scholarships to indigent students especially those from tobacco farming areas was also reported by interview participants as an activity of tobacco companies not to promote smoking directly but to develop positive views of tobacco companies and thus the youth become more receptive of their products. Frieden and Blakeman (2005) point out that some representatives of tobacco companies have privately admitted to the purpose of CSR as being

geared towards protecting their reputation and boosting their shareholders' value. These programs seem laudable at face value but have ulterior undertones when seen in the light of how these may influence youth's smoking behaviour. It was mentioned by one participant in this study that scholarship examinations for university undergraduates sponsored by the tobacco companies are usually held in the company's work site where cigarettes are manufactured. Mowery, Farrelly, Haviland, Gable and Wells (2004) found a significant association between being receptive to tobacco industry promotions and being open to smoking. Tobacco companies seem to be working on youth's receptivity of their company as a way of luring them to accept their products as well.

The use of CSR a means of getting people to tolerate the activities of tobacco companies in communities is evident in this study as very few participants in the qualitative phase of this doctoral study mentioned that the harm done to the health of the public by smoking outweighs the good tobacco companies might be doing in the name of CSR. Friedman (2009) rightly asserts that CSR "has become a potential path to legitimacy and improved public relations for both companies that produce mainstream products and those that sell vice, such as the tobacco industry" (p. 819). Focusing their argument on documents from the tobacco industries made available during litigations and web search, Freidman (2009) and Patel et al. (2009) point out an salient fact that activities of the 'big capital' sold as CSR are actually advanced marketing strategies aimed at recruiting young smokers and women and to grow their businesses. The question that needs to be answered is; are the youth and women aware of the purpose of these programmes?

Occasional and regular smoking behaviour have also been found to be significantly linked to students' belief about tobacco companies doing good things in the community (Leatherdale, Sparks & Kirsh, 2006). This belief is said to manipulate young people to think that it is 'cool' to smoke. It was also observed in this doctoral study that only a few of the young smokers interviewed mentioned that the activities of tobacco companies impacts negatively on the youth in the long run. All the young smokers who had participated in any of the promotional activities of these companies were of the opinion that such activities were organized to reward the loyalty of the youth to the company. They therefore saw these events in a positive light. Siegel and Bierner (2000) found that adolescents who owned a tobacco promotional item and were attracted to the advertisements of a cigarette brand were more than twice more likely to become established smokers than adolescents who did neither. It is important to note that the great reduction in the advertisement of tobacco on TV and radio in Nigeria over the years have been due to the activities of Non-Governmental organizations (NGOs) working to achieve a tobacco-free Nigeria and not necessarily due to a functional government law as explained by one participant in this doctoral study. The effect of media and advertising is further discussed in the next section.

Media depictions of smoking

Tobacco advertising and promotion are still being carried out by tobacco companies in Nigeria as attested to by several young smokers interviewed. While tobacco advertising was completely banned from the Nigerian media in 2002 by the Advertising Practitioners Promotion Control of Nigeria [APCON] (Drope, 2011), this does not appear to be completely enforced as more than half of the participants in this doctoral study reported that tobacco adverts still abound especially

in the print media (bill boards and newspapers). The researcher particularly noticed the very big and bold advert of Benson & Hedges at the Murtala Muhammed International Airport in Lagos (Nigeria's busiest Airport) on her way back to South Africa from her field work. Advertising and promotion are very effective tools in influencing young people to initiate and later become established smokers (Gilpin, White, Messer & Pierce, 2007) and any terrain with less effective laws guarding these activities will be exploited by tobacco companies.

Due to the defunct nature of an existing tobacco control law and a new law still being processed, Nigerians and especially her youth come face to face with direct risk influences like the media and advertising depictions of smoking which do not picture the health consequences of the habit. Youth are therefore left to make a choice whether to smoke or not with only 'half the story' of the consequences of smoking. One of the community leaders interviewed in this study mentioned that though he had heard that cigarettes are not good, he did not know why they say so.

A few interview participants in this study confirmed that tobacco advertising in the television and radio has greatly reduced compared to what used to happen in past years. However, smoking scenes in movies were said to still generously abound in Nigeria. These smoking scenes were said to be most commonly seen in Nigerian local movies popularly called 'home videos' which presently receive a large patronage within and outside Nigeria. Fawibe and Shittu (2011) similarly reported that more than half of their study participants (Nigerian University undergraduates) claimed to have seen pro-tobacco messages on TV. In this doctoral study, one interesting feature that could not go unnoticed was the strong influence some tobacco adverts have on young smokers even years after they have left the television screens. Young smokers could still recall slogans which were used in the media a few years back like; "…welcome to

London" and "…the best tobacco money can buy". They could also recount vividly, the effects these adverts had on them.

Previous studies have shown a strong, direct and independent association between seeing tobacco use in films and experimenting with cigarettes. Adolescents with higher exposure to tobacco use in films were significantly more likely to have experimented with smoking (Sargent et al., 2001). In a South African study, Brook, Pahl and Morojele (2009) found that adolescents' receptivity to media models of smoking is related to nicotine dependence. This is consistent with findings in the United States in a study conducted by Chen, Cruz, Schuster, Unger and Johnson (2002). One young smoker in this doctoral study particularly described how he would pause a movie to go have a stick of cigarette in response to watching a movie actor smoke in the film. A study by Shmueli, Prochaska, and Glantz (2010) found that viewing smoking scenes in movies has a direct link with an immediate and subsequent smoking behavior among young smokers. They therefore suggest that in order to avoid this sort of stimulation to smoke, smokers who intend to quit the habit or limit their cigarette consumption should be wary of being exposed to smoking scenes in movies.

One of the defining characteristics of popular culture has been described as the creation of idols, stars or superheroes (Murray, 2006). Popular culture makes these idols, stars and superheroes very appealing to the minds of viewers intending to catch their attention and win their loyalty in the process. Tobacco advertising has captured this tool and uses it to get the youth to initiate and perpetuate smoking. Distefan et al. (2004) advocate that attempts at reducing smoking prevalence among adolescents must aim to confront the tobacco marketing strategy of incorporating smoking scenes in films. The researcher also noticed that a greater proportion of

young smokers interviewed in this doctoral study experienced increased craving to smoke while talking about smoking experiences during the interview process.

Cultural practices

In this doctoral study, culture was found to play a crucial role in making cigarettes available and within the reach of the youth. This section addresses the second research question of this study which seeks to ascertain the various cultural practices involving tobacco use in the community which may serve to influence the youth to smoke. Results reveal that tobacco in various forms serves many cultural purposes in southern Nigeria. Generally, snuff is more popular among older members of the society and serves also as an identity marker for the old irrespective of their gender. Snuff or cured tobacco leaves (together with the components that are used to process it to make snuff called *'akanwu'*) are also provided to old men and in some cases to women, as part of the bride-wealth in parts of southern Nigeria. Snuff is also used to welcome visitors or given as a gift item to older members of the community in some parts of south eastern Nigeria.

Another way in which tobacco is used in indigenous communities in Nigeria, is in the making of traditional medicines. The fresh leaves of the tobacco plant are used as a component of traditional medicines. Sometimes, these are burnt or crushed to extract their fluid which is then added to other ingredients for making traditional medicines. It is used among various cultural and ethnic groups in southern Nigeria. A previous study in a part of southern Nigeria by Ehikhamenor (2005) found that amongst the elderly, tobacco is used to treat dental lesions.

Primordial culture exists in southern Nigeria which demands the provision of cigarettes in packs to the youth as a prerequisite for cultural ceremonies like marriages and burials. Cigarettes provided at burials and marriages are expected to be consumed by young men of the community.

The youth also demand that they be provided with cigarettes when they have to carry out some traditional duties in the community. This cultural practice involving the provision of cigarettes to young men in the community was found to be dissipating in the south-south GPZ but still hold strong in many parts of the south-east GPZ. It is however non-existent in the south-west GPZ. Both qualitative and quantitative results in this doctoral study show this cultural practice to be strongest in the south-east GPZ.

Feinhandler (1986) explains that tobacco has been used in a variety of contexts and cultures in the past. The tobacco industry in China have been accused of selling the image of the use of the tobacco as a social currency by associating the gifting of cigarettes with such traditional values and cultural customs thereby making this practice of using the cigarette for such purposes socially acceptable, desirable, and reinforcing (Ding & Melbourne, 2012). With the increasing knowledge of the health hazards associated with smoking, it is expected that cultural uses of tobacco products will be replaced with less harmful items while the medicinal use of tobacco products can be replaced with modern medical options. Adult participants in this doctoral study (i.e. community leaders, political analysts and NGO officials) expressed the belief that with more political will on the part of government and the elders, cultural practices involving the consumption of cigarettes and snuff can be replaced with less harmful items like the kolanut or alligator pepper (*Aframomum melegueta)* which are also culturally valued agricultural items in Nigerian and many tropical African countries (Doherty, Olaniran & Kanife, 2010). However, the re-negotiation of cultural practices involving tobacco use in this context may not be achieved by policy interventions alone. This is because these traditions are engrained within indigenous traditions in the community. Decisions involving changes in these traditions are not usually done at the individual or group level but through the traditional political structure involving traditional

273

kings, chiefs and councils of elders (Ayittey, 2006). These should be accessed and keyed into tobacco policy formulation and implementation.

The qualitative results in this doctoral study suggest that cultural ceremonies seem to encourage smoking among males. For example, it was found that the youth groups culturally mandated to be provided with cigarettes during traditional ceremonies in some parts of southern Nigeria comprise of males only. Culture thus seems to have contributed to the association of the male identity with cigarette smoking and this may provide some explanations to the gender disparity in smoking prevalence found in this study. The survey results in this study also showed that it is more socially acceptable for males to smoke than for females. This acceptability was not influenced by the gender of the respondents as results from this study also showed that male and female respondents generally shared a similar view in this regard. However, gender disparity has been found across the world with more males who smoke than females (Eriksen, Mackay & Ross, 2012). It has been reported that males account for 80% of all those who smoke globally (Esson & Leeder, 2004).The difference in male to female smoking prevalence especially in developing countries has been speculated to be caused mainly by the existence of social norms which discourage females from smoking (Esson & Leeder, 2004). Social acceptance has been found to be the most common reason for using smokeless tobacco among adults in a study conducted in Nigeria (Desalu et al., 2010). This seems to be the case too with cigarette smoking and the gender disparity in its prevalence.

Parental and socialization practices involving the sending of children and youth on errands to purchase various items including cigarettes were found to be quite prominent in Nigeria. Respondents in this study reported children to be also involved in selling cigarettes. Most

smokers interviewed reported being subjected to these practices or being involved in them i.e. they have either been sent to buy and/or have sent minors to buy cigarettes for them. There were also reports that these minors are sometimes asked to light up the cigarettes they are sent to buy at the point of purchase. Parents, other family members and older adults in the community are allowed to send children on errands as part of socialization practices and children are culturally obliged to go on such errands which may include buying cigarettes. This exposure may foster a positive attitude towards smoking supporting the internalising of smoking as an acceptable behaviour and availing children the opportunities for experimentation with smoking. Unfortunately, the practice of sending children on errands including buying cigarettes was viewed to be nearly impossible to change through tobacco control policies. One political analyst believes that it is only when older members of the community are encouraged to quit smoking or become aware of the negative consequences of this practice that children can be stopped from going on such errands. Exposure to cigarettes as a minor was a significant predictor of smoking in this study.

Interpersonal (Social) risk influences

Interpersonal or social risk influences often has a thin line separating it from intrapersonal influences especially in the African society where the self is majorly derived from the family and the society (Ayittey, 2006). Individuals' identity and habits are closely linked to that of their family background and/or the broader social society. This therefore makes it imperative to understand influencing factors in the smoker's family and society which contribute to the initiation and maintenance of smoking. The section answers the third research question for this

study which is concerned with the influence of various interpersonal factors (such as family members, friends and role models) on smoking among southern Nigerian youth.

Interpersonal influences found in this study are peers, family and other role models. While the society's perception about cigarette smoking was found to have little or no effect on young smokers' decision to smoke (as noted earlier in this discourse), it nevertheless influenced their decisions about whom they disclosed their smoking status to. A greater percentage of smokers in this study were found to conceal their smoking habit from their family and friends especially when these are non-smokers.

This doctoral study found peer influence on young people's decision to smoke the strongest among other factors. Results from the survey conducted showed that smokers' closest friends tended to be smokers themselves making it therefore more difficult for the youth to refrain from smoking. Several studies have also confirmed the very strong influence of peers on young people's smoking behaviour (Charlton, Minagawa & While, 1999; Conrad, Flay & Hill, 1992; El-Amin et al., 2011; Epstein et al., 2003; Erbaydar, Lawrence, Dagli, Hayran & Collishaw, 2005; Epstein et al., 2003; Ogden, 2000). As noted by Sarafino (2002), teens who try their first cigarette typically smoke it in the company of peers and with their encouragement.

The qualitative results in this doctoral study showed that the smoking behaviour of role models such as teachers, successful professionals, movie stars and older adults, influenced both the youth's attitudes towards smoking and their smoking behaviours. These findings support those from previous research. Teachers' smoking behaviour during school hours has been found to influence adolescents' smoking behaviour (Poulsen et al. in Kayaba, Wakabayashi, Kunisawa, Shinmura & Yanagawa, 2005). Research has also shown that adolescents initiate smoking in

response to social influences (Lloyd-Richardson, Papandonatos, Kazura, Stanton & Niaura, 2002). These influences were said to usually lead such adolescents to emulate the behaviour of their friends, family members and other people they admire (role models).

Furthermore, the qualitative results in this doctoral study found that some young smokers were directly influenced to smoke by the smoking behaviours of members of their immediate family such as their brothers and fathers. While some smokers were influenced by seeing their fathers or brothers smoke, others saw nothing wrong with picking up the habit since their family members smoked. A study by El-Amin et al. (2011) also affirms that adolescents' smoking behaviour were strongly associated with smoking behaviour of their parents and friends. The qualitative findings in this study however show that smokers were found to mostly conceal their smoking habit from their parents irrespective of whether their parents smoke or not. This corroborates with the survey results of this study which showed a significant association between parental smoking status (particularly paternal smoking) and youth's smoking status. Hrubá and Žaloudíková (2008) found that the smoking behaviour of parents and other relatives led to a substantial increase in the number of children who considered smoking in the future. The smoking behaviour of family members therefore influences young people to initiate smoking (Yu, 2011).

Parental history of regular cigarette use has been found to be associated with cigarette use among adolescents too (Foster et al., 2007). It can therefore be said that parents' smoking behaviour can influence youth's smoking behaviour along two pathways. First is the direct influence of observing their parents smoke and the other is the indirect influence of developing accepting attitudes towards smoking. This second pathway also impacts on the youth's likelihood to be influenced by peers who smoke.

On gender relations and parental smoking habits, survey results of this doctoral study found a very low prevalence of smoking among female youth and even lower among female parents compared to their male counterpart (though this is also a general global phenomenon). Research has also found a strong association between the gender of parents who smoke and youth smoking behaviour (Loureiro, Sanz-de-Galdeono & Vuri, 2010). In their study, Loureiro et al. (2010) found that boys tend to imitate their fathers while girls tend to imitate their mothers in deciding whether to smoke or not. This they described as the 'same-sex parent-child link in smoking behaviour'. However, this link especially holds true in two-parent households and it is therefore not surprising to have found more male youth who smoke who reported that their fathers are smokers in this doctoral study.

Most of the smokers whose fathers smoke reported having been influenced by their father's smoking behaviour. On the whole, results in this doctoral study revealed that the youth were likely to show more loyalty to their peers than their parents in making decisions about smoking cigarettes. Mowery, Farrelly, Haviland, Gable and Henry (2004) found that parental advice not to smoke did not significantly predict older youth's intention not to smoke while having friends who smoke predicted youth's intention to smoke. This seems to support the findings in this doctoral study that youth are more likely to be influenced by their friend's views about smoking than the views of their parents.

Parental support and parent-child conflict do have significant inverse effects on substance use and deviance-prone attitudes in adolescents (Walker, Ainette, Wills & Medoza, 2007). Results from a study by Piko and Balázs (2012) suggest that negative family interactions may serve as a risk factor for smoking among adolescents. While the youth are more inclined to accept the view

of their peers over their parents' about smoking, their relationship with their parents (positive or negative) may serve to either push them to smoke or help them resist the pressure to smoke as the case may be.

Among the interpersonal factors found to influence the youth to smoke, peers and friends served to be the most direct influence as they tend to encourage smoking initiation and perpetuation by persuasion, gifts of cigarettes and pressure. Parents, older siblings and other role models on the other hand seemed to influence youth more indirectly by forming supportive attitudes towards smoking making these youth more likely to succumb to peer pressures to smoke and accept cigarettes as gifts from friends.

Intrapersonal risk influences

Intrapersonal influences were identified as those influences which are mostly internal to the individual but could be influenced by some external factors. These influences tend to make individuals vulnerable to pick up the smoking habit and/or make them susceptible to yield to external pressures to smoke. This section also seeks to answer the fourth research question pertaining to the influence of intrapersonal risk factors on smoking among the youth in southern Nigeria. For the purpose of this discussion, the factors identified among the participants have been grouped into perceptions, knowledge and attitudes towards smoking, lack of life skills as well as the motivators for smoking.

Youth's perceptions, knowledge and attitudes towards cigarette smoking

Young smokers who participated in the qualitative phase of this study were found to display sensation seeking tendencies and hedonic attitudes. They explained that they derive pleasure

from smoking and even play games with the ash that results from the burning cigarettes. Weak commitment to religious and conventional values, a determination to smoke and an under-estimation of the negative health implications of smoking were also reported among young smokers in this doctoral study. Several studies have linked smoking to individuals who are sensation seekers (Evans et al., 2006; Terracciano & Costa, 2004); highly impulsive (Terracciano & Costa, 2004); risk takers (Dinn, Aycicegi & Harris, 2004) and have weak commitments to religious beliefs (Willis, Yaeger & Sandy, 2003) among other factors. Wing, Moss, Rabin and George (2012) also found more impulsiveness among smokers than non-smokers. According to Dinn et al. (2004) adolescents who use tobacco have been described as "more rebellious, risk taking, impulsive and interpersonally aggressive relative to non-smokers" (p. 109). This however does not imply that all adolescents who smoke have these traits but that more adolescents who smoke are likely to be identified with these traits when compared with non-smokers.

Though most young smokers interviewed could recount some of the health hazards associated with smoking, they expressed a sense of invincibility (which also characterizes youth's risk taking tendencies) when asked how this knowledge has influenced their smoking behaviour. Many young smokers believed that these health effects will not happen to them because of their positive belief system. There seems to be an under-estimation of the negative health effects of smoking or that these health effects are largely long term and therefore should not be an immediate cause for concern. Most of the young smokers interviewed could actually mention some of the long term effects of smoking e.g. the risk of various types of cancer. Nevertheless, some smokers also believed that these risks can be reduced by a reduction in cigarette consumption and/or by eating healthy. On the other hand, some actually made efforts to reduce the number of cigarettes they consume per day as a way of protecting themselves from the

negative health consequences of smoking. Some of the smokers also seem to have resigned themselves to fate. They had even constructed a slogan; "anything can kill a man" to express this resignation in their own way. This slogan was used to express the fact that all humans must eventually have to face death someday and somehow. It is also used to express their fatalistic attitude towards the negative health consequences of their smoking behaviour. Consequently, these smokers expressed the belief that cigarette smoking is not the only source of death and should not carry as much concern as it presently does. In a study by Hussain et al. (2010) it was found that the knowledge of the adverse effects of cigarette smoking did not translate to a lower prevalence in smoking among Nigerian Soldiers. Dinn et al. (2004) therefore assert that smoking behaviour may reflect to some degree, a diminished ability to anticipate the long term negative consequences of tobacco use. A study by Morrel, Song and Halpern-Felsher (2010) found that adolescents who had personal smoking experiences viewed smoking to be less risky and were more likely to report on the benefits of smoking over time. Morrel et al. (2010) therefore suggest that these alterations in risk perception by smokers may possibly be as a result of the sensational and seemingly positive effect of smoking on such individuals. This may be due to the psychoactive properties of some of the components of cigarettes.

Findings from the survey conducted in this doctoral research also confirm that just over half of young people (about 56%) have high knowledge levels about the negative impact of smoking on health and well-being. However, this was significantly higher in the following subgroups; non-smokers, females, students, respondents who have never experimented with smoking and those who come from and reside in the south-west GPZ as well as those who reside in the south-south GPZ.

