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# An investigation into contemporary tobacco smoking behaviour in Nigeria: the impact of cultural transference on consumer behaviour and usage intentions.

ADEWUSI, I.

2021

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# An investigation into contemporary tobacco smoking behaviour in Nigeria: the impact of cultural transference on consumer behaviour and usage intentions

Idowu Adewusi

PhD

2021

## An investigation into contemporary tobacco smoking behaviour in Nigeria: the impact of cultural transference on consumer behaviour and usage intentions

Idowu Adewusi

A thesis submitted in partial fulfilment of the requirements of the Robert Gordon University for the degree of Doctor of Philosophy

February 2021

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#### Abstract

Tobacco has continued to be a global threat, particularly in developing countries. While it appears that the demands for tobacco products have continued to fall in many developed countries, tobacco growing and consumption is posited to become increasingly concentrated in developing countries. Studies have consistently linked the increase to its commercialisation by the tobacco industry, and globalisation is acknowledged to play a vital role in its evolvement. Although, the emerging area of study to understand this phenomenon has been on the economic, policy implementation and health behavioural aspect, behavioural issues such as the impact of the change in the global environment on tobacco use behaviour is unclear. Thus, prompted this research.

This research investigates the effect of the current anti-tobacco regime in major developed countries on the usage of tobacco products in developing countries. The research argued that the change in tobacco use behaviour on a global level where tobacco is increasingly becoming less socially acceptable is capable of influencing tobacco use behaviour in developing countries. The core theoretical focus is on consumer behaviour, particularly cultural values and personality traits, and the impact of cultural transference on tobacco usage intention.

The study adopted an interdisciplinary approach for rigorous review and integration of a body of texts critical to current knowledge on contemporary tobacco use behaviour. It deployed the research technique in a single setting in a focused attempt to draw parallels with existing theories and models, and through triangulation, extend the theory within the field of consumer behaviour. The data collection methods for the study consisted of a combination of mixed-method research. The first method for this research is an in-depth interview in the form of a series of focus groups, followed by the use of a questionnaire. The justification for this is the richness and depth of information gained from the analysis of multiple sources of data available to the researcher within a single setting.

The findings from the research show a subtle link between tobacco use behaviour in Nigeria and the ongoing events in the global environment. It demonstrated that while the global environment may influence individual tobacco use behaviour, individuals make decisions against the backdrop of interpretation of the global environment, within the constraints of their local environment. The research contributes to the utilisation of global consumer culture to advance tobacco use control. It also identified and recommended areas for future studies.

**KEYWORDS:** consumer behaviour, tobacco use behaviour, cultural transference, usage intension, consumer psychology, consumer culture, global consumer culture, tobacco control, environmental influence.

# Table of contents:

Abstra	act		i
Table	of co	ntents:	ii
List of	ftable	2S:	. vii
List of	f figur	es:	ix
List of	fappe	endices:	xii
СНАР	PTER	ONE:	1
Introc	luctio	n to the research	1
1.0	Intro	duction	1
1.1	Back	ground to the research	6
1.2	Justif	ication for the research	. 14
1.3	Rese	arch aim and objective	. 19
1.4	Rese	arch questions	. 20
1.5	Rese	arch methodology	. 20
1.6	Rese	arch assumptions	. 22
1.7	Rese	arch contribution and originality	. 23
1.8	Outli	ne of the thesis	. 24
1.9	Sumi	nary	. 25
СНАР	TER	τωο	. 26
Litera	ture r	eview	. 26
2.0	Intro	duction	. 26
2.1 Re	esear	ch context	. 26
2.2	Theo	retical foundation	. 36
2.2.	.1 C	ulture	. 37
2.	2.1.1	Structural functionalism	. 40
2.	.2.1.2	Symbolic interactionism	.41
2.	.2.1.3	Conflict theory	. 42
2.	.2.1.4	Critics of sociological classes	. 43
2.	2.1.5	The relevance of conformity and deviance to culture change	. 47
2.2.	.2 C	ulture and environment	. 49
2.	2.2.1	Cultural value orientations	. 52
2.	.2.2.2	Cultural orientation and environment	. 57
2.2.	.3 C	ulture, environment and technology	. 59
2.3 Tł	ne stu	dy of tobacco use	. 62