From the results obtained in this doctoral study, a conclusion cannot be made concerning the relationship between knowledge levels and smoking status per se. High knowledge level with regards to the impact of smoking on health and well-being seems to be positively associated with the youth in terms of their employment category (students versus unskilled workers), gender (females versus males) and respondents' GPZs of origin and of residence (the South-south and South-west versus the South-east in both cases). On the other hand, those who have never experimented with smoking and those who do not currently smoke were also found to have higher levels of knowledge suggesting that their knowledge levels may have influenced their choice of not smoking. Findings regarding the perceptions of the negative health implications of smoking as they relate to actual smoking behaviour is consistent with those from previous studies conducted in Nigeria by Fawibe and Shittu (2011); Desalu, Iseh, Olokoba, Salawu and Danburam (2010) and Hussain et al. (2010). Knowledge of the harmful effect of smoking was also found to be generally high among students of institutions of higher learning in the Eastern Cape Province of South Africa (Awotedu et al., 2006).

Smokers had ambivalent views about their smoking behaviour. While most believe smoking is a bad habit, many seemed also quite comfortable with it. These ambivalent views about smoking among the youth can be traced to their beliefs about how society views smoking. Young smokers felt that the society views smoking negatively not necessarily because of the health concerns associated with the habit, but because those who smoke are seen as rebellious and irresponsible. However among the youth (especially males), smoking is seen as an identity marker, distinguishing the 'tough guys' from the 'weak ones'. Sarafino (2002) mentions that young people tend to believe that smoking enhances their image and makes them look more mature.

Life skills and smoking behaviour

Two major life skills found to be lacking among young smokers in relation to how they started smoking were; coping skills and refusal skills. These two life skills could largely determine youth's self efficacy to refrain from smoking. Qualitative results in this doctoral study revealed that some of the youth were drawn to cigarette smoking when they experienced certain life challenges like stress and lack of employment or jobs (for those who are self-employed), lack of parental warmth etc. Cigarette smoking was therefore used by these youth as a way of self-medicating when faced with problems or stress.

An individual's self-efficacy beliefs are likely to influence whether such individual will initiate and sustain appropriate behaviours when faced with obstacles (Bandura in McGahee, Kemp & Tingen, 2000). It is therefore not surprising that this doctoral study found low self-efficacy among smokers in their narration of how they were influenced to start smoking. One particular point of interest was how a few of the participants described how much they hated cigarettes before they came face to face with the situations or persons that led them to pick up the habit. This initial negative attitude towards smoking did not however translate to a high self-efficacy when they had to make a choice whether to smoke or not. Results from the survey in this doctoral study also showed that smokers tended to have a lower self-efficacy to refuse smoking than non-smokers. The survey being a cross-sectional one could not ascertain whether this low self-efficacy found among smokers was the reason for their smoking initiation.

The ability to refuse or resist pressures to smoke especially from peers can be said to show just how much refusal skills a youth has. This also can determine whether an intending quitter will go back to the habit or not. Young smokers interviewed in this study showed a lack of refusal skills

in their narration of how they started smoking. Elder, Salis, Woodruff and Wildey (1993) in their study investigating the relationship between refusal skills and the onset of tobacco use found a favourable trend in refusal skills and delaying or preventing the onset of tobacco use. Sarafino (2002) asserts that many individuals who begin smoking seem to lack general personal and social life skills which include among others; assertiveness skills, decision making skills and techniques for coping with anxiety.

The inability to cope with the lack of parental warmth and care from other family members was also found to influence the youth to smoke. This acted as a 'push' factor to initiate smoking. One of the youth interviewed explained that he started to smoke because of the loss of his father and the fact that he had no one to care for him. Foster et al. (2007) found that the presence of parental warmth was associated with a decreased likelihood of adolescent smoking behaviour.

Motivators for smoking

This study found several personal factors which served as motivators for young people to initiate and perpetuate smoking. These have been grouped into psychological, physiological and cognitive factors for the purpose of this discussion.

Psychological factors

Prominent psychological factors pointed out by young smokers themselves include anger, depression, worry and distress. Young smokers interviewed in this study also reported smoking cigarettes in order to relax when agitated and to cope better with social challenges. Perkins et al. (2010) found that a low ability to tolerate distress and/or a history of depression could increase acute smoking reinforcement irrespective of a smoker's mood. Bisol, Soldado, Albuquerque,

Lorenzi and Lara (2010) also suggest that smoking may be linked to high levels of anger and an unstable externalized affective temperament. The implication of these findings is that interventions geared towards reducing uptake of tobacco smoking should be mindful of the individual's psychological state and temperament for it to be effective.

From the qualitative results in this doctoral study, young smokers seemed to use cigarettes therapeutically to tackle more deep seated psychological issues e.g. forgetting about one's problems (as expressed by some smokers). However, it is erroneously believed (among the smokers) that cigarette smoking assists in solving psychological problems such as depression. In fact, a study conducted among Greek adolescents by Francis et al. (2007) found that adolescents who smoke regularly, have increased rates of psychopathology compared to those who are non-smokers.

Mufanò and Araya (2010) argue that cigarette smoking and depression have more of a cause-effect relationship with cigarette smoking increasing the risk of depression. Also, Niemelä et al. (2009) found an association between childhood depression and smoking in later years. A study of depression among Nigerian University students found heavy cigarette smoking among other factors to be significantly associated with depression related disorders among the students (Adewuya, Ola, Aloba, Mapayi & Oginni, 2006). Results from a study by Laws, Holliday and Huang (2007) suggest that smokers are more likely to experience moods of depression, anxiety, low morale, lack of motivation and anger compared with non-smokers. From the qualitative data collected in this doctoral study, depression emerged as a possible risk factor for youth initiating and perpetuating cigarette smoking. Smokers also reported smoking more cigarettes when they felt depressed as a result of unemployment, a lack of parental warmth and other stressors.

It has also been highlighted that smokers experience positive mood effects from smoking with some being 'helped' to cope with difficult and stressful situations (Bancroft, Wiltshire, Parry & Amos, 2003; Ogden, 2000). A study by Childs and de Wit (2010) found stress to significantly increase cravings for cigarettes but not actual smoking when the participants were given the option to earn money instead of satisfying this craving. This suggests that a lack of money is a major stressor and it is therefore not surprising that more of their participants preferred to earn money than to smoke. Stress and emotional disorders have been described as having a dynamic and reciprocal relationship and as possible risk factors for smoking (Ameringer & Leventhal, 2010).

Physiological factors

Physiological motivators for smoking reported in this study include difficulty with sleep and digestion. While cigarette smoking has been reported to have a calming or relaxation effect on smokers, Silverstein (1982) argues that "the calming effect attributed to smoking is due to the action of nicotine in ending withdrawal symptoms in addicted smokers rather than to a sedative property of cigarette smoking" (p. 946). It is therefore likely that the smokers in this study may be addicted to nicotine.

As mentioned earlier, young smokers in this doctoral study reported having to smoke in order to sleep well. Due to the scope of this study, it could not be ascertained whether this was as a result of their dependence on nicotine or not. Nevertheless, Hu, Sekina, Gaina and Kagamimori (2007) found that sleep quality is affected not just by being a smoker but also by the process of smoking cessation in men. If young smokers assert that they need to smoke in order to sleep well, it is

possible that this could be a symptom of addiction rather than a curative means for lack of sleep (Silverstein, 1982).

Cognitive factors

Cognitive motivators for smoking reported by young smokers include the use of cigarette as a 'thinking companion'. Sarafino (2002) explains this effect of nicotine using the biobehavioural model of Ovide and Cynthia Pomerleau (1989). This model proposes that people continue to indulge in cigarette smoking because they use and then depend on the effects of nicotine to regulate their cognitive and emotional states. It is possible too that when the amount of nicotine in the systems of smokers reduces to a low levels, such persons will only be able to concentrate normally after increasing the nicotine level in their bodies. While it was not possible to ascertain the cognitive states of smokers before and after they started smoking in this study, one undergraduate smoker who participated in this study mentioned that his overall level of concentration has decreased since he started smoking.

Immediate influences for smoking

Immediate influences for cigarette smoking found in this study include trial behaviour, the intention to smoke and the use of related substances like alcohol and marijuana. Expectedly, results from the survey showed that about 75% of those who have tried smoking are currently smokers and those who have the intention to smoke were about four times more likely to report having tried smoking before. Furthermore, males and those with low levels of knowledge of the negative health effects of smoking were also more likely to have reported ever to try smoking than others.

Cigarette smoking has been tagged a gateway drug due to research findings which suggest its association with the increased likelihood of illicit drug use (Biederman et al., 2006; Lai, Lai, Page & McCoy, 2000). A study by Brook, Rubenstone, Zhang, Morojele and Brook (2011) also found significant correlation between smoking and alcohol use among South African adolescents. With previous research lending evidence to the cigarette as a gateway drug, it is of great concern that marijuana is viewed by participants in this doctoral study to be "safer" with lesser health consequences than tobacco. This disturbing attitude towards the use of marijuana as a replacement for cigarette calls for concerted awareness and interventions. A study by O'Cathail et al. (2011) found cigarette smoking prevalence to be significantly associated with cannabis use among Irish teenagers. A positive association has also been found between tobacco consumption and illicit drug use among Bangladeshi men (Khan, Aklimunnessa, Kabir, Kabir & Mori, 2006). This is not to say that all tobacco consumers would use illicit drugs or smoke marijuana but unless youth are properly informed, they may continue to try to avert the health consequences of smoking cigarette by smoking marijuana.

Concerning the intention to smoke and smoking behaviour, young smokers interviewed in this study reported having an intention to smoke way before they ever tried their first cigarette. It should be noted that 53.1% of current smokers still have the intention to continue to smoke while 6.9% of young people who do not currently smoke expressed an intention to smoke within the next one to five years. The intention to smoke was significantly related to reports of trying cigarettes one to five years later in a cohort study conducted by Hampson, Andrews and Barckley (2007) among second and fifth grade students in the United States. Guilamo-Ramos, Dittus, Holloway, Bouris and Crossett (2011) have also reported a high association between

smoking and the intention to smoke among Latino adolescents. Unfortunately, there are currently no specific plans in place within Nigeria targeted at preventing non-smokers from picking up the habit or to encourage smokers to give up the habit. Fawibe and Shittu (2011) in their study conducted among Nigerian university undergraduates also found that majority of smokers were unwilling to quit smoking as they did not consider smoking to have negative effects on their health and quality of life.

Noteworthy also are the findings from the survey phase of this study indicating significant relationship between youth's intention to smoke and their employment category. Unskilled workers were more likely to indicate a medium to high intention to smoke irrespective of their smoking status. The results also suggest that a small but worrisome percentage of students and unskilled workers who are currently non-smokers are likely to initiate smoking in the future while unskilled workers who are already smokers are less likely to give up the habit within the next one to five years. A study by Lawrence et al. (2007) also found differential smoking patterns by employment status and school enrolment status. Another surprising finding is the exposure to anti-smoking messages being a significant predictor of being a smoker. It is not understood how this comes about but it is possible that smokers in this study are particularly more interested in hearing what messages exist about their habit and so have been more exposed to anti-smoking messages than their non-smoking counterparts.

The fifth research question in this doctoral research seeks to ascertain the best predictors of smoking among the youth. The best predictor of smoking behaviour reported in the survey is a

high exposure to SHS. The qualitative findings however suggest the influence of friends and peers followed by the lack of tobacco regulatory laws.

As mentioned earlier in this discourse, the exposure to significant others' smoking behaviour and contexts of smoking also play an important role to shape youth's views about smoking

The theory of triadic influence: A Suggested re-categorisation of constructs within levels

The TTI with the three streams/types of influences (Personal, social and environmental streams) has the advantage of looking beyond the individual and immediate social issues that influence behaviours. It proposes multi-levels of influences within each of the streams of influences. It is however the categorization of these levels within the three streams of influence that does not exactly fit well. The constructs identified at the ultimate level of influence in each of the streams (see Table 1) do fit well within their respective streams. Other constructs categorized within the distal and proximal levels of influences in the intrapersonal stream and the distal level in the interpersonal stream were also found to be well placed within their respective streams. However, at the proximal level within the interpersonal stream are constructs like the prevalence estimates and beliefs that important others encourage smoking. It is rather suggested that a factor such as the prevalence estimate of smoking (for example) should have been placed within the environmental stream of influence as this is usually population based. Also, a factor such as the beliefs that important others encourage smoking should instead lie within the intrapersonal stream of influence as this belief is one which is conceived by the individual and not necessarily his/her significant others.

A closer view of the factors at the distal level of influence within the cultural/environmental stream of influence also shows that many of such factors should have been placed within the intrapersonal stream of influence. Factors such as weak commitment to conventional values, schools and religion, weak desire for success and achievement, hedonic values and short-term gratification, rebelliousness, desire for independence from parents may be better placed under the intrapersonal stream and not be categorized under the environmental stream. These factors are clearly based on issues that pertain to the individual and not his environment. They may however be influenced by the environment but ultimately lies within the individual. At the proximal level within the environmental stream are factors such as expected costs and benefits of not smoking, evaluation of costs and benefits of not smoking, expected costs and benefits of smoking, attitude towards smoking by others and attitudes towards smoking by self. Most of these factors with the exception of attitude towards smoking by others also lie within the individual and should have been categorized under the intrapersonal stream of influence. Attitude towards smoking by others should have been placed within the interpersonal stream as this may be considered to be the attitude of the individual's significant others and not necessarily a population based attitude.

In all, the TTI though has the merit of putting into consideration the context within which behaviours are carried out, there is need to re-evaluate the categorization of several constructs within the streams and levels of influences as presented in Table 1. Also, while the factors within the ultimate level of influences can be understood as predisposing factors for carrying out a particular behaviour, there is no clear cut distinction between the distal and proximal level factors.

Based on the assertion by Airhihenbuwa and Obregon (2000) that the differences in health behaviours often can be traced to culture, it is expected that traditional cultures or primordial cultures should be explicitly stated as a factor within the environmental stream of influence to encompass an intercontinental flavour to this theory. Cultural use of the tobacco has been identified as one factor which is responsible for the persistence of the tobacco in the society (Feinhandler, 1986). Cultural perspective to tobacco research has also been highlighted as a neglected angle needing to be explored in order to achieve success in tobacco control especially in cultures where the tobacco serves a cultural purpose (Nichter, 2003). It is understandable that the TTI being a Western based theory does not place much emphasis on the role of culture in influencing health risking behaviours though some form of it is mentioned within the cultural/environmental stream. However, using this theory within the African context would mean that the researcher would have to themselves bring cultural influences to the fore front as has been done in this current study.

The use of the TTI is this study is therefore based on these observations highlighted and the placement /categorization of the risk influences within the streams was driven by the data obtained in this study.

A theoretical model explaining the pathway of risk influences for smoking among the youth

Using the findings in this study, a theoretical model for understanding risk influences for smoking among the youth is proposed. Though this model is very similar to that of the theory of triadic influence which guided this study, the categorisation of the constructs under the streams

of influences in this model was informed by the results obtained in this study and not strictly by the TTI as seen in Table 1.

This model involves three major levels or streams of influences which impact on actual smoking either directly or indirectly through the immediate influences. These streams of influences are: the cultural/environmental influences, interpersonal influences and intrapersonal influences.

The cultural/environmental influences

The cultural/ environmental stream is seen to influence factors within the other two streams as it provides the context within which cigarettes are made available and affordable to the youth. Where there are weak regulations within this stream, the stage becomes set for the youth to have easy access to and affordable cigarettes. As a result of a lack of regulations also, tobacco companies make use of various tactics to lure the youth to pick up the habit of smoking. Within this stream are factors which seem to also normalize smoking in the society as a result of: the use of cigarettes for traditional ceremonies, its availability at social functions and an early exposure of children to cigarettes and other tobacco products as they run errands for adults who use them.

Other factors which also serve to influence smoking among the youth within this stream include unemployment and a high prevalence estimate. Unemployment creates room for the youth to have plenty of time to be at drinking joints and bars and mix up with peers who smoke. Also, the stress caused by a lack of a job to do also serves to push such youth to smoke in order to forget about their problems. The media also serves to influence the youth to smoke either through the portrayal of smokers as successful people or associating smoking with media celebrities who are admired by the youth.

293

Interpersonal influences

The interpersonal influences for youth's smoking behaviour include the influence of peers and significant others. Significant others here include parents and other family members, teachers, role models in the form of media celebrities and successful professionals who smoke. Factors within this stream are also influenced by factors in the other streams. For example, the media depiction of smokers as successful people occurs unrestricted in an environment with weak regulatory policies on tobacco advertisement. Socialisation of children under collectivist cultures to run errands for family members and other older adults within the community also makes it possible for children and youth to be sent to buy or sell cigarettes and other tobacco products. This grants them the opportunity to have close contact with these persons as they use various tobacco products like cigarettes and snuff and this in turn serves to normalise smoking. Sometimes, such individuals try their first cigarette when running such errands. In a similar vein, with the implementation of appropriate tobacco policy which would make schools smoke free zones, teachers would not be seen by students smoking at school.

Thus these interpersonal influences tend to normalise the habit of smoking and can either directly influence the youth to initiate smoking or indirectly influence them by the decision they make to smoke in the future.

Intrapersonal influences

The intrapersonal influences include personality characteristics and attitude towards smoking, lack of life skills (e.g. coping and refusal skills), low self-efficacy, motivators for smoking, weak commitment to conventional and religious values and the awareness and attitude towards the

health effects of smoking. These factors are also influenced by factors within the cultural/environmental and the interpersonal streams. For example the youth's attitude towards smoking may be influenced by the attitudes or smoking behaviour of their peers and significant others and this may influence their self-efficacy to refuse smoking or their determination to smoke. The provision of cigarettes for traditional ceremonies may also influence the youth's attitude towards smoking making it difficult to educate such youth on the harm the product can cause.

Immediate influences

The factors within this wave of influence are more directly linked to actual smoking and engaging in these activities would increase the likelihood that such a youth will go on to use cigarettes regularly. Trying out smoking, deciding to smoke in the future and the use of substances like alcohol, marijuana etc, are factors which serve as immediate influences for smoking. A diagrammatic representation of this model is presented in Figure 20.

It would have been interesting to test this model using structural equation modelling (SEM) but going by the nature of the data used in this study which does not lend itself easily to the use of SEM, this could not be done. However, this can be explored in future research.

Targeted Interventions based on the PRIS

Based on the theoretical model explaining the pathway of risk influences for smoking, an intervention model is proposed. These interventions are based on the risk influences identified within the various levels of influence.
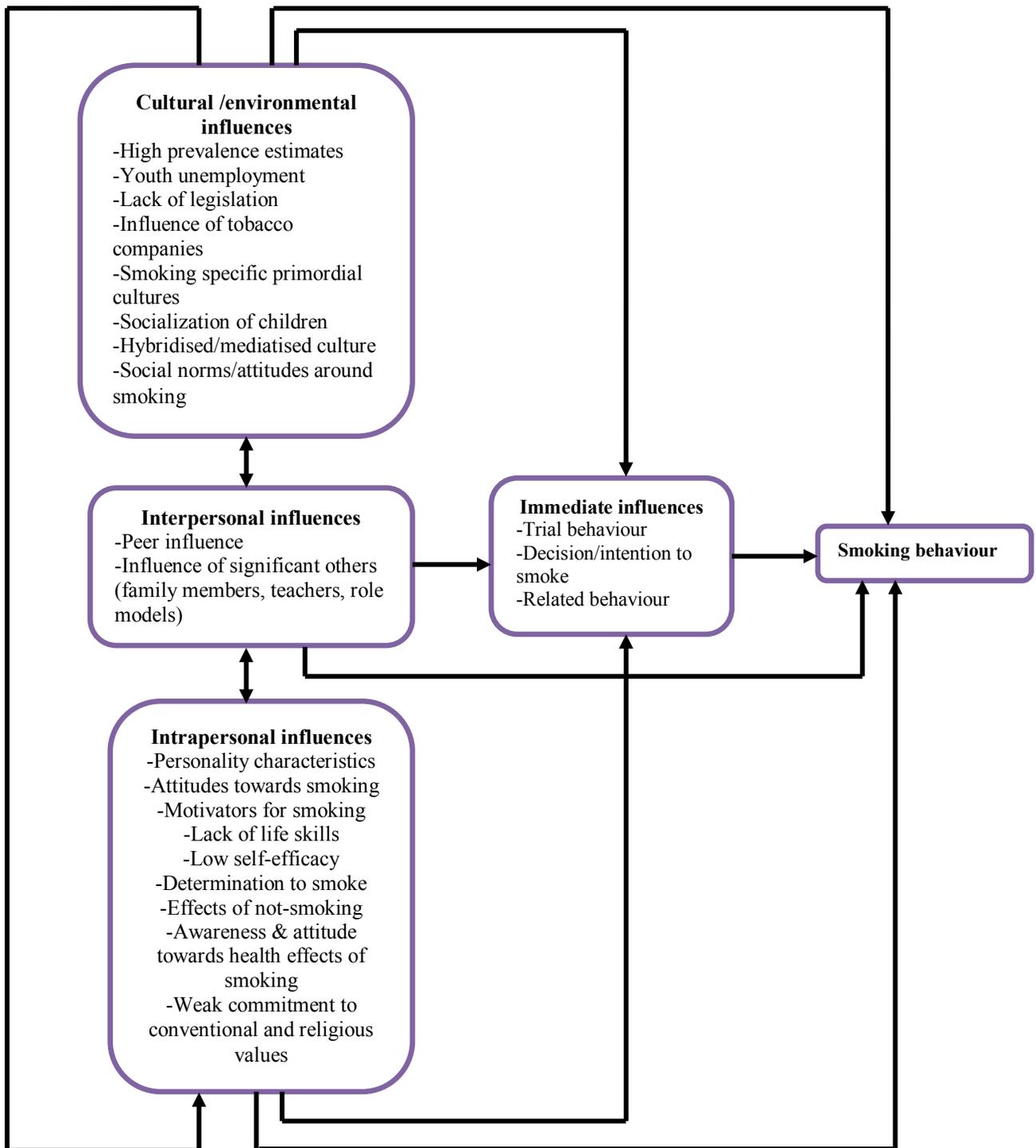
Figure 20: The pathway of risk influences for smoking (PRIS) by Egbe, C. O.

To address risk influences at the cultural/ environment level, a comprehensive tobacco control policy has to be put in place which should take into account the various social and cultural roles the tobacco plays in the society. The drafting of such a policy should involve the traditional rulers and leaders of communities which still use tobacco products as cultural items. It is envisaged that community leaders' involvement in the formulation of such a policy will boost implementation especially at the community level. However, community leaders and members of traditional communities which still use tobacco products as cultural items will need to be sensitized about the reason why the tobacco and its products are not suitable for consumption. Also, community leaders should be tasked to find alternative and safer products to replace the tobacco products currently being used for traditional ceremonies. This should be done in conjunction with the council of elders and chiefs of each community and decisions arrived at should be documented and communicated to members of the community.

The empowerment of members of the public to protect themselves and be the eye of the government concerning effective implementation of tobacco policy when put in place will go a long way in discouraging people from breaking the law. Members of the public should be given complaint lines in all mobile networks operating in Nigeria where they can call to inform the authorities tasked with implementing the policy. Complaints about pro-tobacco media adverts and various tactics used by tobacco companies to lure the youth to smoke like promotional events and distribution of branded gift items to members of the public should be encouraged.

At the interpersonal level, awareness by government and non-governmental organisations (NGOs) should specifically target older adults who smoke with a view to discourage them from continuing to smoke. The negative effect of the smoking behaviour of older adults including

parents (whom they see as role models) on children and youth should be highlighted as a motivation for these adults to give up the habit. Smoking cessation clinics should be set up in each state and in major towns where smokers (young or old) who need help to quit can easily access this service.

At the intrapersonal level, it is suggested that the school curriculum should include the negative impact of tobacco use on individuals and the economy of the country. The health effects of smoking to smokers and non-smokers should be part of health education or other related curriculum. This should form part of the school curriculum from primary to secondary schools since many youth who smoke have been found to start at this period of their lives.

Also, life skills should be included as part of the school curriculum at the primary and secondary levels. Students should be taught coping skills in order to handle personal and social challenges. Refusal skills and decision making skills should also form part of the life skills curriculum.

In conclusion, the value of multi-level targeted interventions cannot be overlooked in any attempt at reducing smoking initiation and perpetuation in the population especially among the youth. However, targeted awareness campaign serves as the communication live wire for such interventions to be successful. Raising awareness should not be left for the government alone. Various NGOs working with children and youth should get involved even when a tobacco regulatory policy is yet to be in place. Children, youth and adults will benefit from such awareness programmes as these programmes will provide the much needed information for individuals to make informed choices about whether or not to use tobacco products. This will also help to drive the implementation of a regulatory policy when it is in place.

Summary of discussion

Youth smoking behaviours are influenced by various factors. At the cultural/environmental stream of influence is the absence of strong tobacco control legislation leading to the activities of tobacco companies going largely unchecked while cigarettes are readily available to individuals of all ages. Non-smokers are also exposed to SHS while children are exposed to cigarette at very early age because they have to run errands of buying cigarettes for adults who smoke.

In this study also and still within the cultural/environmental stream of influence, cultural practices were found to play a part in making cigarettes available for adolescents and youth to smoke at social gatherings and traditional ceremonies.

It is proposed that attempts at tobacco control must view the "big picture" especially in African societies. The collectivist culture which is prevalent in African societies makes it more imperative to look beyond the individual to have an adequate and comprehensive understanding of behaviour. Many health behaviours are influenced by culture in diverse ways. Airhihenbuwa and Obregon (2000) posit that the differences in health behaviours are often a function of culture. Policies which impact on cultural practices have to be well negotiated during the process of formulation and awareness raised so that individuals will see the need for a change in health risking behaviours like cigarette smoking at various levels.

Interpersonal risk influences for smoking were found to come from their peers, family members and other role models. Intrapersonal influences were found to include among others: a lack of life skills e.g. refusal skills, coping skills and low self-efficacy to refuse smoking. Youth's attitudes to smoking and an under estimation of the negative impact of smoking on their health

and wellbeing also contribute to influence their smoking behaviour. The youth were also found to be motivated to smoke by various psychological, physiological and cognitive factors.

The behaviours found to be most closely related to smoking in this study were alcohol consumption and the smoking of marijuana. Trial of cigarette at an early age may also determine whether such persons will become regular smokers later in life.

In this chapter also, a model explaining the pathway of risk influences for smoking has been presented with various targeted multi-level interventions suggested. Further recommendations are made in the next chapter.

CHAPTER EIGHT

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

This chapter presents the summary of the research findings, conclusions and recommendations. The limitation of this study and suggestions for further research are also discussed.

Summary of major findings

A mixed methods study was conducted to broadly investigate the socio-cultural risk factors influencing an increasing smoking prevalence among the youth in the southern region of Nigeria. The summary of the qualitative and survey findings have been presented in chapters five and six respectively. However, the points of convergence and divergence of these findings are summarized here.

Points of divergence and convergence in qualitative and quantitative findings

This study did not exactly aim to test all qualitative findings quantitatively but found that many factors identified in the qualitative results were verified by the quantitative findings. Some notable points of convergence of the qualitative and quantitative findings are discussed.

Smoking prevalence

Respondents in the qualitative phase suggested that smoking is on the increase among the youth and expressed worry about an even greater increase among females. Results from the survey corroborated these suggestions.

Knowledge and smoking prevalence

Results from both the quantitative and qualitative studies in this research suggest that though the knowledge of the negative health impacts of smoking is above average among the youth, knowledge does not seem to influence smokers to stop smoking. Young smokers offered counter arguments and behaviours to reduce the negative health impacts of smoking in various ways. Some of these include reducing their cigarette consumption, eating cancer protective foods, resigning to fate and others outrightly rejected the health messages they have heard.

Smoking and tobacco control

The interview respondents in this study were very articulate about the influence of the weak tobacco control on the promotion and persistence of smoking in the community. This position was also confirmed when more than a quarter of the survey respondents chose this as one of the major reasons for an increasing prevalence of smoking among the youth.

Noteworthy is the fact that some of the young smokers interviewed were of the view that an increase in cigarette prices may not be an effective measure in reducing smoking prevalence among the youth. These participants argued that it will only make the cigarette "an expensive contraband". The survey results also supported this finding as the majority of the respondents (57.5%) believed that a price increase is unlikely to reduce the smoking prevalence in Nigeria. Perhaps policy makers should become aware of this in order not to focus solely on price control as a tobacco control strategy. However, the youth overwhelmingly supported a regulation of tobacco use through appropriate policies.

Interestingly, both qualitative and quantitative findings seem to support a ban on the manufacturing of cigarettes in Nigeria as a way to reduce smoking prevalence in the country.

Influence of societal and cultural practices on smoking

The results from the qualitative and quantitative phases of this research indicate that while it is somewhat tolerable for males to smoke in the society; the same cannot be said about females who smoke. Smoking was therefore found to be more socially acceptable for males than for females. Cultural practices in parts of southern Nigeria also demand that cigarettes be given to the youth group which comprise of only males thereby associating smoking to the male gender.

Also, cultural practices involving the use of tobacco for traditional ceremonies were found to be more prevalent in south-eastern Nigeria as reflected in both studies. Smoking prevalence was also found to be highest in the south-east GPZ among the three GPZs of southern Nigeria. Statistical analysis, however did not find either of these factors (GPZ of origin or residence) as a significant predictor of smoking status.

The qualitative findings revealed that the practice of sending children to purchase or sell cigarette is a common phenomenon. This practice exposes children to tobacco use without the knowledge of the adults involved in this. It was also found in the survey that youth who have had exposure to cigarettes as a minor were three times more likely to be smokers after controlling for all other culture related variables.

Immediate influences for smoking

Most smokers were found to have the desire (and intention) to smoke at some point before they came face to face with the situation or persons who led them to actually start smoking. Evidence from both the qualitative and quantitative results revealed that smokers tend to consume alcohol alongside cigarettes.

Best / strongest predictor of smoking

Survey results revealed that the best predictor of smoking among southern Nigeria youth is a high exposure to SHS. Youth who have had a high exposure to SHS were 19 times more likely to report being smokers. However, this result should be interpreted with caution due to the wide confidence interval obtained.

Other points of divergence of results from the two phases of this study were largely due to the fact that most qualitative findings were not actually tested in the quantitative phase due to the magnitude of the various findings and the cross sectional nature of the survey conducted. Furthermore, the modification of the GYTS questionnaire which was based mainly on tobacco smoking prevalence and identifying some cultural practices involving tobacco use and the fact that the quantitative phase was a cross sectional survey did not make it possible to verify all of the qualitative findings in this study.

Conclusion

This study has been carried out to ascertain the roles played by various factors in influencing smoking among youth in southern Nigeria. Push and pull factors have been identified and the ways in which they function in youth smoking vulnerability have been explored. It is important therefore that when designing tobacco policies, all these factors be put into consideration in order to make implementation easier and more effective. For example a synchronization of interventions in the cultural and policy environments will be more effective in changing cultural practices involving tobacco use. Evidence from this study shows that the youth are influenced to smoke in a multiplicity of ways, the best predictors being a high exposure to SHS and the social practice of sending children to buy or sell cigarettes. This knowledge should inform the activities of policy makers and implementers as well as health bodies working to achieve a smoke-free world.

Recommendations

Tobacco prevention cannot be achieved through the use of just one approach or a few approaches that end up addressing a few aspects of the problem or at best, delay smoking initiation for a few years. The findings of this doctoral research therefore propose multilevel, multi-sectorial and multidimensional approaches as a comprehensive approach to fight tobacco in Nigeria. It is also important that a proposed comprehensive approach should involve each sector or partner in the fight against tobacco being responsible for specific aspects in order to avoid duplication and a waste of already scarce resources. While the proposed Nigeria NTCB advocates a multidisciplinary and multi-sectoral approach, it clearly omits some vital sectors like the traditional political structure and youth because the Ministries directly responsible for these

categories of individuals do not form part of the sectors being mobilized for tobacco control. Also, there seem to be a sidelining and/or underestimation of the role the education sector can play in raising awareness, preventing smoking initiation and facilitating smoking cessation in the whole issue of tobacco control especially among young people. Also, the issue of targeted interventions is not adequately addressed in the NTCB.

The survey respondents in this study were asked to suggest what may be responsible for the increasing prevalence of smoking and this result has been presented as part of the survey results in this dissertation (see chapter six). While the influence of friends was identified as a crucial factor in the qualitative phase of this study, participants were also asked to suggest what they perceived to be effective measures in curbing the increasing prevalence of smoking among Nigerian youth. Their recommendations have been presented as part of the qualitative results in this dissertation (see chapter five). In addition to the recommendations made by the participants in this study other recommendations are proposed.

The various attitudes displayed by the young smokers in this doctoral study call for targeted interventions which will address each of the issues young smokers expressed. This will raise the bar of awareness around the negative health impact of smoking as well as the psychoactive effect of nicotine in order to encourage more young smokers to quit the habit.

At the cultural/environmental stream of influence are factors which border on tobacco policies and cultural practices involving the use of and exposure to tobacco products. It is important that a viable tobacco control policy be put in place in Nigeria to show a serious commitment by the government towards protecting the health of her citizens. It is also important that traditional

ceremonies involving tobacco use be explored in different parts of the country and a special task force created by the Country's Ministry of Interior be put in place which will be given the specific responsibility of negotiating with the traditional political structure in these communities about replacing the use of these tobacco products with other equally valued items in the community.

To address interpersonal risk influences for smoking, there is a need to create awareness among the adult smoking population on how their behaviour serve to influence smoking among the youth given that the best predictor of smoking in this study was found to be social exposure to smoking. This is also important because among cultural activities involving the tobacco, exposure to cigarettes as a minor was found to be the best predictor of smoking. These predictors are very connected with the use of tobacco among the adult population and therefore, interventions to curb smoking by the adult population will also invariably help to curb smoking among the youth at the long run. The task of raising awareness can be carried out by both government (the Ministries of Health and Information & orientation) and non-governmental organizations (NGOs). Smoking cessation programmes should also be put in place by both government and NGOs and promoted to encourage smokers to give up the habit. Cessation programmes can be run by psychologists, health care providers (Physicians, Dentists etc), and lay persons trained for this purpose. Most people are introduced to smoking by other smokers. Therefore the less we have of active smokers, the less likely that people will be encouraged by them to initiate smoking. The government at all levels; National, State and Local, should be mandated to provide cessation clinics in their jurisdictions as against the proposed National level cessation programmes being proposed by the NTCB (2009).

To address the intrapersonal influences for smoking, it is suggested that awareness be raised among children and youth beginning from the early school years and into undergraduate studies. Well structured tobacco education should be incorporated into the school curriculum so as to equip children and youth with the right information on the negative effects of smoking on their health and well being. In addition to these anti-tobacco lessons, it is important that children and youth be taught life skills such as decision making, coping and refusal skills at school. The teaching of life skills which is not addressed in the proposed NTCB will enable the youth to withstand the pressure from peers to smoke as well as cope with various life challenges which have been found to push some youth to smoke. This will also be useful for the youth to handle many of the interpersonal risk influences.

There is also a very urgent need for an increased awareness especially among the youth on the dangers of smoking marijuana and to counter the myth that it is safer than tobacco. Although, the National Drug Law Enforcement Agency (NDLEA) has been proposed to be part of the Tobacco Control Committee which will see to the implementation of the NTCB when passed into law, their duties are not explicitly outlined in the bill. It is recommended that this agency tackles the issue of the use of tobacco as a gateway drug as well as the new trend of youth picking up the smoking of marijuana as a safer alternative to cigarette. This agency can partner with the Ministries of Education, Information and orientation and Youth and women affairs in their effort to curb this new trend.

Reducing smoking prevalence: the role of various stake holders

The proposed strategies towards curbing the use of tobacco can not be carried out by the government alone. As stated earlier it should be multi-level, multi-sectoral and multi-dimensional. Suggested roles to be played by some key stakeholders are discussed further.

Psychologists and health promotion practitioners

Psychologists in diverse fields have been playing unique roles in researching on current trends in smoking prevalence and how this can be curbed through awareness and encouraging smoking cessation among active smokers. Nevertheless, the war against smoking is far from being over especially in developing countries as every day, more and more people especially adolescents are getting hooked to cigarette smoking. It is becoming more and more glaring that traditional ways of tackling the prevalence of smoking need to be renewed with novel strategies. While the policy approach to this has yielded desired results in many developed countries, the same cannot be said of the developing world. The reason why this is so could be attributed to the activities of tobacco companies and compromising governments within this region of the world. But it is interesting to note that, despite the fact that policies have been discovered to lower tobacco consumption in many countries, the onus still rests on the individual to make the decision whether to smoke or not.

Psychologists and health promotion practitioners for example should be involved in raising awareness and consciousness in the population on the multifaceted effects of smoking on the smoker and the population at large. There is serious need to address smoking by older adults who through their smoking behaviour make it easier for children and youth to make a choice to become smokers. Psychologists and health promotion practitioners should also be involved in

running cessation clinics to assist those who need help to quit the habit. They should also be consulted by policy makers in designing policies that are workable and context specific.

School psychologist should be specially trained to design programmes to strengthen adolescents' life and social skills which will enable them to resist the temptation to smoke from the pressure from peers and that of the society expressed in media images and social norms. They should also be committed to raising awareness on the health effects of smoking from pre-school to secondary schools as most smokers have been found to start the habit around this period of their life. This can also be extended to universities. Self-efficacy to refuse smoking and coping skills which will enable individuals to manage depressing circumstances are very essential for young adults as many have been found to resort to smoking to cope with problems.

Occupational or industrial psychologists should be trained on administering smoking cessation therapy for smokers at the work place who need to be assisted to quit the habit. This is because, most people who smoke do not initiate smoking when they are gainfully employed. Instead, they continue with the habit which they must have picked up while they were younger. With more financial freedom through employment, price increase measures will not be a very effective strategy to discourage workers from smoking. Also, having been smoking for some time, more workers who smoke will tend to have addiction issues with the cigarette. They therefore would need professional help to stop smoking. Workers quitting smoking will be beneficial to the smokers themselves as well as to their employers as this would save the organization valuable man hours that workers would have spent smoking during official hours and the loss of man hours through tobacco related illnesses. Also, money that would have been spent on the

treatment of tobacco related diseases would be saved and diverted into other productive sectors in the organization.

Governments at various levels

Governments at the state and grassroot levels should prioritize tobacco control policy formulation and implementation. The enforcement of such policies to ensure maximum compliance (when they have been put in place) should also be the responsibility of the various levels of government. Security personnel or an enforcing agency must be well informed on their role to ensure total compliance with tobacco policies. The various marketing strategies employed by tobacco multinationals which are specifically targeted at women, children and youth as replacement smokers must be stopped completely just as it is being done in many developed countries through the formulation and implementation of appropriate legislations.

It is expected that government should bear in mind the various tobacco control strategies that have been found to be successful within and outside Africa like tax increase, pictorial warning, restriction of sales to and by minors, curbing of illegal trade on tobacco products, ban on direct and indirect advertising and sponsorships by tobacco companies etc. The mass media should be used by government to create greater awareness among various stakeholders which should include educational institutions, community and parental responsibilities with regards to discouraging children and youth from smoking not only cigarettes but marijuana as well as alcohol use. Implimentation is not expected to be easy in this regard but will receive a boost if communities play a role in monitoring implementation.

The traditional political structure

The traditional political structure should also be co-opted in tobacco policy formulation and implementation to ensure that laws are adhered to within communities. In Nigeria for example, the traditional rulers are officially recognized as part of the political structure. Although no specific political responsibility rests on them in terms of policy formulation in the country, they should be seen as key stakeholders in the issue of tobacco control. This is because, in communities where tobacco is grown or used in cultural practices, there is a need to renegotiate its use so that there will not be any conflict of interest should policy implementation go against cultural practices as will be the case. In Nigeria, traditional institutions are the closest form of government to the people. Traditional rulers can also be involved in negotiating with tobacco farmers on taking up other viable and less destructive means of livelihood in the community. The traditional institution can also be enabled to create awareness within their communities and make specific traditional laws which will be in line with national laws on tobacco control.

Everyone would want health compromising cultural practices involving tobacco use to change due to increased knowledge on the harmful effect of tobacco use but unless someone consciously takes the lead to enlighten those concerned; community leaders, the youth and children, parents and indeed all stakeholders about the need to change these cultures, there might never be a change. Cultures are never changed based on individual knowledge or feelings especially in the African context where cultural activities are carried out for a collective purpose. However, cultures can more easily be changed when everyone is made to see a need for this change. It is important to note that tobacco control policies must put into cognizance the fact that the cigarette serves cultural purposes in many parts of Nigeria. This will invariably impact on the success of

any attempt at tobacco control in such societies. Awareness campaigns must be carried out and discussions made with community heads and traditional rulers to encourage the use of other items that are not destructive to the youth and the general population. Outcomes of such deliberations must be incorporated into current policies for success to be achieved within cultural communities.