2.3.1	Concise account of Tobacco use	64
2.3.2	Tobacco in Nigeria.	69
2.3.3	Tobacco use prevalence in Nigeria	74
2.3.4	The culture of tobacco use in Nigeria	78
2.3.5	Activities of tobacco companies in Nigeria	81
2.3.6	Public knowledge of tobacco use	87
2.3.7	Public attitude towards tobacco use	92
2.4 Co	ntemporary tobacco use	96
2.4.1	The local community	98
2.4.2	1.1 Cultural identity	98
2.4.2	1.2 Social network	
2.4.2	1.3 Personality	
2.4.2	1.4 Symbolic meaning	112
2.4.2	1.5 Social environment	115
2.4.2	The global environment	117
2.4.2	2.1 Globalisation	117
2.4.2	2.2 Media and technology	119
2.4.2	2.3 Global culture	121
2.5 Re	esearch Model and Hypothesis	
2.5.1	Research justification	122
2.5.2	Research Model	125
2.5.3	The research questions and hypotheses	126
2.6 St	ummary	129
СНАРТЕ	R THREE	
Methodo	logy	131
3.0 Int	troduction	131
3.1 Re	search design	134
3.1.1	Research philosophy	135
3.1.1	1.1 Positivism	137
3.1.1	1.2 Constructivism	141
3.1.1	1.3 Critical theory	145
3.1.2	Selection of research philosophy	148
3.1.2	2.1 Justification for the choice of research method	151
3.1.3	Research design framework	156
3.1.3	3.1 The purpose of research	157

	3.1.3	.2 Types of investigation	. 160
	3.1.3	.3 Extent of research interference	. 160
	3.1.3	.4 Study settings	. 160
	3.1.3	.5 Measurement	. 161
	3.1.3	.6 Unit of analysis	. 165
	3.1.3	.7 Sampling design	. 166
	3.1.3	.8 Time horizon	. 175
	3.1.3	.9 Data collection	. 176
3.2	Pro	cedure	. 189
3	.2.1	Exploratory phase	. 195
3	.2.2	Survey phase	. 197
3.3	Etł	nical consideration	. 211
3	.3.1	Information Consents	. 212
3	.3.2	Exercise debrief	. 212
3	.3.3	Participants protection	. 212
3	.3.4	Accuracy	. 212
3	.3.5	Confidentiality	. 213
3	.3.6	Voluntary participation	. 213
3.4	Lin	nitation	. 213
3	.4.1	Limitation from the research design	. 213
3	.4.2	Limitations on the research approach	. 215
3	.4.3	Limitation of surveys	. 215
3.5	Del	imitations	. 216
3.6	Sur	nmary	. 216
СН	APTEI	R FOUR	. 218
Res	ult		. 218
4.0	Inti	oduction	. 218
4.1	Qua	alitative report	. 218
4	.1.1	The focus group analysis	. 223
4	.1.2	Reports from the focus group	. 223
	4.1.2	.1 The general pattern of tobacco use	. 224
	4.1.2	.2 The attitude and perception of tobacco use	. 226
	4.1.2	.3 Awareness of tobacco control	. 231
	4.1.2	.4 Influence of microenvironment factor on tobacco behaviour	. 234
	4.1.2	.5 Influence of macro-environment factor on tobacco behaviour	. 237