The traditional political structure can thus help in negotiating cultural practices using tobacco products; play a role in sensitizing parents on the harm caused by the social practice of exposing young children to tobacco products and assist in raising awareness among community members about the negative health effect of tobacco.

Limitations of the study

This research encountered some limiting factors. First is the fact that the qualitative phase comprised of purposively selected participants of a small size (27 respondents). Though this small sample size is characteristic of qualitative research (Kelly, 2006), it limits the generalisability of the findings thereof. However, the young smokers and community leaders came from each of the GPZ in southern Nigeria. Other limitations of the study are discussed.

Challenges encountered in the fieldwork

The researcher encountered a number of challenges during the field work. Firstly, the field work was carried out at a politically busy period in Nigeria. This was during the 2011 general elections in Nigeria. This made it difficult to track down politicians who should have participated in the study. This limitation was however handled by including more political analysts and people

working with the youth in NGOs as well as environmental activists working towards a tobacco-free Nigeria. Interviewing policy makers would have provided important perspectives about the proposed National Tobacco Control Bill as well as other efforts by government aimed at tobacco control in Nigeria.

Secondly, getting young smokers to participate in this study was found to be quite challenging. It was discovered that many young people who smoke do not disclose this to others especially their family members. Young persons approached were suspicious of the research aim even after the consent form was given to them through gate keepers and the entire research process explained. Some called off the interview at the last minute for this same reason. Based on reports from the gate keepers, the researcher believes that other than the fact that young smokers were not comfortable with talking with a stranger about their habit which society perceives as negative, they were also very sceptical about the recording of the interview sessions. The fact that qualitative research of this sort is not very commonly used in doing research in this environment may also have contributed to this.

Further, it was found that many young smokers are also smoking marijuana and many of them felt the researcher could be a secret agent working for the National Drug Law enforcement Agency (NDLEA) – the body in charge of enforcing the law against illicit drug use in Nigeria. These young smokers felt that the audio recordings of the interviews would be used as evidence against them at a later stage despite ensuring confidentiality and anonymity of their personal details. Some participants voiced this fear and threatened to come after the researcher should they get into trouble with the law as a result of the interview. However, the consent form which

had the phone numbers and addresses of the researcher, her supervisors and the UKZN research office was very helpful in establishing a good level of trust for the interviews to take place.

Thirdly, the researcher initially tried using snowball sampling technique to get young smokers to participate in this study but this was unsuccessful as none of the young smokers initially interviewed could convince their friends who smoke to participate in this interview for the same reasons outlined in the earlier paragraph. The researcher then had to go to popular drinking spots at a campus in one educational institution where students gather to eat, drink and smoke and to a popular road junction where unskilled workers meet to eat, drink and smoke to get more participants for this study. Young smokers felt safer when the interview was conducted in these public places though the researcher tried to do this out of the hearing of other persons at these popular spots. In spite of this, there were a lot of interactions with noise from people talking at the top of their voices and the noise from moving vehicles. There was also a heavy down pour of rain during some of the interviews and this also reduced the quality of recording done at the bars and drinking joints. With the use of earphones, the researcher was able to overcome to a very great extent, the effect of the very noisy background on the quality of some of the recordings.

Lastly, the researcher could not get any female smoker to participate in the qualitative phase of the study. It was found that it is still not fashionable for females to smoke in Nigeria and females who smoke, do so in hiding. Attempts at getting some young smoker to help in getting female smokers to participate in the qualitative phase did not yield any fruit. Two of the interview participants mentioned that females who smoke are tagged as unfit for marriage and this takes the stigmatisation of female smokers further than it is for male smokers.

Limitations of using the GYTS questionnaire

This study made use of a modified version of the Global Youth Tobacco Survey (GYTS) questionnaire to collect data for the second (survey) phase. As mentioned in the method chapter, the GYTS questionnaire is usually used to investigate country tobacco profile among the youth. The GYTS questionnaire has been extensively discussed in the method chapter. However, its use limited the testing of major findings of the qualitative phase of this study. While it was not initially intended to test every finding in this phase, further analysis of the qualitative data showed that many of the risk influences which emerged from young smokers' narration of their experiences could not be tested using the modified GYTS questionnaire. Some of these include risk influences for smoking like unemployment, attributes of smokers, some of the motivators for smoking etc.

The researcher however tried to make the best use of this instrument in further investigating as many qualitative findings as possible in the quantitative phase.

Contribution to new knowledge

This study highlights the multiplicity of influences which contribute in various measures to the initiation and perpetuation of the smoking of cigarettes by the youth. The findings in relation to the influence of cultural practices are particularly novel for the African setting. The cultural explanation for the skewed distribution of smokers by gender is also worthy of note. Though this skewness (more males than females being smokers) is a global phenomenon especially in developing countries, some of the cultural reasons found in this study are particularly new. This study also proposed a model for the understanding of risk influences for smoking with a view to

inform appropriate interventions. The use of a mixed- methods research design particularly provides a new approach to conducting tobacco research.

Recommendations for further research

This study was carried out in southern Nigeria. It is recommended that a similar study be repeated in the northern region of Nigeria where previous research have specifically found smoking to run along ethnic lines (Desalu et al., 2008). It will also make good research to do a comparative study of this nature in other African countries where the tobacco plays significant cultural roles.

Some of the risk influences for smoking like unemployment, attributes of smokers, some of the motivators for smoking which could not be explored in the survey would be good research areas for future studies.

Perhaps it might be important to carry out a study which will focus solely on how cultural factors influence tobacco use in Nigeria and other similar cultures. In carrying out such research, there will be the need to create a more comprehensive culture sensitive questionnaire which will tap into more aspects of cultural practices where the tobacco or its products are used.

This doctoral study can also be replicated using an ethnographic methodological approach so as to capture in another dimension, how the use of some tobacco products has come to be specifically associated with some traditional cultural practices.

A longitudinal study aimed at finding out how socio-cultural factors serve to influence smoking might also be a very useful approach to tobacco research.

Future research could also explore how interactions between policy makers and community leaders could help to foster better formulation and more effective implementation of tobacco control policies.

Community interventions in curbing smoking prevalence is an important aspect of tobacco research that is waiting to be explored in the global fight against tobacco use especially in collectivist cultures as they obtain within Africa and some other regions of the world. It will be worthwhile to test the model (PRIS) proposed in this work in future studies.

In all, the fight for a tobacco free world is still on and research and successful applications of findings must be used to serve as the driving force to accomplish an appreciable level of success in this regard.

REFERENCES

Abdulmalik, J., Omigbodun, O., Beida, O., & Adedokun, B. (2009). Psychoactive substance use among children in informal religious schools (Almajiris) in northern Nigeria. *Mental Health, Religion & Culture*, *12*(6), 527-542. doi:10.1080/13674670902832813

Adelekan, M., Abiodun, O., Obayan, A., & Oni, G. (1992). Prevalence and pattern of substance use among undergraduates in a Nigerian university. *Drug and Alcohol Dependence*, *29*(3), 255-261. Doi:10.1016/0376-8716(92)90100-Q

Adewumi, F (2009). Unending battle against tobacco smoking in Nigeria (December 01, 2009). Retrieved from http://www.nigeriavillagesquare.com/articles

Adewuya, A. O., Ola, B. A., Aloba, O. O., Mapayi, B.M., & Oginni, O. O. (2006). Depression amongst Nigerian university students: prevalence and sociodemographic correlates. *Social Psychiatry and Psychiatric Epidemiology, 41*, 674-678.

Aghaji, M. N. Ekwueme, C., & Omotowo, B. (2007). Tobacco use and tobacco smoke exposure among secondary school students in Nigeria retrieved from http://www.idrc.ca/en/ev-157407-201-1-DO_TOPIC.html

Airhihenbuwa, C., & Obregon, R. (2000). A critical assessment of theories/models used in health communication for HIV/AIDS. *Journal of Health Communication, 5*(Supplement), 5-15.

Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl and J. Beckman, (Eds). *Action Control: From Cognition to Behaviour*. Berlin: Heidelberg; New York: Springer-Verlag.

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organisational Behaviour and Human Decision Processes, 50*, 179-211.

Ajzen, I. & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behaviour. New Jersey: Prentice-Hall, Inc.

Akinremi, A., & Akioye, S. (2003). Nigeria: experience it, die from it. *Tobacco Control, 12 (3),* 245-250. doi:10.111136/tc.12.3.250.

Akinroye, K. K. (2009). Promoting the effective implementation of the Tobacco Control Laws and policies in Nigeria. Paper presented at the 14th World Conference on Tobacco or Health, Mumbai, India on March 7th, 2009. Retrieved from http://www.docstoc.com/docs/94078963/Nigeria-ATSA-International-Development-Research-Centre-IDRC

Alderete, E., Erickson, P. I., Kaplan, C. P., & Pérez-Stable, E. J. (2010). Ceremonial tobacco use in the Andes: implications for smoking prevention among indigenous youth. *Anthropology and Medicine*, 17 (1), 27-39.

Ali, S. M., Chaix, B., Merlo, J., Rosvall, M., Wamala, S., & Lindstrom, M. (2009). Gender differences in daily smoking prevalence in different age strata: a population-based study in southern Sweden. *Scandinavian Journal of Public Health* 37: 146-152. doi: 10.1177/1403494808100274

Alli, Y. S. (n.d.). Tobacco usage and Nigerian laws. Retrieved from www.yusufali.net/.../Tobacco_Usage_And_Nigerian_Laws

Almeida, O. P., Garrido, G. J., Alfonso, H., Hulse, G., Lautenschlager, N. T., Hankey, G. J., & Flicker, L. (2011). 24-Month effect of smoking cessation on cognitive function and brain structure in later life. *Neuroimage,* 55(4), 1480-1489.

Ameringer, K. J., & Leventhal, A M. (2010). Applying the tripartite model of anxiety and depression to cigarette smoking: an integrative review. *Nicotine & Tobacco Research, 12(12),* 1183–1194. doi: 10.1093/ntr/ntq174

Atawodi, S. E., Preussmann, R., & Spiegelhalder, B. (1995). Tobacco-specific nitrosamines in some Nigerian cigarettes. *Cancer Letters, 97*(1), 1-6.

Awotedu, A. A., Higenbottam, T. W., & Onadeko, B.O. (1983). Tar, nicotine and carbon dioxide yields of some Nigerian cigarettes. *Journal of Epidemiology and Community Health, 37*, 218–220.

Awotedu, A. A., Jordaan, E. R., Ndukwana, O. Z. B., Fipaza, N. O. Awotedu, K. O., Martinez, K. O., Foyaca-Sibat, H., & Mashiyi, M. K. (2006). The smoking habits, attitudes towards smoking and knowledge regarding anti-smoking legislation of students in institutions of higher learning in the Eastern Cape Province of South Africa. *South Africa Family Practice,* 48 (9), 14.

Ayankogbe, O. O., Inem, O. A., Bamgbala, O. A., & Robert, O. A. (2003). Attitudes and determinant of cigarette smoking among rural dwellers South West Nigeria. *Nigeria Medical Practitioner, 44*, 70-74.

Ayittey, G. B. N. (2006). *Indigenous African institutions* (2nd Ed.). New York: Transnational Publishers.

Ayo-Yusuf, L. (February 15, 2011). Tobacco control in sub-Saharan Africa. Retrieved from http://www.phasa.org.za/articles/tobacco-control-in-sub-saharan-africa-moving-from-knowledge-discovery-research-to-policy-delivery-practice.html march 14th 2012

Backinger, C. L., McDonald, P., Ossip-Klein, D. J., Colby, S. M., Maule, C. O., Fagan, P.,… Colwell, B. (2003). Improving the future of youth smoking cessation. *American Journal of Health Behavior,* 27 (Suppl 2), S170-S184.

Bancroft, A., Wiltshire, S., Parry, O., & Amos, A. (2003). "It's like an addiction first thing... afterwards it's like a habit": Daily smoking behaviour among people living in areas of deprivation. Social Science and Medicine, 56(6), 1261-1267.

Bandura, A. (1977). Self efficacy: Towards a unifying theory of behaviour change, Psychology Review, 84, pp 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* New Jersey: Prentice – Hall.

Bardoel, J., & van Cuilenburg, J. (2010). Strategic media management. In Fourie, P. J. (Ed.). *Media Studies: Media History, Media and Society, 2*, 155-192.

Bayer, R. (2008). Stigma and the ethics of public health: Not can we but should we. *Social Science and Medicine,* 67, 463-472. doi: 10.1016/j.socscimed.2008.03.017

Bayer, R., & Colgrove, J. (2002). Public health vs. civil liberties. *Science, 297,* 1811.

Bhana, M. D., McKay, M. M., Mellins, Petersen, I. & Bell, C. C. (2010). Family-based HIV prevention and intervention services for youth living in poverty-affected contexts: the CHAMP model of collaborative, evidence-informed programme development. *Journal of the International AIDS Society,* 13(Supplement 2):S8. Retrieved from http://www.jiasociety.org/content/13/S2/S8

Bialous S. A., Kaufman, N., & Sarna, L. (2003).Tobacco control policies. *Seminars in Oncology Nursing, 19*(4), 291-300.

Biederman, J., Monuteaux, M. C., Mick, E., Wilens, T. E., Fontanella, J. A., Poetzi, K. M., Kirk, T., Masse, J., & Faraone, S. V. (2006). Is cigarette smoking a gateway to alcohol and illicit drug use disorders? A study of youths with and without Attention Deficit Hyperactivity Disorder. *Biological Psychiatry 59 (3),* 258-264.

Bisol, L.W., Soldado, F., Albuquerque, C., Lorenzi, T.M., & Lara, D.R. (2010). Emotional and affective temperaments and cigarette smoking in a large sample. *Journal of Affective Disorders,* 127, 89–95.

Blecher, E. H., & van Walbeek, C. P. (2009). Cigarette affordability trends: an update and some methodological comments. *Tobacco Control,* 18, pp. 167-175. doi: 10.1136/tc.2008.026682

Bonnie, R. J., Stratton, K., & Wallace, R. B. (2007). Ending the Tobacco Problem: A Blueprint for the nation. Retrieved from http://www.nap.edu/catalog/11795.html

Bronfenbrenner, U. (1986). Recent advances in research on the ecology of human development. In R. K. Silbereisen, K. Eyferth, & G. Rudinger (Eds.), *Development as action in context: Problem behavior and normal youth development* (pp. 286–309). New York, Springer-Verlag.

Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 619–648). Washington, DC, American Psychological Association.

Bronfenbrenner U., & Morris, P. A. (1998). The ecology of developmental processes. In R. M. Lerner (Ed.), *Handbook of Child Psychology* (5th ed., Vol. 1, pp. 993–1028). New York, Wiley.

Bronfenbrenner's ecological theory (n.d.). Rretrieved from

http://faculty.weber.edu/tlday/human.development/ecological.htm

Brayne, C. (2000). Smoking and the brain. *British Medical Journal, 320*, 1087–1088.

Breinbauer, C., & Maddaleno, M. (2005). *Youth: Choices and change: Promoting healthy behaviours in adolescents.* Washington, DC: Pan American Health Organization.

British American Tobacco Nigeria (2012). Cigarette factories, British American Tobacco's Nigeria. Retrieved from http://www.tobaccoreviews.net/cigarette-factories-british-american-tobaccos-nigeria/

Brook, J.S., Morojele, N.K., Brook, D.W., Zhang, C., & Whiteman, M. (2006). Personal, interpersonal, and cultural predictors of stages of cigarette smoking among adolescents in Johannesburg, South Africa. *Tobacco Control, 15* (Suppl. 1), i48-i53

Brook, J., Pahl, K., & Morojele, N. K. (2009). The relationship between receptivity to media models of smoking and nicotine dependence among South African adolescents. *Addictive Research and Theory,* Vol. 17, No. 5, pp. 493-503. doi: 10.1080/16066350802245635

Brook, D. W., Rubenstone, E., Zhang, C., Morojele, N. K., & Brook, J. S. (2011).Environmental stressors, low well-being, smoking and alcohol use among South African adolescents. *Social Science & Medicine, 72,* 1447-1453. Doi: 10.1016/j.socscimed.2011.02.041

Buhari, T. (2010). BAT continues illegal marketing to minors. *ERAction* May-August, 2010 (issue 11). Environments Rights Action/Friends of the Earth, Nigeria.

Burke, N. J., Joseph, G., Pasick, R. J., & Barker, J. C. (2009). Theorizing social context: Rethinking behavioral theory. *Health Education & Behaviour, 36* (5 Suppl), 55S−70S. doi:10.1177/1090198109335338

Bush, J., White, M., Kai, J., Rankin, J., & Bhopal, R. (2003). Understanding influences on smoking in Bangladeshi and Pakistani adults: community based, qualitative study. *British Medical Journal, 326* (7396), 962–967. doi: 10.1136/bmj.326.7396.962

Caffray, M., & Schneider, S. L. (2000). Why do they do it? Affective motivators in adolescents' decisions to participate in risk behaviours. *Cognition and Emotion, 41*(4), 543-576.

Campaign for Tobacco free kids (2009). Smoking's immediate effects on the body. Retrieved from www.tobaccofreekids.org/research/factsheets/pdf/0264.pdf

Centers for Disease Control and Prevention (2012). Youth and tobacco use – Youth and young adult data fact sheets. Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm

Chaiton, M., Cohen, J., O'Loughlin, J., & Rehm, J. (2010). Use of cigarettes to improve affects and depressive symptoms in a longitudinal study of adolescents. *Addictive behaviors,* retrieved from *PsycINFO database record*

Chaloupka, F. J., Jha, P., Corrao, M. A., da Costa e Silva, V. L., Ross, H., Ciecierski, C. C., & Yach, D. (2003). Global efforts for reducing the burden of smoking. *Dis manage health outcome;* 11 (10): 647-661. doi: 1173-8790/03/0010-0647

Charlton, A., Minagawa, K. E., & While, D. (1999). Saying "no" to cigarettes: a reappraisal of adolescent refusal skills. *Journal of Adolescence, 22*(5), 695–707.

Chen K. T., Chen C. J., Fagot-Campagna A., Narayan K. M. V. (2001). Tobacco, betel quid, alcohol, and illicit drug use among 13−35 year-olds in I-Lan, rural Taiwan: prevalence and risk factors. *American Journal of Public Health* 91: 1130–1134.

Chen, X., Cruz, T. B., Schuster, D. V., Unger, J. B., & Johnson, C. A. (2002). Receptivity to protobacco media and its impact on cigarette smoking among ethnic minority youth in California. *Journal of Health Communication,* 7, 95-111. doi:10.1080.10810730290087987

Chiejina, A. (18 June, 2010). Tobacco marketing and challenges of public-smoking bill - latest news, breaking news, business, finance. Retrieved from http://www.businessdayonline.com/NG/index.php?option=com_content&view=article&id=1193

Childs, E., & de Wit, H. (2010). Effects of acute psychosocial stress on cigarette craving and smoking. *Nicotine and Tobacco Research, 12 (4),* 449-453. doi: 10.1093/ntr/ntp214

Clark, E., McCann, T. V., Rowe, K., & Lazenbatt, A. (2004). Cognitive dissonance and undergraduate nursing students' knowledge of, and attitudes about, smoking. *Journal of Advanced Nursing,* 46 (6), 586-594. Retrieved from www.interscience.wiley.com/Journal/118779362

Colebatch, H. K. (2002). *Policy* (2nd Edition). New York: Open University Press.

Collins, B. N., Ibrahim, J. K., Hovell, M., Tolley, N. M., Nair, U. S., Jaffe, K., ...Audrain-McGovern, J. (2010). Residential smoking restrictions are not associated with reduced child SHS exposure in a baseline sample of low-income, urban African Americans. *Health, 2,* 1264-1271. doi: 10.4236/health.2010.211188

Conrad, K. M., Flay, B. R., & Hill, D. (1992). Why children start smoking cigarettes: predictors of onset. *British Journal of Addiction, 87*(12), 1711-1724.

Coombs, J., Bond, L., Van, V., & Daube, M. (2011). "Below the line": the tobacco Industry and Youthmoking. *Australian Medical Journal, 4*(12), 655-673. doi.org/10.4066/AMJ.2011.1018

Corrao, M. A., Guindon, G. E. Cokkinides, V. & Sharma, N. (2000). Building evidence base for global tobacco control. *Bulletin of the World Health Organisation, 78* (7), 884-889.

Cotton, A. (2011). Misconceptions in smoking cessation. *Practice Nurse, 41(3), 13-18.*

Creswell, J. W. (2005). *Educational research: planning, conducting, and evaluating quantitative and qualitative approaches to research*, 2nd ed. New Jersey: Merill/Pearson Education.

da Costa e Silva, V. L. (2005). Health consequences of the tobacco epidemic in West African French-speaking countries and current tobacco control. *Promotion and Education,* (Supplement 4), 7–12.

Davies, R. M., Wakefield, M., Amos, A., & Gupta, P. C. (2007). The Hitchhiker's guide to tobacco control: a global assessment of harms, remedies, and controversies. *Annual Review of Public Health,* 28: 171-194. PMID: 17367285

Delamothe, T. (2012). Deaths from smoking: the avoidable holocaust. *British Medical Journal, 344* (7848), d694-. doi: 10.1136/bmj.e2029

Desalu O. O., Iseh, K. R., Olokoba, A. B., Salawu, F. K., Danburam, A. (2010). Smokeless tobacco use in adult Nigerian population. *Nigerian Journal of Clinical Practice, 13*(4), 382–387.

Desalu, O.O., Olokoba, A.B., Danburam, A., Salawu, F. K., & Issa, B. M. (2008). Epidemiology of tobacco smoking among adults population in north-east Nigeria. *The Internet Journal of Epidemiology, 6*(1). Retrieved from http://www.ispub.com/journal/the-internet-journal-of-epidemiology/volume-6-number-1/epidemiology-of-tobacco-smoking-among-adults-population-in-north-east-nigeria.html

Ding, D., & Melbourne, H. (2012). Cigarettes, social reinforcement, and culture: a commentary on "tobacco as a social currency: cigarette gifting and sharing in China". *Nicotine & Tobacco Research, 14 (3),* 255-257.

Dinn, W. M., Aycicegi, A., & Harris, C. L. (2004). Cigarette smoking in a student sample: Neurocognitive and clinical correlates. *Addictive Behaviours, 29,* 107-126. doi: 10.1016/j.addbeh.2003.07.001

Distefan, J. M., Pierce, J. P., & Gilpin, M. S. (2004). Do favourite movie stars influence adolescent smoking initiation? *American Journal of Public Health, 94 (7),* 1239-1244.

Doherty V. F., Olaniran, O. O., & Kanife, U. C. (2010). Antimicrobial activities of Aframomum melegueta (Alligator pepper). *International Journal of Biology,* 2 (2), 126-131. Retrieved from www.ccsenet.org/ijb.

Drope, J. (2011). Nigeria tobacco situation analysis. In Drope J. (Ed). *Tobacco control in Africa: people, politics and policies. London:* Anthem Press pp. 201-218.

Durrheim, K., & Painter, D. (2006). Collecting quantitative data: sampling and measuring. In Terre Blanche, M., Durrheim, K., & Painter, D. (Eds). *Research in practice-applied methods for the social sciences.* South Africa, UCT Press.

Edohasim, E. (2010).*Cigarette smoking: Easy path to ill-health, death*. Retrieved from http://nigerianationaltobaccocontrolbill.blogspot.com

Ehikhamenor, E. E. (2005). *Tobacco Use as Dental Therapeutics in Edo State, Nigeria.* The Preliminary Program for First African and Middle-East IADR Federation Conference (September 27-29, 2005). Retrieved from http://iadr.confex.com/iadr/afrmde05/preliminaryprogram/abstract_66628.htm

Ekanem I. A. (2008). Global youth tobacco survey (GYTS) Nigeria report. Retrieved from http://www.afro.who.int/en/clusters-a-programmes/hpr/health-risk-factors/tobacco/tobacco-country-profiles.html

El-Amin Sel, T., Nwaru, B. I., Ginawi, I., Pisani, P., & Hakama, M. (2011). The role of parents, friends and teachers in adolescents' cigarette smoking and tombak dipping in Sudan. *Tobacco Control, 20*(2), 94-99.

Elder, J. P., Salis, J. F., Woodruff, S. I., & Wildey, M. B. (1993). Tobacco-refusal skills and tobacco use among high-risk adolescents. *Journal of Behavioral Medicine,* 16(6), 629-642.

Emory, K., Saquib, N., Gilpin, E. A., & Pierce, J.P. (2010). *The association between home smoking restrictions and youth smoking behaviour: a review. Tobacco Control,19, 495–506.* doi: 10.1136/tc.2010.035998

Epstein, J. A., Botvin, G. J., & Spoth, R. (2003). Predicting smoking among rural adolescents: Social and cognitive processes. *Nicotine Tobacco Research, 5*, 485–91.

Erbaydar, T., Lawrence, S., Dagli, E., Hayran, O., & Collishaw, N. E. (2005). Influence of social environment in smoking among adolescents in Turkey. *European Journal of Public Health, 15(* 4), 404–410.

Eriksen, M., Mackay, J., & Ross, H. (2012). The Tobacco Atlas, 4th edn. American Cancer Society, World Lung Foundation, 2012. Retreived from www.TobaccoAtlas.org

Eriksen, M. P., LeMaistre, C. A., & Newell, G. R. (1988). Health hazards of passive smoking. In L. Breslow, J. E. Fielding, & L. B. Lave (Eds.), *Annual Review of Public Health, 9,* 47-70. Palo Alto: Annual Reviews, Inc.

Esson, K. M., & Leeder, S. R. (2004). *The millennium development goals and tobacco control: an opportunity for global partnership*. Geneva: World Health Organisation.

Evans, A. H., Lawrence, A. D., Potts, J., MacGregor, L., Katzenschlager, R., Shaw, K., ...Lees, A. J. (2006). Relationship between impulsive sensation seeking traits, smoking, alcohol and caffeine intake, and Parkinson's disease. *Journal of Neurology Neurosurgery and Psychiatry, 77*, 317–321. doi: 10.1136/jnnp.2005.065417

Fakoya, O. (2008). Nigeria: The Health, Economic and Social Menace of Smoking - Time for Concerted Actions. Retrieved from http://www.nigeriavillagesquare.com/articles/guest-articles/ html

Farrelly, M. C., Pechacek, T. F., Thomas, K. Y., & Nelson, D. (2008). The impact of tobacco control programs on adult smoking. *American Journal of Public Health, 98* (2), 304 – 309.

Faseru, B., Barengo, N. C., Sandström, H. P. & Omokhodion, F. (2006). Smoking behavior and perception of risk among medical students in Ibadan, Nigeria. *Prevention and Control* 2 (2), 103-109. Retrieved from http://www.sciencedirect.com/science

Fawibe, A. E., & Shittu, A. O. (2011). Prevalence and characteristics of cigarette smokers among undergraduates of the University of Ilorin, Nigeria. *Nigerian Journal of Clinical Practice*, 14(2), 201-205.

Feinhandler, S. J. (1986). The social role of smoking. In R. D. Tollison (Ed.), *Smoking and society: towards a more balanced assessment* (pp. 167-187). Lexington: D.C. Health and Company.

Fichtenberg, C. M., & Glantz, S. A. (2002). Effect of smoke-free workplaces on smoking behaviour: systematic review. *British Medical Journal*, 325, 188.

Fishbein, M. & Ajzen, I. (1975). *Beliefs, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Flay, B. R. (1999). Understanding environmental, situational and interpersonal risk and protective factors for youth tobacco use: the theory of triadic influence. *Nicotine & Tobacco Research 1,* S 111-S 114.

Flay, B. R., Petraitis, J., & Hu, F. (1995). The theory of triadic influence: Preliminary evidence related to alcohol and tobacco use. In: Fertig JB, Allen JP, eds. *NIAAA Research Monograph-Alcohol and Tobacco: From Basic Science to Clinical Practice* Bethesda, MD: US Government Printing Office, pp. 37-57.

Flay, B. R., Petraitis, J., & Hu, F. B. (1999). Psychosocial risk and protective factors for adolescent tobacco use. *Nicotine and Tobacco Research*, *1*, S59 – S65.

Flay, B. R., Petriatis, J., & Miller, T. Q. (1995). Reviewing theories of adolescent substance abuse: Organizing pieces of the puzzle. *Psychological Bulletin* 117 (1):67-86.

Flay, B. R., Snyder, F., & Petraitis, J. (2009). The Theory of Triadic Influence. In R. J. DiClemente, M. C. Kegler & R. A. Crosby (Eds.), *Emerging Theories in Health Promotion Practice and Research* (Second ed., pp. 451-510). New York: Jossey-Bass.

Foldes, S., & Schillo, B. (2003). Community, culture and tobacco in Minnesota's minority communities: The DREGAN project. Blue Cross Blue Shield of Minnesota, center for tobacco reduction and   health improvement. Retrieved from http://gateway.nlm.nih.gov/MeetingAbsrtacts/ma?f=102275152.html

Forster, J. L., Widome, R., & Bernat, D. H. (2007). Policy interventions and surveillance as strategies to prevent tobacco use in adolescents and young adults. *American Journal of Preventive Medicine, 33(6 Suppl),* S335–S339.

Foster, S. E., Jones, D. J., Olson, A. L., Forehand, R., Gaffney, C. A., Zens, M. S., & Bau, J. J. (2007). Family socialization of Adolescent's self reported cigarette use: the role of parents' history of regular smoking and parenting style. *Journal of Pediatric Psychology, 32 (4),* 481-493.

Francis, K., Katsani, G., Sotiropoulou, X., Roussos, A., & Roussos, C. (2007). Cigarette Smoking Among Greek Adolescents: Behavior, Attitudes, Risk, and Preventive Factors. *Substance Use & Misuse*, 42(8), 1323-1336. doi: 10.1080/10826080701212410

Frieden, T. R., & Blakeman, D. E. (2005). The dirty dozen: 12 myths that undermine tobacco control. *American Journal of Public Health*, 95 (9), 1500-1504.

Friedman, L. C. (2009). Tobacco industry use of corporate social responsibility tactics as a sword and a shield on secondhand smoke issues. *Developing oversight approaches to nanobiotechnology: the lessons of history. Winter edition.*

Galanti, M. R., Rosendahl, I., Post, A., & Gilljam, H. (2001). Early gender differences in adolescent tobacco use—the experience of a Swedish cohort. *Scandinavian Journal of Public Health,* 29, 314–317.

Gartner, C., & McNeill, A. *(2010).* Options for global tobacco control beyond the FCTC. *Addiction,* 105(1),1–3.

Gilpin, E. A., White, M. M., Messer K., & Pierce, J. P. (2007). Receptivity to tobacco advertising and promotions among young adolescents as a predictor of established smoking in young adulthood. *American Journal of Public Health, 97* (8), 1489-1495. dio: 10.2105/AJPH. 2005.070359

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report, 8*, 597–607.

Graham, H. (1987). Women's smoking and family health. *Social Science and family health,* Heidelberg; New York: Springer-Verlag, 25, 47-56.

Griesbach, V., Amos, V., & Currie, C. (2003). Adolescent smoking and family structure in Europe. *Social Science and Medicine,* 56**,** 41–52.

Guilamo-Ramos, V., Dittus, P., Holloway, I., Bouris, A., & Crossett, L. (2011). An Integrated Framework for the Analysis of Adolescent Cigarette Smoking in Middle School Latino Youth. *Youth and Society,* doi: 10.1177/0044118X09358312

Gurpegui, M., Jurado, D., Luna, J. D., Fernández-Molina, C., Moreno-Abril, O., & Gálvez, R. (2006). Personality traits associated with caffeine intake and smoking. *Progress in Neuro-Psychopharmacology and Biological Psychiatry, 31(5), 997-1005.* doi: 10.1016/j.pnpbp.2007.02.006

Hammond, E. C., & Horn, D. (1984). Smoking and death rates--report on forty-four months of follow-up of 187,783 men. *Journal of American Medical Association,* 251(21), 2840-2853. doi:10.1001/jama.1984.03340450056029

Hampson, S. E., Andrews, J. A., & Barckley, M. (2007). Predictors of the development of elementary-school children's intention to smoke cigarettes: Hostility, prototypes, and subjective norms. *Nicotine & Tobacco Research 9 (7)*, 751-760. doi: 10.1080/14622200701397908

Harbour, C. (2011). Smoking and normative influence among Egyptian youth: a review of the literature. *Eastern Mediterranean Health Journal, 17*(4), 349-355.

Harden, K.P., & Tucker-Drob, E.M. (2011). Individual differences in the development of sensation seeking and impulsivity during adolescence: further evidence for a dual systems model*. Developmental Psychology, 47*, 739–746.

Haviland, M. G. (1990). Yates's correction for continuity and the analysis of 2× 2 contingency tables. *Statistics in Medicine*, 9, 363-367.

Henning, E, van Rensburg, W. & Smit, B. (2004). *Finding your way in qualitative research*. Pretoria: Van Schaik Publishers.

Hicks, D. & Gwynne, M. (1996). *Cultural Anthropology*. New York, NY: Harper Collins.

Hitchman, S., & Fong, G. T. (2011). Gender empowerment and female-to-male smoking prevalence ratios. *Bulletin of the World Health Organization,* 89 (3), 161-240 retrieved from www.who.int/bulletin/volumes89/3/10-079905/en/index.html

Hoffmann, D., & Hoffmann, I. (1997): The changing cigarette, 1950-1995. *Journal of Toxicology and Environmental Health, 50 (4),* 307-364. doi: 10.1080/009841097160393

Hofstede, G. (1997). *Culture and Organization: Software of the Mind.* New York: McGraw-Hill.

Holden, C. (2000). Another scourge for Africa. *Science, 290* (5495), 1291. from www.search.ebcohost.com/login.aspx?direct=true&db=a9h&AN=3792177&site=ehost-livee Retrieved 12/03/2012

Hrubá, D., & Žaloudíková, I. (2008). Where do our children learn to smoke? *Central European Journal of Public Health, 16*(4), 178-181.

Hu, L., Sekine, M., Gaina, A., & Kagamimori, S. (2007). Association between sleep quality and smoking in Japanese civil servants. *Sleep and Biological Rhythms* 5, 196–203. doi:10.1111/j.1479-8425.2007.00277.x

Hu, T. W., Sung, H.Y., & Keeler, T. E. (1995). Reducing cigarette consumption in California: tobacco taxes vs an anti-smoking media campaign. *American Journal of Public Health, 85*(9), 1218 – 1222.

Humble, C., Croft, J., Gerber, A., Casper, M., Hames, C.,& Tyroler, H.(1990). Passive Smoking and 20-Year Cardiovascular Disease Mortality among non-smoking Wives, Evans County, Georgia. *American Journal of Public Health*, 80, 599-601.

Hussain, N. A. A., Akande, T. M., & Adebayo, O. (2010). Prevalence of cigarette smoking and the knowledge of its health implications among Nigerian soldiers. *East African Journal of Public Health, 6*(2), 168-170.

Ian Gilmour, M., Jaakkola, M. S., London, S. J., Nel, A. E., & Rogers, C. A. (2006). How exposure to environmental tobacco smoke, outdoor air pollutants, and increased pollen burdens influences the incidence of Asthma. *Environmental Health Perspectives, 114 (4)*, 627–633 (2006). doi:10.1289/ehp.8380

Ilevbare, J. (2006). BATN boost Osun-Osogbo festival. *This Day, 22 July 2006.* Retrieved from http://archive.tobacco.org/news/228749.html

Imhonde, H. O. & Aluede, O. (2007). Smoking intensity among Nigerian secondary schools adolescent smokers. *Educational research quarterly* (December 1, 2007). Retrieved from http://www.highbeam.com/doc/1P3-1402656421.html

Ivankova, N.V., Creswell, J. W. & Plano Clark, V. L. (2007). Foundations and approaches to mixed methods research. In K. Maree (Ed.), *First steps in research* (pp. 254-278). Pretoria: Van Schaik Publishers.

Iyiola, O. O. (2008). *Influence of marketing on tobacco consumption behaviour in rural and urban areas of the South-western region of Nigeria.* Florida: Dissertation.com (pp. 1-25)

Jakpor, P. (2012). Nigeria: how British American Tobacco undermines the WHO FCTC through agricultural initiatives: invited commentary. *Tobacco Control,* 21, p. 220. doi:10.1136/tobaccocontrol-2011-050411

Jamrozik, K. (2004). Population strategies to prevent smoking. *British Medical Journal, 328*,759

Joffe, H. (1999). *Risk and 'the other'.* Cambridge: University Press.

Kayaba, K., Wakabayashi, C., Kunisawa, N., Shinmura, H., Yanagawa, H. (2005). Implementation of a smoke-free policy on school premises and tobacco control as a priority among municipal health promotion activities: nationwide survey in Japan. *American Journal of Public Health, 95*(3), 420-422.

Keer, M. E. (2002). Psychosocial determinants of cigarette smoking among college students. *Journal of Community Health Nursing, 19 (4),* 245-257.

Kelly, K. (2006). From frontiers to text: collecting data in qualitative research. In Terre Blanche, M., Durrheim, K., & Painter, D. (Eds). *Research in practice-applied methods for the social sciences.* South Africa, UCT Press.

Khan, M. M. H., Aklimunnessa, K., Kabir, M. A., Kabir, M., & Mori, M. (2006). Tobacco consumption and its association with illicit drug use among men in Bangladesh. *Addiction, 101*, 1178–1186. doi: 10.1111/j.1360-0443.2006.01514.x

Koh, H. K., Alpert, H. R., Judge, C. M., Caughey, R. W., Elqura, L. J., Connolly, G. N., & Warren, C. W. (2011). Understanding worldwide youth attitudes towards smoke-free policies: an analysis of the Global Youth Tobacco Survey. *Tobacco Control*, 20, 219-225. doi: 10.1136/tc.2010.038885

Kugler, J. (2009). Big Tobacco Sets Its Sights on Africa. Retrieved from www.time.com

Lader, D. & Matheson, J. (1991). *Smoking among secondary school children in England 1990*: An enquiry carried out by the Social Survey Division of OPCS. London.

Lai,S., Lai, H., Page, J. B., & McCoy, C. B. (2000). The association between cigarette smoking and drug abuse in the United States. *Journal of Addictive Diseases, 19 (4)*, 11-24. doi**:**10.1300/J069v19n04_02

Laitin, D. D. (1977). *Hegemony and culture: Politics and religious change among the Yoruba.* Chicago: The University of Chicago Press.

Lance, P. M., Akin, J.S., Dow, W. H., & Loh (2004). Is cigarette smoking in poorer nations highly sensitive to price?: Evidence from Russia and China. *Journal of Health Economics, 23*(1), 73–89.

Lawrence, D., Fagan, P., Backinger, C. L., Gibson, J. T., & Hartman, A. (2007). Cigarette smoking patterns among young adults aged 18–24 years in the United States. *Nicotine & Tobacco Research,* 9(6), 687-697.

Laws, Holliday, R. C., & Huang, C. J. (2007), Prevalence and social norms associated with cigarette smoking among college students attending historically black colleges and universities. *American Journal of Health Studies, 22*(2), 96–104.

Leatherdale, S. T., Sparks, R., & Kirsh, V. A. (2006). Beliefs about tobacco industry malpractices and youth smoking behaviour: insight for future tobacco control campaigns (Canada). *Cancer Causes Control*, 17, 705-711. doi: 10.1007/s10552-006-0004-z

Leventhal, H. & Cleary, P. D. (1980). The smoking problem: A review of research and theory in behavioural risk modification. *Psychology Bulletin, 88*, 370 – 405.

Levy, D. T., Nikolayev, L., & Mumford, E. (2005). Recent trends in smoking and the role of public policies: results from the SimSmoke tobacco control policy simulation model. *Addiction, 100*(10), 1526 – 1536.

List of Nigerian State by Landmass and Population Density (n.d.) retrieved http://macosconsultancy.com/Lists%20of%20Nigerian%20State%20by%20Landmass%20and%20Population%20Densityyy.html (Sourced from National Population Commission report 1991 & 2006)

Lloyd-Richardson, E. E., Papandonatos, G., Kazura, A., Stanton, C., & Niaura, R. (2002). Differentiating stages of smoking intensity among adolescents: Stage-specific psychological and social influences. *Journal of Consulting and Clinical Psychology, 70(4)*, 998-1009. doi: 10.1037/0022-006X.70.4.998

Loureiro, M. L., Sanz-de-Galdeano, A., & Vuri, D. (2010). Smoking Habits: Like Father, Like Son, Like Mother, Like Daughter*? Oxford Bulletin of Economics and Statistics, 72*(6), 717–743. doi: 10.1111/j.1468-0084.2010.00603.x

Madu, S., Onya, H., & Okafor, F. (1998). Smoking habits of the people of Agbowo community, Ibadan. *In quest for psychotherapy for modern Africa* (pp. 304-316). Sovenga South Africa: UNIN Press. Retrieved from PsycINFO database.