4.2	The	qua	antitative report	240
4.	2.1	The	e demographic profile	245
4.	2.2	Beh	navioural pattern of tobacco use	246
4.	2.3	An	alysis of scale reliability and validity	251
	4.2.3	1	Tobacco use behavioural establishment	251
	4.2.3	.2	Social network	252
	4.2.3	3	Symbolic meaning	253
	4.2.3	.4	Self-esteem	254
	4.2.3	5.1	Self-concept	255
	4.2.3	.6	Tobacco use deterrent	257
	4.2.3	.7	Globalisation	257
	4.2.3	.8	Dimension of culture	258
4.	2.4	The	e descriptive analysis of measurement scale	261
	4.2.4	1	The result for Tobacco use behavioural intention	262
	4.2.4	2	The result on social network	263
	4.2.4	3	The results for Symbolic meaning	264
	4.2.4	.4	Results for Self-esteem	265
	4.2.4	5	The result on self-concept	266
	4.2.4	.6	The result of Tobacco use deterrent	268
	4.2.4	.7	The result on globalisation	269
	4.2.4	.8	Result on the cultural dimension	270
4.	2.5	The	e report of statistical tests	272
	4.2.5	1	correlation analysis	272
	4.2.5	2	Multiple regression analysis	275
	4.2.5	3	Model predictive testing	279
	4.2.5	4	Hypothesis test	281
4.3	Lim	itati	on	283
4.4	Sun	nma	ıry	284
CHA	<b>APTE</b> F	R FI	VE	285
Disc	cussio	n		285
5.0	Intr	odu	ction	285
5.1	The	find	dings from research questions and the research objectives	285
5.	1.1 O	ver	view of findings from the qualitative research	288
5.	1.2 0	ver	view of findings from the quantitative research	290
5.2	The	imp	pact of the global environment	292

5.2	.1	Media and technology	293
5.2	.2	Globalisation	294
5.2	.3	Global culture	295
5.3	The	e impact of the local environment	296
5.3	.1	The cultural identity	296
5.3	.2	Social network	297
5.3	.3	Personality	298
5.3	.4	Symbolic meaning	299
5.3	.5	Social environment	301
5.4	The	eoretical contribution	301
5.5	Met	hodological contribution	303
СНА	PTEF	R SIX	305
Concl	lusio	n	305
6.0	Intr	roduction	305
6.1 devel		nclusion on the impact of contemporary global culture on tobacco us	
6.2 tobac		nclusion on the nature of the impact of contemporary global culture on the nature of the impact of contemporary global culture on the second	
6.3	Con	nclusion on the implication for tobacco control	309
6.4	Lim	itation of the study	310
6.5	The	e recommendation for future research	313
Refer	ence	2:	315

## List of tables:

Table 2. 1: Sociological classes that describe deviant behaviour
Table 2. 2: The Hofstede's ranking for Masculinity and Femininity         56
Table 2. 3: Timeline of Nigeria's Tobacco Control Legislative Efforts From 1990–
2015
Table 2. 4: Description of personality trait       107
Table 3. 1: Research Philosophy Paradigms       136
Table 3. 2: Critical Realist Research Designs.       146
Table 3. 3: Explanations and examples of critical realist strategies         147
Table 3. 4: The comparison between qualitative and quantitative
Table 3. 5: the strengths and weakness of the mixed method         150
Table 3. 6: Theory construction in quantitative and qualitative research158
Table 3. 7: Types of data and their measurement characteristics         162
Table 3. 8: The sample size for different population sizes         168
Table 3. 9: Summary of quantitative and qualitative sampling
Table 3. 10: Common problems associated with sampling design and strategies
to tackle them
Table 3. 11: summary of the comparison of primary and secondary approach to
data collection
Table 3. 12: The advantages and disadvantages of the Focus Group
Table 3. 13: Examples of various methods used to measure the degree of
difference in closed questions
Table 3. 14: The types of questionnaire distribution showing the advantages and
disadvantages184
Table 3. 15: The endogenous and exogenous challenges of data collection in
developing countries
Table 3. 16: The major mixed methods design types
Table 3. 17: The quality assessment strategy for the study
Table 3. 18: The guideline for conducting mixed method       199
Table 3. 19: Focus group discussion question guide
Table 3. 20: Questionnaire questions    205

 Table 4. 1: Group blueprint - Three variables
 220

Table 4. 2: Group blueprint - Four variables	220
Table 4. 3: Demographics of focus group participants	222
Table 4. 4: The demographic characteristic of the quantitative research	246
Table 4. 5: Table displaying the tobacco use of behavioural patterns	247
Table 4. 6: Table displaying the frequency of tobacco use per respondents?	249
Table 4. 7: Table displaying the result from behavioural intention	262
Table 4. 8: Table displaying the result on the social network	264
Table 4. 9: Table displaying the result from the symbolic meaning	265
Table 4. 10: Table displaying the result from Self-esteem	266
Table 4. 11: Table displaying findings from the self-concept (positive dimension	on)
	267
Table 4. 12: Table displaying result from the self-concept (negative dimension	ı)
	268
Table 4. 13: Table displaying results from the tobacco deterrent	269
Table 4. 14: Table displaying results from the globalisation	270
Table 4. 15: Table displaying results from the cultural dimension	271
Table 4. 16: Table displaying test of normality	273
Table 4. 17: Table showing the correlation result	274
Table 4. 18: Table showing the Model summary	275
Table 4. 19: illuminates the assumptions tested from the multiple regression	
analysis for this study	277
Table 4. 20: Table displaying the ANOVA result	278
Table 4. 21: Table showing the result for the Coefficients	279
Table 4. 22: The hypothesis test results	

# List of figures:

Figure 1. 1: The illustration of the relationship between consumer behaviour,	
local community and global environment	8
Figure 1. 2: Global and regional estimates of the prevalence of tobacco use by	
sex 1	L7

Figure 2. 1: Relationship between Culture, Technology, Social Environment and
Behaviour
Figure 2. 2: Broader context guiding the literature review
Figure 2. 3: Ritze's Integrated Micro-Macro Theory of Social Analysis
Figure 2. 4: The changes in consumption from 1980- 2016, by WHO regions 66
Figure 2. 5: Percentage distribution of current tobacco users by tobacco use
pattern, GATS Nigeria 201275
Figure 2. 6: Model of Automatic Processes
Figure 2. 7: The relationship between microenvironment and macroenvironment
and self-identity as it relates to tobacco use
Figure 2. 8: The abridged conceptual model developed for this study126
Figure 3. 1: Dialectical tension view of basic and applied research133
Figure 3. 2: Research Onion135
Figure 3. 3: The Deductive research process

righte 5. 5. The Deductive research process	
Figure 3. 4: The Inductive research process	142
Figure 3. 5: The Triangulation design	152
Figure 3. 6: The Embedded design	153
Figure 3. 7: The Explanatory design	153
Figure 3. 8: The Exploratory design	154
Figure 3. 9: The research design	156
Figure 3. 10: Type of sampling designs	170
Figure 3. 11: The graphical representation of the research design	189

Figure 4. 1: Missing Value Patterns	.243
Figure 4. 2: Graph showing the missing value pattern	.244
Figure 4. 3: The Wilcoxon signed-rank test	.281

Figure 5. 1: The relationship between Macroenvironment and Microenvironment	
and tobacco use behaviour293	
Figure 5. 2: The relationship between macroenvironment and tobacco use 296	
Figure 5. 3: Relationship between microenvironment and tobacco use behaviour	

## **Lists of Pictures:**

Picture 1. 1: A billboard showing a trendsetter advertisement in Lagos, Nigeria.	I
	82
Picture 1. 2: Showing exposure to tobacco and its advertising	83
Picture 1. 3: Tobacco retail store close the premises of a school	84
Picture 1. 4: Branded sticker on a transparent container for tea and candies	85
Picture 1. 5: The Great Brands distribution network.	86

# List of appendices:

Appendix 1: Highlights from the focus group exercises	362
Appendix 2: The Scatter plot to test for relationship between the dependent	
variable and independent	389
Appendix 3: The variance of the residuals	391

#### **CHAPTER ONE:**

#### Introduction to the research

#### 1.0 Introduction

According to the World Health Organisation, the tobacco epidemic is one of the most significant public health threats facing the world today, killing over 8 million people annually (World Health Organisation, 2019). Even with scientific evidence consistently confirming that direct use of tobacco and exposure to tobacco smoke cause deaths, diseases and disabilities to users and non-users, the tobacco epidemic has continued to linger at a global scale (U.S. Department of Health and Human Services, 2006; Law and Hackshaw, 1996; Oberg et al., 2010, and World Health Organisation, 2019). Going by the World Health Organisation's report on the Global Tobacco Epidemic (2019), while it appears that the prevalence of tobacco use has continued to decrease proportionately in many countries, has remained high. Consequently, there are predictions that the preponderance of the impending morbidity and mortality as a result of tobacco use will occur in developing countries.