Magid, V., Colder, C. R., Stoud, L. R., Nichter, M., & Nichter, M. (2009). Negative affect, stress, and smoking in college students: unique associations independent of alcohol and marijuana use. *Addictive Behaviours, 34*(1), 973–975.

Map of Nigeria retrieved from http://www.fao.org/ag/AGP/AGPC/doc/Counprof/nigeria/nigeria.htm

Mardani, A., Houz, M. D. D., Mardani, S., & Khajavi, Y. (2011). European Journal of Social Sciences, 25(4), 498-505.

Maree, K. & van der Westhuizen, C. (2007). Planning a research proposal. In K. Maree (Ed.), *First steps in research* (pp. 24-44)*. Pretoria: Van Schaik Publishers.

McGahee, T. W., Kemp, V., & Tingen, (2000). A theoretical model for smoking prevention studies in preteen children. *Pediatric Nursing, 26*(2), 135 – 141.

McGruder, C. O. (n.d). "Nigeria Sues Big Tobacco" It's About Time. Communities under siege. Retrieved from http://www.cus-united.org/article.og.htm

McKie, L., Laurier, E., Taylor, R. J. & Lennox, A. S. (2003). Eliciting the smoker's agenda:implications for policy and practice. *Social Science and medicine* 56, 83-94.

Melgosa, J. (2007). *Developing a healthy mind.* Spain, Editorial safeliz, p. 134.

Merdad, L. A., Al-Zahrani, M. S., Farsi, J. M. (2004). Smoking habits among Saudi female university students : Prevalence, influencing factors and risk awareness. *Ann Saudi Med.* Retrieved from http://www.saudiannals.net/text.asp?2007/27/5/366/51474

Mermelstein, R., & The Tobacco Control Network Writing Group (1999). Explanations of ethnic and gender differences in youth smoking: a multisite, qualitative investigation. *Nicotine Tobacco Research, 1*, S91–S98.

Minh, V. H., Haib, P. T., Gianga, K. B., Ngab, P. Q., Khanhc, P. H., Lamc N. T., & Kinhc, L. N. (2011). Effects of individual characteristics and school environment on cigarette smoking among students ages 13-15: A multilevel analysis of the 2007 Global Youth Tobacco Survey (GYTS) data from Vietnam. *Global Public Health, 6 (3),* 307-319. doi: 10.1080/17441692.2010.517779

Mitchell, C., Baildam, E., Bull, D., Clemonds, A., & Marshall, D. (2005). *Vibrant health in the twenty-first century* (5th ed., pp. 66 – 77). Thailand: Stanborough Press.

Mokgwathi, M. M. (2011). Health risk behaviours among secondary school students in Botswana: physical activity and health. *African Journal for Physical Health Education, Recreation and Dance, 17*(3), 481-488.

Moore, L., Roberts, C., & Tudor-Smith, C. (2001). School smoking policies and smoking prevalence among adolescents: multilevel analysis of cross-sectional data from Wales. *Tobacco Control*, 10, pp. 117-123. doi:10.1136/tc.10.2.117

Morrel, H. E. R., Song, A. V., & Halpern-Felsher, B. L. (2010). Predicting adolescent perceptions of the risks and benefits of cigarette smoking: A longitudinal investigation. *Health Psychology, 29(6),* 610 – 617.

Morrow, M., & Brands, A. (2003). Fact sheet on gender, health and tobacco. Retrieved from www.who.int/gender/documents/Gender_Tobacco

Moscovici, S. (1984). The phenomenon of social representations. In R. M. Farr & S. Moscovici (eds.), *Social Representations*. Cambridge: Cambridge University Press.

Mowery, P. D., Farrelly, M. C., Haviland, L., Gable, J. M., & Wells, H. E. (2004). Progression to established smoking among US youth. *American Journal of Public Health*, 94 (2), 331-337.

Munafò, M. R., & Araya, R. (2010). Cigarette smoking and depression: a question of causation. *The British Journal of Psychiatry,* 196, pp. 425-426. doi: 10.1192/bjp.bp.109.074880

Murray, N. M. (2006). Pepsiman! Toward a theory of symbolic morphosis in global advertising. *Journal of Popular Culture*, 39 (6), 1077-1090.

Narkowicz, S., Polkowska, Z., & Namieśnik, J. (2012). Analysis of Markers of Exposure to Constituents of Environmental Tobacco Smoke (ETS). *Critical Reviews in Analytical Chemistry, 42*(1), 16-37. doi: 10.1080/10408347.2012.629948

Narula, S. K., Berg, C. J., Escoffery, C., & Blecher, E. (2012). South African college students' attitudes regarding smoke-free policies in public, on campus, and in private spaces. *Addiction Research & Therapy,* S1, 005. doi:10.4172/2155-6105.S1-005

National Population Commission (NPC) [Nigeria] and ICF Macro. (2009). *Nigeria Demographic and Health Survey 2008.* Abuja, Nigeria: National Population Commission and ICF Macro. Retrieved from http://pdf.usaid.gov/pdf_docs/PNADQ923.pdf

National Tobacco Control Bill (NTCB) (2009). Nigerian National Tobacco Control Bill. Retrieved from http://docs.google.com/fileview

Nelson, J. (2003). Youth smoking prevalence in developing countries: effect of advertising bans. *Applied Economics Letters, 10*, 805-811. doi; 10.1080/1350485032000158618

Neuman, W. L. (2011). *Social research methods – Qualitative and quantitative approaches (7th Ed.).* Boston, Pearson.

Nez Henderson, P., Jacobsen, C., Beals, J., & the AI-SUPERPFP Team (2005). Correlates of Cigarette Smoking Among Selected Southwest and Northern Plains Tribal Groups: The AI-SUPERPFP Study. *American Journal of Public Health.* 95:867–872. doi:10.2105/AJPH.2004.050096

Nichter, M. (2003). Smoking: what does culture have to do with it? *Addiction,* 98,139–145.

Niemelä, S., Sourander, A., Pilowsky, D. J., Susser, E., Helenius, H., Piha, J., ...Almqvist, F. (2009). Childhood antecedents of being a cigarette smoker in early adulthood. The Finnish 'from a boy to a man' study. *Journal of Child Psychology and Psychiatry,* 50: 3, pp. 343-351. doi: 1111/j.1469-7610.2008.01968.x

Nieuwenhuis, J. (2007). Analyzing qualitative data. In K. Maree (Ed.), *First steps in research* (pp. 99 – 115). Pretoria: Van Schaik Publishers.

Nigeria: Report card on the WHO Framework Convention on Tobacco Control (n.d.).
Retrieved from www.afro.who.int/index.php?option=com

Nigeria-Population density (n.d). retrieved from
http://www.indexmundi.com/facts/nigeria/population-density

Nwoye, A. (2006). Remapping the Fabric of the African Self: A Synoptic Theory. *Dialectical Anthropology, 30:* 119-146. doi 10.1007/s10624-005-5058-x

Novo, M., Hammerström, A., & Janlert, U. (2000). Smoking habits –a question of trend or unemployment? A comparison of young men and women between boom and recession. *Public Health, 114,* 460-463.

O'Cathail, S. M., O'Connell, O. J., Long, N., Morgan, M., Eustace, J. A., Plant, B. J., & Hourihane, J. O. B. (2011). Association of cigarette smoking with drug use and risk taking behaviour in Irish teenagers. *Addictive behaviours, 36,* 547-550. doi: 10.1016.j.addbeh.2011.01.012

Odigwe, C. (2008). Smoking in Nigeria: is it time for a rethink? Retrieved from http://archive.student.bmj.com/issues/03/08/life/294.php

Ogden, J. (2000). *Health Psychology- A Textbook.* Buckingham, Open University Press.

Oshodin, O. (1983). Attitudes toward smoking among University of Benin students in Nigeria. *College Student Journal*, *17*(4), 362-364.

Otsuki, M. (2009). Social connectedness and smoking behaviors among Asian American college students: An electronic diary study. *Nicotine & Tobacco Research*, *11*(4), 418-426.

Owie, I. (1986). Smoking behavior of prospective teachers: A Nigerian case. *Journal of American College Health*, *32*(5), 205-207.

Pallant, J. S. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS.* New York: Open University Press.

Pampel, F. C. (2006). Global patterns and determinants of sex differences in smoking. *International Journal of Comparative Sociology*, 47(6), 466–487. Doi: 10.1177/0020715206070267

Panagiotakos, D. B., Pitsavos, C., Chrysohoou, C., Skoumas, J., Masoura, C., Toutouzas, P., & Stefanadis; ATTICA study. (2004). Effect of exposure to second hand smoke on markers of inflammation: the ATTICA study. *The American Journal of Medicine, 116*(3), 145–150.

Parkinson, C. M., Hammond, D., Fong, G. T., Borland, R., Omar, M., Sirirassamee, …Thompson, M. (2009). Smoking beliefs and behavior among youth in Malaysia and Thailand. *American Journal of Health behavior,* 33 (4), 366-375

Patel, P., Okechukwu, C. A., Collins, J., & Hughes, B. (2009). Bringing 'light, life and happiness': British American Tobacco and music sponsorship in Sub-Saharan Africa. *Third World Quarterly*, doi: 10.1080/01436590902867110

Pechacek, T. F., & Babb, S. (2004). How acute and reversible are the cardiovascular risks of secondhand smoke? *British Medical Journal, 328*, 980-983.

Perkins, K.A., Karelitz, J.L., Giedgowd, G.E., Conklin, C.A., & Sayette, M.A. (2010). Differences in negative mood-induced smoking reinforcement due to distress tolerance, anxiety sensitivity, and depression history. *Psychopharmacology*, 210, 25 – 34.

Petersen, I., & Govender, K. (2010). Theoretical considerations: from understanding to intervening. In I. Petersen, A. Bhana, A. J. Flisher, L. Swartz & L. Richter (Eds). *Promoting mental health in scarce-resource contexts: Emerging evidence and practice (*pp. 21-48). Cape Town: HSRC Press.

Piko, B. F., & Balazs, M. A. (2012). Authoritative parenting style and adolescent smoking and drinking. *Addictive behaviours, 37,* 353-356. Doi: 10.1016/j.addbeh.2011.11.022

Pomerleau, O. F., & Pormerleau, C. S. (1989). A biobehavioral perspective on smoking. In T. Ney & A. Gale (Eds.), *Smoking and human behaviour.* NewYork: Willey.

Portella, E. (2000). Cultural cloning or hybrid cultures? Retrieved from http://www.unesco.org/courier/2000_04/uk/edito.htm#top

Prescott, E. V. B., Clemmensen, I. H., & Tobak, J. K. (2004). Tobacco. *Ugeskr Læger, 166,* 1570-1573.

Preston, S. H., & Wang, H. (2006). Sex mortality differences in The United States: The role of cohort smoking patterns. *Demography, 43*(4), 631-646, Doi: 10.1353/dem.2006.0037

Projections of production of tobacco leaf (n.d.). Retrieved from http://www.fao.org/docrep/006/Y4956E/y4956e08.htm

Protopapas, A., Pliatsikas, C., & Travlou L. (n.d). Effects of nicotine on cognitive functioning of healthy smokers and non-smokers. Retrieved from http://www.ilsp.gr/homepages/protopapas/poster/nicotine-poster.html

Richardson, H. L., Walker, A. M., & Horne, R. S.C. (2009). Maternal smoking impairs arousal patterns in sleeping infants. *Journal of Sleep Research, 17*, 450–457.

Roediger, H. L., Capaldi, E. D., Paris, S. G., Polivy, J., & Herman, C. P. (1996). *Psychology* (4th Ed., p. 556). Minneapolis: West Publishing Company.

Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change, Journal of Psychology, 91, pp. 93 – 114.

Rogers, R. W. (1983). Cognitive and physiological processes in fear appeals and attitude change: A revised theory of protection motivation, in J. R. Cacioppo & R. E. Petty (eds), Social Psychology: A source book, pp. 153-176. New York, Guilford Press.

Rogers, R. W. (1985). Attitude change and information integration in fear appeals, *Psychology Reports*, 56, 179-182.

Rosenstock, I. M. (1966). Why people use health services, *Millbank Memorial Fund Quarterly*, 44, pp. 94-124.

Ross, H., Blecher, E., Yan, L. & Hyland, A. (2010).Do cigarette prices motivate smokers to quit? New evidence from the ITC survey. *Addiction, 106*, 609–619. doi: 10.1111/j.1360-0443.2010.03192.x

Ross, H., & Chaloupka, F. J. (2002). Economics of tobacco control. *International Tobacco Evidence Network,* author. Retrieved from www.tobaccoevidence.net

Salawu, F. Danburam, A. Isa, B.& Agbo, J. (2010) Cigarette smoking habits among adolescents in Northeast Nigeria. *The Internet Journal of Epidemiology,* 8, 1.

Santrock, J. W., Mackenzie-Rivers, A., Leung, K. H., & Malcomson, T. (2003). *Life span development.* Toronto, Ontario, Canada: McGraw-Hill. Retrieved from http://www.mcgrawhill.ca/college/santrock/lifespan

Sarafino, E. P. (2002). *Health Psychology, Biopsychosocial interactions* (4th Ed., pp. 202 -218). New York: John Wiley & Sons.

Sargent, J. D., & Hanewinkel, R. (2009). Comparing the effects of entertainment media and tobacco marketing on youth smoking in Germany. *Addiction,* 104, pp. 815-823. doi: 10.1111/j.1360-0443.2009.02542.x

Sargent, J. D., Beach, M. L., Dalton, M. A., Mott, L. A., Tickle, J. J., Ahrens, M. B., & Heartherton, T. F. (2001). Effect of seeing tobacco use in films on trying smoking among adolescents: cross sectional study. *British Medical Journal,* 323, 1394-1397.

Scales, M. B. (2009). Adolescents' perceptions of smoking and stress reduction. Retrieved from http://heb.sagepub.com/content/36/4/746.abstract

Schane, R. E., Ling, P. M., Glantz, S. A. (2010). Health Effects of Light and Intermittent Smoking: A Review. *Circulation*,121, 1518-1522.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment, 18*(4), 350–353.

Schnohr, C. W., Kreiner, S., Rasmussen, M., Due, P., Currie, C., & Diderichsen, F. (2008). The role of national policies intended to regulate adolescents smoking in explaining the prevalence of daily smoking: a study of adolescents from 27 European countries. *Addiction*, 103, 824-831. doi: 10.1111/j.1360-0443.2008.02161.x

Schwarzer, R. (1992). Self efficacy in the adoption and maintenance of health behaviors: Theoretical approaches and a new model, in R. Schwarzer (ed.), Self efficacy: Thought control of action, pp. 217-243. Washington, DC, Hemisphere.

ScienceDaily. (2012). Carcinogens Form from Third-Hand Smoke. Retrieved from http://www.sciencedaily.com/releases/2010/02/100208154651.htm

Shafey, O., Dolwick, S., & Guindon, G. E. (Eds.) (2003). *Tobacco control country profiles 2003*. Atlanta, GA: American Cancer Society. Retrieved from http://www.globalink.org/tccp

Shanks, D. R. (2010). Learning: from association to cognition. *Annual review of Psychology 61:*

273-301. doi: 10.1146/annurev.psych.093008.100519

Sherman, S. J., & Fazio, R. H. (1983). Parallels between attitudes and traits as predictors of behavior. *Journal of Personality, 51 (3),* 308-345.

Shmueli, D., Prochaska, J. J., & Glantz, S. A. (2010). Effect of smoking scenes in films on immediate smoking-a randomized controlled study. *American Journal of Preventive Medicine 38(4),* 351–358. doi: 10.1016/j.amepre.2009.12.025

Shuaib, F., Foushee, H. R., Ehiri, J., Bagchi, S., Baumann, A., & Kohler, C. (2011). Smoking, sociodemographic determinants, and stress in the Alabama Black Belt. *The Journal of Rural Health,* 27, 50-59. doi: 10.1111/j.1748-0361.2010.00317.x

Siegel, M., & Bierner, L. (2000). The impact of an antismoking media campaign on progression to established smoking: results from a longitudinal study. *American Journal of Public Health 90* (3): 380-386.

Silverman, D. (2001). *Interpreting qualitative research* (2nd Ed). London: Sage.

Silverstein, B. (1982). Cigarette smoking, nicotine addiction, and relaxation. *Journal of personality and social psychology, 42 (5),* 946-950.

Skinner, M. L., Haggerty, K. P., & Catalano, R. F. (2009). Parental and peer influences on teen smoking: are White and Black families different? *Nicotine and Tobacco Research,* 11 (5): 558-563. doi: 10.1093/ntr/ntp034

Slowik, N., Ma, S., He, J., Lin, X. X., & Soldin, O. P. (2011). The effect of secondhand smoke exposure on markers of elastin degradation. *Chest, 140*(4), 946-953.

Song, A. V., & Ling, P. M. (2011).Social Smoking among Young Adults: Investigation of Intentions and Attempts to Quit. *American Journal of Public Health, 101*(7), 1291-1296.

South Africa: Report card on the WHO Framework Convention on Tobacco Control (n.d.). Retrieved from www.afro.who.int/index.php?option=com

Storey, L. (2007). Doing interpretative phenomenological analysis. In Lyons, E. E., Coyle, A. (Eds.). *Analysing qualitative data in Psychology*. London, Sage.

Stuber, J., Galea, S. & Link, B. G. (2009). Stigma and smoking: the consequences of our good intentions. *Social Service Review,* pp. 585-609. Retrieved from www.jeffereylonghofer.com.

Sugarman, S. D. (2003). A balanced tobacco control policy. *American Journal of Public Health, 93*(3), 416-418.

Tauras, J. A., & Chaloupka, F. J. (1999*). Determinants of smoking cessation: an analysis of young adult men and women*. Working paper 7262. Cambridge, MA: National Bureau of Economic Research.

Taurus, J. A. (2005). Can public policy deter smoking escalation among young adults? *Journal of Policy Analysis and Management, 24*(4), 771-84.

Terracciano, A., & Costa, P. T., Jr. (2004). Smoking and the five-factor model of personality. *Addiction, 99,* 472–481.

The Columbia Electronic Encyclopedia, 6th Edition (2011). Retrieved from http://web.ebscohost.com/ehost/

Tobacco killing in low-income and middle-income countries (2012). *The Lancet ,* 379, 1172. Retrieved from www.thelancet.com

Tomaselli, K. G. (1999). *Appropriating images: the semiotics of visual representation.* Denmark: Intervention press.

Townsend, L., Flisher, A. J., Gilreath, T., & King, G. (2009). A systematic literature review of tobacco use among adults 15 years and older in sub-Saharan Africa. *Drug Alcohol Depend*, 84(1), 14-27.

Trovato, F., & Lalu, N. M. (2007). From divergence to convergence: the sex differential in life expectancy in Canada, 1971–2000. *Canadian Review of Sociology/ Anthropology, 44*(1), 101–22.

Tsai, Y., Yang, C., Chen, C., & Tsai-Ching, L., (2003). *Reduction in smoking and brand switching in response to tax-induced price increases in Taiwan*. Taiwan: National Health Research Institute.

Tumwine, J. (2011). Implementation of the Framework Convention on Tobacco Control in Africa: Current Status of Legislation. *International Journal of environmental Research and Public Health, 8*, 4312-433.

Tunmise, A. (2005). Nigeria: BATN's second phase of proudly Nigerian campaign (27 February, 2005). Retrieved from http://stti.confex.com/stti/congrs06/techprogram/paper 28140.htm

Tworek, C., Yamaguchi, R., Kloska, D. D., Emery, S., Barker, D. C., Giovino, G. A., et al. (2010). State-level tobacco control policies and youth smoking cessation measures. *Health Policy, 97*, 136–144.

Ulin, P. R., Robinson, E. T., Tolley, E. E., & McNeill, E. T. (2002). *Qualitative methods: A field guide for applied research in sexual and reproductive health*. North Caroline, USA: Family Health International.

Umoh, A. E., Otoh, E. C., Taiwo, O. O., Danfillo, I. S., & Jalo, P. H. (2009). Teachers' knowledge of effects of active/passive smoking on health. *Education Research.* The preliminary program for IADR 2nd African and Middle East regional conference (23rd-25th September, 2009).

US Bureau of the Census, International Data Base (2010). Population statistics from us census dept. for Nigeria. Retrieved from http://www.motherlandnigeria.com/population.html

US Centre for Disease Control (CDC) (2010). Smoking and tobacco use. Global youth tobacco survey: core Questionnaire(2008). Retrieved from http://www.cdc.gov/tobacco/global/gyts/intro.htm

US Department of Health and Human Services. (1994). *Preventing tobacco use among young people: A report of the Surgeon General*. Atlanta: Author.

U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General.* Atlanta: Author.