The literature on tobacco has established that both smoke and smokeless tobacco are associated with the tobacco epidemic (Proia et al., 2006; Bolinder, Englund and De Faire, 1994; Critchley and Unal, 2003). However, unlike studies on smokeless tobacco that recently started to gain popularity, the literature on smoke tobacco is versed and vastly accessible. Thus, it makes the available information on smoke tobacco adequate to draw a case on a global scale. Also, smoke tobacco mostly in the form of cigarettes accounts for more than 80% of all the tobacco sales in the world (Jha et al., 2015). It is by far the most common means of people indulging in tobacco and feeding their nicotine addiction (National Institute on Drug Abuse, 2019). Thus, labelled as the leading cause of tobacco epidemic globally, accounting for one in ten deaths around the world (Reitsma et al., 2015). In 2004, 26% of men, 47% of women and 28% of children of the 600,000 recorded mortalities were as a result of exposure to secondhand smoke (Oberg et al., 2010). It is for these reasons this study focused on smoked tobacco, particularly cigarette smoking as

opposed to other forms of tobacco use. However, the study does not imply that the use of other forms of tobacco products are safer or less critical in any way. The impetus behind this approach is the access to ample data on cigarette smoking that allows for thorough study and easy comparison of findings. In the remainder of this thesis report, tobacco smoking, cigarette smoking and smoking are used interchangeably to discuss smoked tobacco.

This study investigates the impact of the ongoing global anti-tobacco regime, particularly in developed countries on current tobacco use behaviour in developing countries, in the context of Nigeria. Considering the disadvantages associated with tobacco, a substantial number of reports have underlined the importance of reducing tobacco use and exposure to tobacco smoke (Kwan, Stratton, and Bonnie, 2015; Community Preventive Service Task Force, 2015; Gelband and Sloan, 2007; Toll et al., 2014; World Health Organisation, 2019). Several of these reports, particularly that of the World Health Organisation have emphasised the need for countries to develop and maintain a comprehensive, multifaceted strategy that reduces tobacco use initiation, increases tobacco use cessation and minimises the exposure to tobacco smoke (World Health Organisation, 2019).

While reports are suggesting rapid continuous success by the government of many developed countries in addressing the tobacco epidemic in these regards (World Health Organisation, 2013, 2015, 2017), it appears that the same cannot be said of many developing countries. There are indications from emerging reports suggesting that governments of many developing countries including Nigeria have continued to struggle in implementing comprehensive measures to tackle the tobacco epidemic (World Health Organisation, 2015, 2017; Drope, 2011). Some of the challenges identified to be responsible for this include tobacco company lobbying and opposition to tobacco control (Otañez, Mamudu, and Glantz, 2009; Bialous, 2019; Oladepo, Oluwasanu, and Abiona, 2018); lack of funding and conflict of interest by government agencies (Oladepo, Oluwasanu, and Abiona, 2018; Abdullah and Husten, 2004); and insufficient national capacity building that supports comprehensive tobacco control measures (Stillman, Figueiredo, Hermandez-Avila and Samet, 2006; Oladepo, Oluwasanu, and Abiona, 2018).

Much has been documented on the upstream (that is, the government, government agencies, and tobacco companies) in many developing countries on the challenges of implementing comprehensive tobacco control measures. However, there is very little information on the current state of the downstream (that is, the people) regarding current tobacco use behaviour. According to McCarthy (2016), understanding, analysing and keeping track of consumer behaviour is critical to tobacco control. Take, for instance, the overview of the origin of tobacco control has shown that tobacco was considered as a socially accepted product until epidemiological and experimental studies linked its use to ill health. The link between tobacco use and illness prompted the control of tobacco use, thereby causing a fall in the social acceptance of tobacco use in many of the regions where tobacco use was controlled (Dani and Balfour, 2011).

Subsequently, tobacco companies are aware of the importance of the social acceptability of tobacco. Thus has prompted them to monitor the public perception of social acceptability in every aspect of their markets and pursued a political and public relations strategy to combat the unacceptableness of tobacco use (Francey and Chapm, 2005; Ling and Glantz, 2005; and Anderson, 2011). In line with the origin of tobacco control and counter activities by tobacco companies, a study conducted by Brown and Willison (1977) on new brand development for cigarettes also demonstrated the importance of consumer behaviour. The study revealed that smokers' concern about their health and concern about social censure were vital forces that drive tobacco use behaviour.

Although the psychology that underlies human behaviour and its subsequent change is a complex process, understanding the behaviour and in what context such behaviour changes is essential to tobacco study (McCarthy, 2016; and Briggs, 2015). Several theories have been applied in behavioural studies to understand behaviour and predict a behavioural change will occur (Kelly and Barker, 2016; Prager, 2012). Take, for instance, the theory of reason action and the theory of planned behaviour. It predicts that people are likely to change their behaviour if they believe that changing such behaviour will improve their health, is socially desirable and that there is a social pressure to change, and that they have personal control over the action and have the ability to change (Speller, 2015).

Likewise, the theories of health behaviour suggest that the dynamic interaction among biological, psychological and social factors determines tobacco use behaviour. They suggest that individual action has biological underpinnings and consequences, and the social and psychological context in which an action happen plays a vital role in influencing it (Brandt et al., 2001). While the application of these theories to understand or predict that behaviour change will occur seems straight forward, it appears it is not always the case, particularly in the case of tobacco use behaviour. According to Kelly and Barker (2016), actions take place in a social environment. Thus, any effort to predict or change it should take into consideration the socio-environmental factors, including the political and economic forces which act directly on people's behaviour regardless of any choice of their actions.

Prager (2012) has argued that behavioural theories and models of behavioural change are not capable of bringing about behaviour change, nor predict with certainty that a behavioural change will occur. Likewise, Davis et al., (2015) stated that behavioural theories and models of behavioural change generally tend to emphasise the individual and sometimes interpersonal rather than the broader social and environmental variables. Consequently, the context such as social and environmental variables are far less likely to be considered (Davis et al., 2015). Conducting a study that considers variables from different levels such as individual, community, and population-level is highly appreciated in behaviour studies, particularly in public health research that intends to change behaviour or predict a behavioural change (Kelly and Barker, 2016, and Davis et al., 2015).

According to the National Institute for Health and Care Excellence (2007), interventions are more effective when simultaneously targeted at variables at different levels. Hence, behavioural studies that aim to understand tobacco use behaviour are likely to benefit from drawing from a wide range of theories than on current theories. In recognition of this, this study is built on the premise that tobacco use is a learnt social behaviour before resulting in addiction for many of its users (Lynch and Bonne, 1994; and Roberts, Kerr, and Smith,

2013). Also, the social environment (consumption environment) plays a vital role in shaping tobacco use behaviour (U.S. Department of Health and Human Services, 2012).

The decline of tobacco use in many developed countries, including the United States, the United Kingdom and Australia have proven to follow the same pattern of the origin of tobacco control, as mentioned earlier. The knowledge about the disadvantages associated with tobacco, health concerns and social acceptability are some of the vital forces that influenced tobacco use behaviour in these regions (Cumming and Proctor, 2014). Factors associated with these forces include the continual increase in the awareness of tobacco harm, the change in the norms that support its use, the surge in the regulatory interventions that limit the accessibility to tobacco products, and shift of global public opinion towards tobacco use (Cumming and Proctor, 2014; and Cumming, Fong, and Borland, 2009). These factors have inevitably caused tobacco use to become less appealing, thereby reducing its social acceptability.