Van Walbeek, C. (2005). Tobacco control in South Africa. [translated from french]. *Promote Educ*ation (Supplement 4) 25-28. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/16190259

Van Walbeek, C. (2002). Recent trends in smoking prevalence in South Africa – some evidence from AMPS data. *South African Medical Journal,* 92 (6), pp. 468-472.

Wagoner, B. (2008). Commentary: Making the familiar unfamiliar. *Culture and Psychology, 14*(4), 467 - 474. doi: 10.1177/1354067X08096511

Walker, C., Ainette, M. G., Wills, T. A., & Mendoza, D. (2007). Religiosity and substance use: Test of an indirect-effect model in early and middle adolescence. *Psychology of Addictive Behaviours, 21,* 84-96.

Waylen, A. E., Leary, S. D., Ness, A. R., Tanski, S. E., & Sargent, J. D. (2011). Cross-sectional association between smoking depictions in films and adolescent tobacco use nested in a British cohort study. *Thorax, 66,* 856-861. Doi: 10.1136/thoraxjnl-2011-200053

Weiten, W. (1989). *Psychology themes and variations.* California, Brooks/Cole, p. 497.

West, R. (2011). Preventing tobacco companies from advertising using their packaging could be an important component of comprehensive tobacco control: a commentary on Australia's plain packaging of cigarettes. *Drug and Alcohol Review,* 30, pp. 681-682. doi: 10.1111/j.1465-3362.2011.00369.x

World Health Organisation [WHO] (2002). Smoking Statistics. Retrieved on 02/09/2010 from http://www.wpro.who.int/media_centre/fact_sheets/fs_20020528.htm

WHO (2003). Framework Convention on Tobacco Control (2003). Updated, 2005. Retrieved from http://www.who.int/fctc/text_download/en/index.html.

WHO (2005). WHO Framework Convention on Tobacco Control, 2003. (Updated 2005) Geneva, Author.

WHO (2008). World Health Statistics 2008. Retrieved from http://www.who.int/whosis/whostat/2008/en/index.html

WHO (2009). World Report on the Global Tobacco Epidemic Geneva, Switzerland: Author.

WHO (2011a). MPOWER-World report on the global tobacco epidemic. Switzerland. Author. Retrieved from www.who.int./tobacco/mpower/index.html

WHO (2011b). Report on the global tobacco epidemic, country profile South Africa. Retrieved from www.who.int/tobacco/surveillance/policy/country_profile/zaf.pdf

WHO (2011c). *WHO report on the global tobacco epidemic*. Geneva, Switzerland: Author.

WHO Factsheet (2011) WHO Tobacco fact sheet, July 2011. Retrieved from
http://www.who.int/mediacentre/factsheets/fs339/en/index.html

WHO (2012a). Why tobacco is a public health priority. Retrieved from
http://www.who.int/tobacco/health_priority/en/

WHO (2012b). *Technical Resource for Country Implementation of WHO Framework
Convention on Tobacco Control Article 5.3*. WHO, author. Retrieved from
whqlibdoc.who.int/publications/2012/9789241503730

WHO Factsheet (2012). Parties to the WHO Framework Convention on Tobacco Control.
Retrieved from http://www.who.int/fctc/signatories_parties/en/index.html

World Statistics Pocketbook Country Profile: Nigeria (2010). Retrieved from
http://unstats.un.org

Wills, T., Sandy, J.M., & Yeager, A. M. (2003). Stress and smoking in adolescence: a test of
directional hypotheses. *Health Psychology, 21*(2), 122-130. dio:10.1037/1278-
6133.21.2.122

Wing, V. C., Moss, T. G., Rabin, R. A., & George, T. P. (2012). Effects of cigarette smoking
status on delay discounting in schizophrenia and healthy controls. *Addictive Behaviours*,
37, 67–72.

Winickoff, J. P, Friebely, J., Tanski, S. E., Sherrod, C., Matt, G. E., Hovell, M. F., & McMillen,
R. C. (2009). Beliefs about the health effects of "thirdhand" smoke and home smoking
bans *Pediatrics,* 123; e74-e79. Doi: 10.1542/peds.2008-2184

Wu, W., Ashley, D. L., & Watson, C. H. (2002). Determination of nicotine and other minor
alkaloids in international cigarettes by solidphase microextraction and gas
chromatography/massspectrometry. *Analytical Chemistry, 74*, 4878–4884.

Yach, D., & Bialous, S. A. (2001). Junking science to promote tobacco. *American Journal of
Public Health*, 91(91), 1745-1748.

Yach, D. (1996). Tobacco in Africa. *World Health Forum. 17*(1), 29-36.

Yang, G., Ma, J., Chen, A. P., Brown, S., Taylor, C. E., & Samet, J. M. (2004). Smoking among
adolescents in China: 1988 survey findings. *International Journal of Epidemiology,
33*(5), 1103-1110. Epub 2004 Jun 24. Retrieved from
http://www.ncbi.nlm.nih.gov/pubmed/15218013

Yu, M. (2011). Tobacco Use Among American Indian or Alaska Native Middle- and High-School Students in the United States. *Nicotine Tobacco Research,* 13(3): 173-181. doi:10.1093/ntr/ntq233

Yu, M., Hahm, H. C., & Vaughen, M. G. (2010). Intrapersonal and interpersonal determinants of smoking status among Asian American adolescents: Findings from a national sample. *Nicotine & Tobacco Research*, 12(8), 801-809. doi:10.1093/ntr/ntq100

Yusko, D. A., Buckman, J. F., White, H. R., & Pandina, R. J. (2008). Alcohol, tobacco, illicit drugs, and performance enhancers: a comparison of use by college student athletes and non-athletes. *Journal of American College Health*. 57(3): 281–290. doi:10.3200/JACH.57.3.281-290.

Recoding of variables for indices and scales

Social acceptance for smoking for gender groups

Question No.	Question	Variables	Initial response options	Recoding
18	Do you think boys who smoke cigarettes have more or less friends?	Social acceptance for boys 1	1 = More friends; 2 = Less friends; 3 = No difference from non-smokers	1 = Less friends; 2 = No difference from non-smokers; 3 = More friends
21	Do you think smoking cigarettes makes boys look more or less attractive?	Social acceptance for boys 2	1 = More attractive; 2 = Less attractive; 3 = No difference from non-smokers	1 = Less attractive; 2 = No difference from non-smokers; 3 = More attractive
19	Do you think girls who smoke cigarettes have more or less friends?	Social acceptance for girls 1	1 = More friends; 2 = Less friends; 3 = No difference from non-smokers	1 = Less friends; 2 = No difference from non-smokers; 3 = More friends
22	Do you think smoking cigarettes makes girls look more or less attractive?	Social acceptance for girls 2	1 = More attractive; 2 = Less attractive; 3 = No difference from non-smokers	1 = Less attractive; 2 = No difference from non-smokers; 3 = More attractive

Intention to smoke scale

Question No.	Question	Variables	Initial response options	Recoding
15	At any time during the next 12 months do you think you will smoke a cigarette?	Intention to smoke 1	1 = Definitely not; 2 = Probably not; 3 = Probably yes; 4 = Definitely yes	Same as initial coding
16	Do you think you will be smoking cigarettes 5 years from now?	Intention to smoke 2	1 = Definitely not; 2 = Probably not; 3 = Probably yes; 4 = Definitely yes	Same as initial coding
		Intention to smoke scale	Values ranged from 1 to 8	1 = No/low probability (values 1 - 4)
				2 = Moderate/high probability (values 5 - 8)

Exposure to SHS scale

Question No.	Question	Variables	Initial response options	Recoding
30	During the past 7 days, on how many days have people smoked in your home, in your presence?	Exposure to SHS 1	1 = 0; 2 = 1 to 2; 3 = 3 to 4; 4 = 5 to 6; 5 = 7	Same as initial coding
31	During the past 7 days, on how many days have people smoked in your presence, in places other than in your home?	Exposure to SHS 2	1 = 0; 2 = 1 to 2; 3 = 3 to 4; 4 = 5 to 6; 5 = 7	Same as initial coding
		Exposure to SHS scale	Values ranged from 1 - 10	1 = Low exposure to SHS (values 1 - 3) 2 = Moderate exposure to SHS (values 4 - 6) 3 = High exposure to SHS (values 7 - 10)

Policy index

Question No.	Question	Variables	Initial response options	Recoding
32	Are you in favor of banning smoking in public places (such as in restaurants, in buses, streetcars, and trains, in schools, on playgrounds, in gyms and sports arenas, in discos)?	Policy 1	1 = Yes; 2 = No	1 = No; 2 = Yes
60	Will an increase in the price of cigarette help to reduce smoking in Nigeria?	Policy 2	1 = Yes; 2 = No	1 = No; 2 = Yes
61	Will banning the manufacturing of cigarettes in Nigeria reduce smoking in Nigeria?	Policy 3	1 = Yes; 2 = No	1 = No; 2 = Yes
64	Will the enforcement of the regulation of the sale and consumption of cigarettes and other tobacco products help to reduce the prevalence of smoking among youth in Nigeria?	Policy 4	1 = Yes ; 2 = No; 3 = Not sure	1 = No ('no' & 'not sure'); 2 = Yes
65	Will the youth in Nigeria comply with a law banning the consumption of cigarettes and other tobacco products?	Policy 5	1 = Yes; 2 = No	1 = No; 2 = Yes
		Policy index	Values ranged from 1 - 10	1 = Low perception (values 1 - 4) 2 = Moderate perception (values 5 - 7) 3 = High perception (values 8 - 10)

Knowledge index

Question No.	Question	Variables	Initial response options	Recoding
17	Once someone has started smoking, do you think it would be difficult to quit?	Knowledge 1	1 = Definitely not; 2 = Probably not; 3 = Probably yes; 4 = Definitely yes	1 = No (initial response options 1 & 2) 2 = Yes (initial response options 3 & 4)
20	Does smoking cigarettes help people feel more or less comfortable at celebrations, parties, or in other social gatherings?	Knowledge 2	1 = More comfortable; 2 = Less comfortable; 3 = No difference from non-smokers	1 = No (initial response options 1 & 3) 2 = Yes (Less comfortable)
23	Do you think that smoking cigarettes makes you gain or lose weight?	Knowledge 3	1 = Gain weight; 2 = Lose weight; 3 = No difference	1 = Yes (initial response options 1 & 2) 2 = No
24	Do you think cigarette smoking is harmful to your health?	Knowledge 4	1 = Definitely not; 2 = Probably not; 3 = Probably yes; 4 = Definitely yes	1 = No (initial response options 1 & 2) 2 = Yes (initial response options 3 & 4)
28	Do you think it is safe to smoke for only a year or two as long as you quit after that?	Knowledge 5	1 = Definitely not; 2 = Probably not; 3 = Probably yes; 4 = Definitely yes	2 = No (initial response options 1 & 2) 1 = Yes (initial response options 3 & 4)
29	Do you think the smoke from other people's cigarettes is harmful to you?	Knowledge 6	1 = Definitely not; 2 = Probably not; 3 = Probably yes; 4 = Definitely yes	1 = No (initial response options 1 & 2) 2 = Yes (initial response options 3 & 4)
		Knowledge index	Values ranged from 2 to 12	1=low knowledge (values 2 - 7) 2 = moderate knowledge (values 8 - 9) 3 = high knowledge (10 - 12)

Culture index

Question No.	Question	Variables	Initial response options	Recoding
55	In your community, is cigarette and/or snuff used as items to be provided for a marriage or burial or any traditional ceremony?	Culture 1	1 = Yes; 2 = No	1 = No; 2 = Yes
56	Are cigarettes and/or snuff readily available at social functions like marriages, burials, cultural festivals, naming ceremonies etc for people to purchase and consume?	Culture 2	1 = Yes; 2 = No	1 = No; 2 = Yes
57	Is any tobacco product like snuff, dried leaves, and fresh leaves etc, used in preparing traditional medicine in your community?	Culture 3	1 = Yes; 2 = No	1 = No; 2 = Yes
		Culture index	Values ranged from 1 - 6	1 = low cultural use (values 1 - 2) 2 = moderate cultural use (values 2 -4) 3 = high cultural use (values 5 - 6)

Anti-smoking message scale (ASMS)

Question No.	Question	Variables	Initial response options	Recoding
39	During the past 30 days (one month), how many anti-smoking media messages (e.g., television, radio, billboards, posters, newspapers, magazines, movies) have you seen or heard?	Anti-smoking message 1	1 = A lot; 2 = A few; 3 = None	1 = None; 2 = A few; 3 = A lot
40	When you go to sports events, fairs, concerts, community events, or social gatherings, how often do you see anti-smoking messages?	Anti-smoking message 2	1 = I never go to sports events, fairs, concerts, community events, or social gatherings; 2 = A lot; 3 = Sometimes; 4 = Never	1 = None (initial response options 1 & 4); 2 = sometimes; 3 = A lot
		Anti-smoking message scale	Values ranged from 1 - 6	1 = None (values 1 - 2); 2 = A few (values 3 - 3); 3 = A lot (values 5 - 6)

Tobacco media advertisement scale (TMAS)

Question No.	Question	Variables	Initial response options	Recoding
41	When you watch TV, videos, or movies, how often do you see actors smoking?	Tobacco media adverts 1	1 = I never watch TV, videos, or movies; 2 = A lot; 3 = Sometimes; 4 = Never	1 = Never (initial response options 1 & 4); 2 = Sometimes; 3 = A lot;
43	During the past 30 days (one month), when you watched sports events or other programs on TV how often did you see cigarette brand names?	Tobacco media adverts 2	1 = I never watch TV; 2 = A lot; 3 = Sometimes; 4 = Never	1 = Never (initial response options 1 & 4); 2 = Sometimes; 3 = A lot;
44	During the past 30 days (one month), how many advertisements for cigarettes have you seen on billboards?	Tobacco media adverts 3	1 = A lot; 2 = A few; 3 = None	1 = None; 2 = A few; 3 = A lot;
45	During the past 30 days (one month), how many advertisements or promotions for cigarettes have you seen in newspapers or magazines?	Tobacco media adverts 4	1 = A lot; 2 = A few; 3 = None	1 = None; 2 = A few; 3 = A lot;
46	When you go to sports events, fairs, concerts, or community events, how often do you see advertisements for cigarettes?	Tobacco media adverts 5	1 = I never attend sports events, fairs, concerts, or community events; 2 = A lot; 3 = Sometimes; 4 = Never	1 = Never (initial response options 1 & 4); 2 = Sometimes; 3 = A lot;
		Tobacco media adverts scale	Ranged from	

Consent form for Individual interviewees

SCHOOL OF PSYCHOLOGY

FACULTY OF HUMANITIES, DEVELOPMENT AND SOCIAL SCIENCE

<u>Doctor of Philosophy - Ph.D (Psychology)</u>

Researcher: Catherine O. Egbe

Supervisor: Prof. Inge Petersen

Co-supervisor: Prof. Anna Meyer-Weitz

Dear Respondent,

Introduction

My name is Catherine O. Egbe. I am a Doctoral student registered at the School of Psychology, Howard College Campus, University of KwaZulu-Natal, Durban, South Africa. My supervisors are; Professor Inge Petersen, and Professor Anna Meyer-Weitz, both of the School of Psychology, University of KwaZulu-Natal.

Invitation to participate in my study

You are invited to participate in my doctoral research study exploring socio-cultural risk influences for smoking behaviour amongst the youth in Nigeria.

Aim of the study

The main aim of my study is to explore the cultural symbol of tobacco, government's policies on tobacco control and the roles of these and the 'big capital' of tobacco companies in influencing young people's smoking behaviour. This study also seeks to find out the strongest influences of young people's smoking behaviour in Nigeria. I therefore intend to capture as much as possible all factors responsible for luring and pushing the youth into the habit of smoking especially those that concern socio-cultural issues, government policies and the tobacco companies.

Method of the study

I will be adopting a mixed methods research design. For the qualitative aspect of this study, I will be employing a method known as interpretative phenomenological analysis in my investigation while a survey will be done at the second (quantitative) phase of the research.

Objectives of the study

Using this study I hope to explore an area of the smoking phenomenon that has not been adequately explored and more so in a manner that is uncommon among researchers in the field of psychology in Nigeria. I hope that by this study, more light will be thrown on the risk influences for smoking amongst the youth in Nigeria. Implications stemming out of this study will help all stake holders towards a better understanding of how the youth get involved in the habit of smoking. This will help to inform better policies and laws on regulation of tobacco and tobacco products in Nigeria. This study will also be relevant to health institutions and counselling outfits involved in planning smoking cessation and awareness programmes as this will lead to more effective and focused programmes that will probably increase the success rate of such endeavours (programmes).

Study sample

This study will involve mainly youth aged between 18 and 24 years (in school and out of school). However, community leaders, government officials and political analysts will also be interviewed to gather other relevant data.

Your involvement in the study

Should you agree to take part in the first phase of this study, either as a youth, community leader, government official or political analyst, you will be requested to participate in one semi-structured, in-depth interview scheduled on a day and venue at your convenience and this will last for about 90 minutes (1½ hours). I will also request you to complete a short biographical questionnaire in which you will provide biographical information - details of educational background and brief details of your smoking habit (if you are a young smoker). You will also be required to adopt a pseudonym for the purpose of the study in to order to ensure the confidentiality of the information you provide. The interview will be conducted by the researcher herself. The interview will be audio taped, transcribed verbatim and coded. During the interview I will request you to share your experiences of your smoking habit in terms of how and when you

started indulging in it, cultural practices in your community involving the use of tobacco and tobacco products and other relevant experiences that can help to achieve the aim of the research.

Risks or financial implication of your participation

All costs relating to the study will be borne by the researcher. It is not anticipated that you will incur any financial expenses resulting from participation in this study; should this occur, you will be fully reimbursed. No risk or harm to yourself or others is anticipated in this study. Should you experience any discomfort during the course of interviewing, you have the right to refuse to respond to certain questions, to discontinue or to withdraw from the interview process.

Right of withdrawal from study

You are under no obligation to participate in this study, and you are free to withdraw at any point. Your decision not to take part in this study will be respected and will have no negative repercussions.

Confidentiality and anonymity of participants

Confidentiality of information will be maintained at all times. Your identity will be protected and anonymity maintained through the use of the pseudonym which you would have selected at the beginning of the interview. Tapes of interviews and transcribed material will be kept safe at all times by the researcher. Extracts from your interviews may be incorporated into my thesis, future academic articles, professional conferences and seminars that may emanate from this study, without revealing your identity.

Safety of study materials

For the purpose of assessing the study's validity, I will maintain all relevant documents and artefacts pertaining to the study from the beginning of the research process through to the final report, including documents such as the questionnaires, audiotapes and verbatim transcriptions, thereby enabling an independent researcher not part of the study to track and assess links and connections between the raw data and the final report. These materials will be kept with my supervisor in a locked cabinet during this period. After five years upon completion of the study and the awarding of the degree, audiotapes and transcripts and used questionnaires will be destroyed.

Consent

Should you agree to participate on the basis of having read and understood the nature and conditions of this research study, please sign the designated section below. You are free to withdraw from this study at any point after having signed this consent form. Should you require clarification or further information regarding the study, please do not hesitate to contact me or any of my supervisors. Relevant contact details are provided below. If you would like to obtain more information on your rights as a participant in this study please contact:

Phumelele Ximba,

Research Office,

University of KwaZulu-Natal,

Tel: 031 2603587

Contact details of Researcher:

Catherine O. Egbe (Miss)

School of Psychology

Howard College Campus

University of KwaZulu-Natal

Tel: +234(0)8033924823 (Nigeria)

     +27(0)733792611 (South Africa)

e-mail: cathycards@yahoo.com

Contact details of Supervisors:

Prof. Inge Petersen

Postgraduate Academic Coordinator
School of Psychology

Howard College Campus
University of KwaZulu-Natal
P. Bag X54001

Durban 4000
Work: 031- 260 2507
Fax: 031- 260 7211
e-mail: PETERSENI@ukzn.ac.za

Prof. Anna Meyer-Weitz

School of Psychology
Howard College Campus

University of KwaZulu-Natal
P. Bag X54001
Durban 4000
Work: 033-2607618
e-mail: Meyerweitza@ukzn.ac.za

…………………………………………………………………………………………………

PARTICIPANT'S DECLARATION

I …………………………………………………….... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and consent to participating in the study. I also grant permission for interviews to be audio taped, and for transcribed interview material to be utilized for research purposes.

I understand that I am at liberty to withdraw from the study at any time, should I so wish.