In line with the above, the current study argued that the change in tobacco use behaviour on a global level that is increasingly characterised by the exchange of information and where tobacco is increasingly becoming less socially acceptable would impact on tobacco use behaviour in developing countries. It presumes that tobacco behaviour is a learnt behaviour that was promoted directly or indirectly from developed countries (Mackey, 1994). Also, developed countries are pacesetters that lay examples for others to follow. Thus, a change in tobacco use behaviour in developed countries will inevitably impact tobacco use behaviour in developing countries. The presumptions are in agreement with the findings from the Institute of Medicine (U.S.) Committee on Health and Behaviour (2012) that recognised the implication of influences at multiple levels, including individuals, family, community and society, on tobacco. The influences at multiple levels are more likely to cause behavioural change and subsequently maintain behaviour.

Study of this nature is significant to tobacco control in developing countries. Similar to tobacco companies and marketers that rely on the analysis of consumers as a successful tool to meet their sales objectives, the understanding of consumer behaviour serves as a prerequisite for the success of any tobacco control measures (McCarthy, 2016). Thus, studying smoking behaviour in the context of the contemporary consumer environment provides another perspective to tobacco control. The rest of this chapter provides an introduction and context for this study. It begins with the background and justification for the study by identifying and examining the relationship among determining factors. It further presents the research aim and objectives, research questions, description of the research methodology, contribution and originality, research assumptions and scope, and the thesis structure.

#### **1.1** Background to the research

In recent decades, the world has continued to witness continuous transnational interaction mostly facilitated by the ongoing process of globalisation, technological advancement, media proliferation, mass movement of people, and transnational exchange (Kraidy, 2002; and Knobler, Mahmoud, and Lemon, 2006). As a result of these, shared experiences are no longer confined to the local community but also extend to the global society (Knobler, Mahmoud, and Lemon, and Lemon, 2006). Likewise, the increased transnational interaction has exposed the darker underside, as well as dissolve the barriers and perceived differences (Parepa, 2012). All of these do not only affect human life, in terms of consumption and decision making but also impacts culture, political systems, human well-being, economic development and prosperity in communities around the world (Mukerji, 2013).

The impact of transnational interaction in the context of broader society on consumers is widely debated and established to be a double-edged sword. On the one hand, many believe transnational interaction comes with negative influences such as the increase in social conflict, loss of identity, and huge encouragement of risky behaviours, such as tobacco use, particularly predominant among children and young adults. Conversely, there are beliefs that individual interactions on a global level have brought about a series of advantages, including the tolerance and understanding of others. In particular, there is the perception that the global environment has created the means for interaction among the different populations in the world, that in return inspired lifestyles, as well as social changes that came with health benefits (Raikhan et al., 2014; and Rozkwitalska, 2014; and Westin Bastos, and Dahinden, 2010).

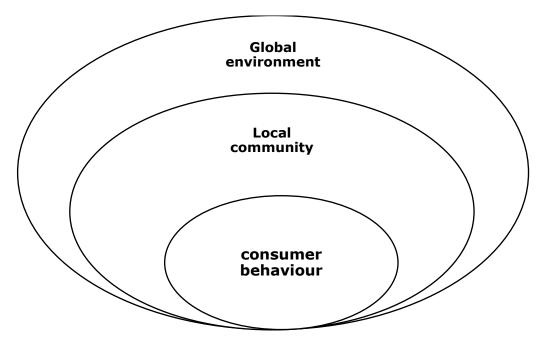
In either case, the increase in transnational interaction has brought about continuous and rapid change to the human environment (Raikhan et al., 2014; and Rozkwitalska, 2014). Such change has continued to modify human behaviour, and such modification is perceived to occur at a faster rate than anyone or governments can control (Edwards, 1999). Thus, strengthens the purpose of this research, as, in recent years, the role transnational interaction plays in facilitating tobacco use prevalence has continued to receive attention. While this may be the case, it appears that the majority of the attention has been on the inequality effect in the context of tobacco distribution between focused and marginalised communities facilitated by forces of globalisation. In other words, most of the focus is on the degree of increase in the prevalence of tobacco use in developing countries due to the ongoing market expansion across the border caused by ceaseless tobacco control in the traditional market (Lee, Eckhardt and Holden, 2016; World Health Organisation, 2019).