_____   _____

Signature of participant   Date

_____   _____

Signature of researcher   Date

APPENDIX 3

Personal details form for young respondents

SECTION A

1. Name (OPTIONAL)--
2. Age---
3. State of origin--
4. State of residence---
5. Geopolitical zone of origin--
6. Geopolitical zone where you now live--------------------------

7. Please tick as appropriate below the category in which you belong

a) University student ☐

b) Student of other tertiary institutions (college of education, polytechnic, college of sport science etc) ☐

c) Skilled worker ☐

d) Unskilled worker ☐

8. Please tick your highest level of education below

a) Primary school ☐

b) Secondary school ☐

c) Tertiary education (Polytechnic, College of Education, University etc) ☐

9. Contact details (phone no. & email address) ---

SECTION B

Please tick as appropriate

		YES	NO
1	Have you ever smoked cigarette?		
2	Do you currently smoke cigarette?		
3	When did you start smoking (_____)		
4	Do you have friends who smoke?		
5	Do you have family members who smoke (father, mother, brother,		

	sister, uncle, aunty, nice, nephew)?		
6	Have you ever attempted to quit smoking?		

APPENDIX 4

Young smokers' interview schedule

1. How prevalent is smoking in your community?
2. What is your perception about cigarette smoking
3. Why do you smoke?
4. How did you start smoking?
5. What does a stick of cigarette mean to you?
6. a) Who are the people who influenced your choice of smoking?
   b) How did they do that?
7. a) Are there any cultural practices or ceremonies in your community which involve the use of cigarettes or other tobacco products?
   b) If yes, name and explain them.
   c) How have these influenced your choice of smoking?
8. How often have you come across cigarette adverts on TV, Billboards, Newspapers, Movies, etc?
9. How have these influenced your choice of smoking?
10. How do you get cigarettes?
11. Where do you normally smoke?
12. Are any of your family members or friends aware that you smoke?
13. How do they perceive your smoking behaviour?
14. Have you ever bought cigarette for anybody as a gift or as an errand? b) who?
15. Are you aware of any law regulating tobacco sale, buying and consumption in Nigeria?
16. Explain how you perceive the enforcement of such laws in your community if any.
17. Are you aware of any health hazard associated with smoking?
18. How does this affect your smoking behaviour?
19. What do you think the government has done/is doing concerning the issue of smoking among young people?
20. What do you think the government can do but have not done about this issue?
21. What, in your opinion influences the youth most to smoke?
22. Please tell me any other thing about smoking among young people.

APPENDIX 5

Personal details form (for adult interviewees)

1. Name (OPTIONAL)---

2. Community OR Constituency ---

3. **Please tick below the geopolitical zone where community is located**

    SOUTH-SOUTH ☐   SOUTH-EAST ☐   SOUTH-WEST ☐

4. **Please tick as appropriate:**

    Government official ☐   politician ☐   law maker ☐   political analyst ☐
    Community leader ☐

APPENDIX 6

Interview schedule for community leaders

1. How prevalent is smoking among adults in your community?
2. How prevalent is smoking among the youth (18-24yrs) in your community?
3. Are there cultural practices/ceremonies in your community which involve the use of tobacco and/or tobacco products e.g. snuff, cured tobacco leaves, cigarettes, etc?
    b) If yes, please mention them.
4. Please describe the role tobacco or tobacco products serve in these ceremonies (if any) and explain how it is consumed?
5. Do the youth participate in any of these ceremonies? How?
6. a) How is cigarette smoking generally perceived in your community?
    b) How is cigarette smoking among the youth perceived in your community?
7. What part of your culture do you think influences the youth to smoke?
8. Is the tobacco plant grown in your community?
9. Is there any tobacco company in your community?
10. How do you think tobacco companies influence the youth to smoke in Nigeria?
11. Have you ever encouraged any young smoker to quit the habit?
12. Why and what was his/her response?
13. Are children under the age of 18 allowed to buy or sell cigarettes in your community?
14. If 'NO' why? If 'YES', how do you think this can influence the youth to become smokers?
15. What do you think the government has done/is doing concerning the issue of smoking among young people?
16. What do you think the government can do but have done about this issue?
17. What, in your opinion influences the youth the most to smoke?
18. Please tell me any other thing about smoking among young people.

APPENDIX 7

Interview schedule for political analysts/NGO officials

1. How prevalent is smoking in Nigeria especially among young people between the ages of 18 and 24yrs?
2. How is cigarette smoking generally perceived in Nigeria especially in your community?
3. a) Are there any cultural practices existing in any part of Nigeria that you are aware of where tobacco or cigarettes are used as ceremonial items or cultural artefacts, traditional medicine etc?
   b) If yes, please explain.
4. Are you aware of the existence of tobacco manufacturing companies in Nigeria?
5. If yes, what roles do tobacco companies play in uplifting the lives of Nigerians?
6. How do these influence government's stance on tobacco control policies in Nigeria?
7. In what ways are tobacco companies allowed to advertise or promote their products in Nigeria?
8. In what ways do tobacco companies influence the youth to smoke in Nigeria?
9. What has the government done to curb smoking in Nigeria?
10. What are the existing tobacco control laws in Nigeria?
11. a) Are these laws operational? How are such laws being enforced?
    b) If not operational, what is responsible for this?
12. In what ways is the state of the policy on tobacco control impacting on the smoking behaviour of Nigerians especially young people?
13. Do you think the culture of Nigerians could be affected by tobacco control laws especially those which can affect the right of adults sending minors to purchase or sell cigarettes? (b) If yes, how?
14. What other aspects of our culture do you think can be affected by policies such as the NTCB?
15. What do you think is responsible for the delay in the passing of the National Tobacco Control Bill which has been before the National assembly since 2008?
16. In what way can the government at its various tiers (at the local, state and federal level) help to curb smoking especially among the youth in Nigeria?
17. Please tell me any other thing about the phenomenon of smoking especially among the youth in Nigeria.

APPENDIX 8

Youth tobacco survey

For research purpose only

(Only for persons aged 18 – 24 yrs)

Dear Respondent,

This is a doctoral research aimed at finding out socio-cultural risk influences for smoking behaviour amongst the youth in Nigeria as well as other issues surrounding youth smoking behaviour in Nigeria.

Please **do not** write your name on this questionnaire. Hence, nobody will be able to identify who has completed this particular form.

INSTRUCTIONS

- **Please read each question carefully before answering it.**

- **Choose the answer that best describes what you believe and feel to be correct.**

- **On this questionnaire, locate your correct response and circle the alphabet which corresponds to your answer.**

- **Your honest responses will be highly appreciated.**

- **If you have to change your answer, don't worry; just put an 'X' on the wrong one you first circled, then circle your correct response.**

Example:
Questionnaire

24. Do you believe that fish live in water?
    a. Definitely yes
    b. Probably yes
    c. Probably not
    d. Definitely not

24. ● Ⓑ Ⓒ Ⓓ

SECTION A

PERSONAL DETAILS

1. Age--------------------Sex: Male-----------Female----------

2. State of origin--

3. State of residence--

4. Geopolitical zone of origin----------------------------------

5. Geopolitical zone where you now live--------------------

Please tick as appropriate below

6. a. College student ☐

   b. Undergraduate ☐

   c. Skilled worker ☐

   d. unskilled worker ☐

Please tick your highest level of education below

7. a. Primary school ☐

   b. Secondary school ☐

   c. Tertiary education (polytechnic, college of education, university etc) ☐

SECTION B

THE NEXT 11 QUESTIONS ASK ABOUT YOUR USE OF TOBACCO.

1. Have you ever tried or experimented with cigarette smoking, even one or two puffs?
(a) Yes (b) No

2. How old were you when you first tried a cigarette?
(a) I have never smoked cigarettes (b) 7 years old or younger (c) 8 or 9 years old (d) 10 or 11 years old
(e) 12 or 13 years old (f) 14 or 15 years old
(g) 16 years old or older

3. During the past 30 days (one month), on how many days did you smoke cigarettes?
(a) 0 days (b) 1 or 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days

4. During the past 30 days (one month), on the days you smoked, how many cigarettes did you usually smoke?
(a) I did not smoke cigarettes during the past 30 days (one month)
(b) Less than 1 cigarette per day
(c) 1 cigarette per day
(d) 2 to 5 cigarettes per day
(e) 6 to 10 cigarettes per day
(f) 11 to 20 cigarettes per day
(g) More than 20 cigarettes per day

5. During the past 30 days (one month), how did you usually get your own cigarettes? (SELECT ONLY ONE RESPONSE)
(a) I did not smoke cigarettes during the past 30 days (one month)
(b) I bought them in a store, shop or from a street vendor
(c) I bought them from a vending machine
(d) I gave someone else money to buy them for me
(e) I borrowed them from someone else
(f) I stole them
(g) An older person gave them to me
(h) I got them some other way

6. During the past 30 days (one month), what brand of cigarettes did you usually smoke? (SELECT ONLY ONE RESPONSE)
(a) I did not smoke cigarettes during the past 30 days
(b) No usual brand
(c) St. Moris
(d) Rotmans
(e) Benson & Hedges
(f) White London
(g) Malboro
(h) Other brands

7. During the past 30 days (one month), did anyone ever refuse to sell you cigarettes because of your age?
(a) I did not try to buy cigarettes during the past 30 days (one month)
(b) Yes, someone refused to sell me cigarettes because of my age
(c) No, my age did not keep me from buying cigarettes

8. During the past 30 days (one month), did you use any form of smoked tobacco products other than cigarettes (e.g. cigars, water pipe, cigarillos, little cigars, pipe)?
  (a) Yes   (b) No

9. During the past 30 days (one month), did you use any form of smokeless tobacco products (e.g. chewing tobacco, snuff, dip)?
  (a) Yes   (b) No

10. Where do you usually smoke? (SELECT ONLY ONE RESPONSE)
(a) I have never smoked cigarettes
(b) At home (c) At school (d) At work
(e) At friends' houses (f) At social events
(g) In public spaces (e.g. parks, shopping centres, street corners) (h) others

11. Do you ever have a cigarette or feel like having a cigarette first thing in the morning?
(a) I have never smoked cigarettes (b) I no longer smoke cigarettes
(c) No, I don't have or feel like having a cigarette first thing in the morning
(d) Yes, I sometimes have or feel like having a cigarette first thing in the morning
(e) Yes, I always have or feel like having a cigarette first thing in the morning

THE NEXT 17 QUESTIONS ASK ABOUT YOUR KNOWLEDGE AND ATTITUDES TOWARD TOBACCO.

12. Do your parents smoke?
(a) None (b) Both (c) Father only (d) Mother only
(e) I don't know

13. If one of your best friends offered you a cigarette, would you smoke it?
(a) Definitely not (b) Probably not (c) Probably yes
(d) Definitely yes

14. Has anyone in your family discussed the harmful effects of smoking with you?
(a) Yes (b) No
15. At any time during the next 12 months do you think you will smoke a cigarette?
(a) Definitely not (b) Probably not (c) Probably yes
(d) Definitely yes

16. Do you think you will be smoking cigarettes 5 years from now?
(a) Definitely not (b) Probably not (c) Probably yes
(d) Definitely yes

17. Once someone has started smoking, do you think it would be difficult to quit?
(a) Definitely not (b) Probably not   (c) Probably yes
(d) Definitely yes

18. Do you think boys who smoke cigarettes have more or less friends?
(a) More friends (b) Less friends (c) No difference from non-smokers

19. Do you think girls who smoke cigarettes have more or less friends?
(a) More friends (b) Less friends (c) No difference from non-smokers
20. Does smoking cigarettes help people feel more or less comfortable at celebrations, parties, or in other social gatherings?
(a) More comfortable (b) Less comfortable (c) No difference from non-smokers

21. Do you think smoking cigarettes makes boys look more or less attractive?
(a) More attractive (b) Less attractive (c) No difference from non-smokers

22. Do you think smoking cigarettes makes girls look more or less attractive?
(a) More attractive (b) Less attractive (c) No difference from non-smokers

23. Do you think that smoking cigarettes makes you gain or lose weight?
(a) Gain weight (b) Lose weight (c) No difference
24. Do you think cigarette smoking is harmful to your health?
(a) Definitely not (b) Probably not (c) Probably yes
(d) Definitely yes

25. Do any of your closest friends smoke cigarettes?
(a) None of them (b) Some of them (c) Most of them
 (d) All of them

26. When you see a man smoking what do you think of him? (SELECT ONLY ONE RESPONSE)
(a) Lacks confidence (b) Stupid (c) Loser (d) Successful
(e) Intelligent (f) Macho (a strong man)

27. When you see a woman smoking, what do you think of her? (SELECT ONLY ONE RESPONSE)
(a) Lacks confidence (b) Stupid (c) Loser (d) Successful (e) Intelligent (f) Sophisticated (g) Amazon (a strong woman)

28. Do you think it is safe to smoke for only a year or two as long as you quit after that?
(a) Definitely not (b) Probably not (c) Probably yes
(d) Definitely yes

THE NEXT 4 QUESTIONS ASK ABOUT YOUR EXPOSURE TO OTHER PEOPLE'S SMOKING.

29. Do you think the smoke from other people's cigarettes is harmful to you?
(a) Definitely not (b) Probably not (c) Probably yes
(d) Definitely yes

30. During the past 7 days, on how many days have people smoked in your home, in your presence?
(a) 0 (b). 1 to 2 (c) 3 to 4 (d) 5 to 6 (e) 7

31. During the past 7 days, on how many days have people smoked in your presence, in places other than in your home?
(a) 0 (b) 1 to 2 (c) 3 to 4 (d) 5 to 6 (e) 7

32. Are you in favor of banning smoking in public places (such as in restaurants, in buses, streetcars, and trains, in schools, on playgrounds, in gyms and sports arenas, in discos)?
(a) Yes (b) No

THE NEXT 6 QUESTIONS ASK ABOUT YOUR ATTITUDES TOWARD STOPPING SMOKING.

33. Do you want to stop smoking now?
(a) I have never smoked cigarettes (b) I do not smoke now (c) Yes (d) No

34. During the past year, have you ever tried to stop smoking cigarettes?
(a) I have never smoked cigarettes (b) I did not smoke during the past year (c) Yes (d) No

35. How long ago did you stop smoking?
(a) I have never smoked cigarettes (b) I have not stopped smoking (c) 1-3 months (d) 4-11 months
(e) One year (f) 2 years (g) 3 years or longer

36. What was the main reason you decided to stop smoking? (SELECT ONE RESPONSE ONLY)
(a) I have never smoked cigarettes (b) I have not stopped smoking (c) To improve my health (d) To save money
(e) Because my family does not like it (f) Because my friends don't like it (g) Other

37. Do you think you would be able to stop smoking if you wanted to?
(a) I have never smoked cigarettes (b) I have already stopped smoking cigarettes (c) Yes (d) No

38. Have you ever received help or advice to help you stop smoking? (SELECT ONLY ONE RESPONSE)
(a) I have never smoked cigarettes
(b) Yes, from a program or professional
(c) Yes, from a friend
(d) Yes, from a family member
(e) Yes, from both programs or professionals and from friends or family members
(f) No

THE NEXT 9 QUESTIONS ASK ABOUT YOUR KNOWLEDGE OF MEDIA MESSAGES ABOUT SMOKING.

39. During the past 30 days (one month), how many anti-smoking media messages (e.g., television, radio, billboards, posters, newspapers, magazines, movies) have you seen or heard?
(a) A lot (b) A few (c) None
40. When you go to sports events, fairs, concerts, community events, or social gatherings, how often do you see anti-smoking messages?
(a) I never go to sports events, fairs, concerts, community events, or social gatherings
(b) A lot (c) Sometimes (d) Never

41. When you watch TV, videos, or movies, how often do you see actors smoking?
(a) I never watch TV, videos, or movies
(b) A lot (c) Sometimes (d) Never

42. Do you have something (t-shirt, pen, notebooks, key holders, bags, backpack, etc.) with a cigarette brand logo on it?
(a) Yes (b) No
43. During the past 30 days (one month), when you watched sports events or other programs on TV how often did you see cigarette brand names?
(a) I never watch TV (b) A lot (c) Sometimes (d) Never

44. During the past 30 days (one month), how many advertisements for cigarettes have you seen on billboards?
(a) A lot (b) A few (c) None

45. During the past 30 days (one month), how many advertisements or promotions for cigarettes have you seen in newspapers or magazines?
(a) A lot (b) A few (c) None

46. When you go to sports events, fairs, concerts, or community events, how often do you see advertisements for cigarettes?
(a) I never attend sports events, fairs, concerts, or community events
(b) A lot (c) Sometimes (d) Never

47. Has a (cigarette representative) ever offered you a free cigarette?
(a) Yes (b) No

48. Have you ever attended any promotional event organized by tobacco companies?
(a) Yes (b) No (c) Not sure

49. How many of such promotional events have you attended?
(a) one (b) two (c) three (d) four (e) more than four

THE NEXT 4 QUESTIONS ASK ABOUT WHAT YOU WERE TAUGHT ABOUT SMOKING IN SCHOOL.

50. During this school year, were you taught in any of your classes about the dangers of smoking?
(a) Yes (b) No (c) Not sure

51. During this school year, did you discuss in any of your classes the reasons why people your age smoke?
(a) Yes (b) No (c) Not sure

52. During this school year, were you taught in any of your classes about the effects of smoking like it makes your teeth yellow, causes wrinkles, causes cancer, causes dry cough, or makes you smell bad?
(a) Yes (b) No (c) Not sure

53. How long ago did you last discuss smoking and health as part of a lesson at school?
(a) Never (b) This term (c) Last term (d) 2 terms ago (e) 3 terms ago (f) More than a year ago

54. Have you ever been taught in school about the effects of smoking like it causes cancer, yellowing of teeth or makes you smell bad?
(a) Yes (b) No (c) Not sure

THE NEXT 11 QUESTIONS ASK ABOUT CULTURAL USE OF TOBACCO AND TOBACCO PRODUCTS AND SOCIO-CULTURAL ISSUES AROUND SMOKING

55. In your community, is cigarette and/or snuff used as items to be provided for a marriage or burial or any traditional ceremony?

(a) Yes   (b) No

56. Are cigarettes and/or snuff readily available at social functions like marriages, burials, cultural festivals, naming ceremonies etc for people to purchase and consume?

(a) Yes (b) No

57. Is any tobacco product like snuff, dried leaves, and fresh leaves etc, used in preparing traditional medicine in your community?

(a) Yes   (b) No

58. Have you ever worked in/for a tobacco manufacturing company?

(a) Yes   (b) No

59. When do you usually feel the urge to smoke cigarette? (SELECT ONE RESPONSE ONLY)

(a) I don't smoke cigarette

(b) When with a bottle of alcoholic drink

(c) When with my friends who smoke

(d) When alone

(e) When worried

(f) During social gatherings and ceremonies

60. Will an increase in the price of cigarette help to reduce smoking in Nigeria?

(a) Yes   (b) No

61. Will banning the manufacturing of cigarettes in Nigeria reduce smoking in Nigeria?

(a) Yes   (b) No

62. What influence(s) Nigerian youth to smoke the most? (SELECT ONE RESPONSE ONLY)

(a) Lack of laws regulating the sale and consumption of cigarettes

(b) Parental nonchalant attitude towards children who smoke

(c) The influence of their environment

(d) The influence of their friends and peer group

(e) The influence of their culture (cigarettes being given or used to youth during traditional ceremonies like marriages etc. and festivals)

63. Have you ever been sent on an errand to buy or sell cigarette when you were below 18yrs?

(a) Yes   (b) No

64. Will the enforcement of the regulation of the sale and consumption of cigarettes and other tobacco products help to reduce the prevalence of smoking among youth in Nigeria?

(a) Yes   (b) No   (c) Not sure

65. Will the youth in Nigeria comply with a law banning the consumption of cigarettes and other tobacco products?

(a) Yes   (b) No

66. Which of the following played a part in your picking the habit of smoking? (SELECT ONE RESPONSE ONLY)

(a) friends (b) parents (c) uncle, aunt, nephew, niece (d) brother or sister (e) age group (f) teacher (g) advert (h) home videos (i) parties (j) I don't smoke

67. Does smoking cigarette make you feel more like an adult?

(a) Yes   (b) No

13 December 2010

Ms. CO Egbe (210555060)
School of Psychology

Dear Ms. Egbe

PROTOCOL REFERENCE NUMBER: HSS/1485/010D
PROJECT TITLE: Risk influences for smoking behaviour amongst the youth in Nigeria: A socio-cultural
approach

EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process:

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

....
Professor Steven Collings (Chair)
HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

cc. Supervisor – Prof. I Petersen
cc. Prof. A Meyer-Weitz
cc. Mrs. S van der Westhuizen