The possibility that the continuous transnational interaction, such as the context of diffusion of information and cultural transference, is capable of modifying tobacco use behaviour has received very little attention. As mentioned earlier, understanding human behaviour is an essential part of tobacco control planning. Thus, given that the social environment that shapes human behaviour is predisposed to change, it is significant for countries to make a conscious effort to understand it peoples' behaviour to be able to control tobacco epidemic successfully (McCarthy, 2016). Humans are perceived to be active agents that continue to make efforts to fulfil their bodily needs and mental desires within a complex and ever-changing surrounding while interacting with their social environment (Farnsworth, 2019).

Human behaviour is a general term used vaguely to describe human actions and conducts. However, this study follows the description that the way individuals or groups of people fulfil their needs and desires says a lot about them (self-identification), the affiliation to their surroundings (social identity) and the dependence on their immediate environment for guidance (Stangor, 2017). In other words, the way individuals see themselves (self-identification) plays a critical role in their behaviour, and self-identification is perceived to be heavily influenced by the social factors in the individuals' surroundings. Going by this, it suggests that the creation of self-identification does not occur in isolation, but by interaction with one's environment (Stangor, 2017; and Leary and Tangney, 2011). Likewise, self-identification is assumed to be meaningful only within the social context (Stangor, 2017; and Kinket and Verkuyten, 1997).

If so, it is safe to assume that the social situation defines individuals' selfidentity and that individuals will rely on others to provide a 'social-reality' that helps determine what to think, feel or do. In the past, studies viewed selfidentification as strictly shaped by one's interaction with members of the primary group, such as family and peer groups, within the local surrounding (Leary and Tangney, 2011; Stangor, 2017). However, emerging studies suggest that the formation of contemporary self-identity is subjective to the dynamics in the local surroundings as well as the global environment, as further discussed in the subsequent subsections (Westin, 2010). Summing these together suggest that global practice within the constraints of the local surrounding shape self-identification that defines individual behaviour. The relationship between consumer behaviour and the social environment is illustrated in figure 1.1 below.





*Source: Developed for this study* 

#### The tobacco use in a social environment

As suggested in the introductory part of this study, tobacco use is a learnt behaviour (Lynch and Bonne, 1994; and Roberts, Kerr, and Smith, 2013). It explains the reason the emerging research on tobacco tends to lean more towards the health and behavioural aspect, whether focused on an individual, community or population level. Many of these studies are conducted to understand the ways to alter tobacco use behaviour primarily through reinforcing health-related knowledge and changing attitudes and structural barriers and facilitators that encourage tobacco use (Robert, Kerr, and Smith, 2013; Golechha, 2016; and Cumming, 2009). While past studies have identified a wide variety of factors that influence tobacco use behaviour, there seems to be a consensus within epidemiological studies. It appears socioenvironmental factors, particularly society and culture primarily elucidate the distribution, as well as sustain tobacco use within and between populations (Robert, Kerr, and Smith, 2013; Golechha, 2016; Cumming, 2009; and Christakis and Fowler, 2008).

The study by Christakis and Fowler (2008) demonstrated this assertion. A survey carried out among 12,067 people over 30years, showed that tobacco smoking behavioural trend links strongly to an individual's social ties within a social environment. Findings from the study revealed that a smoker whose social tie consists of an increasing share of non-smokers was more likely to quit smoking over time and vice versa. Likewise, in the case where there is a change in a particular behaviour in the social environment, individuals regulate their behaviour by tracking the surrounding as it changes and by tracking their conspecific behaviour. The critical elements identified in this study include the social interaction and sharing of behaviour within a population.

Social science explains culture as the totality of any given society's belief system, laws, mores, practices, languages, as well as the attitudinal variables that make social groups unique from others (Spencer-Oatey and Franklin, 2012). According to Gavac, Murrar and Brauer (2016), culture is what causes people to act and behave in specific ways considered appropriate within a social group. Accordingly, to consider behaviour as cultural, it needs to be shared extra-genetically. In other words, it must be learnt through interaction and passed from one person to another (Al-Saleh and Romano, 2015; and Spencer-Oatey and Franklin, 2012). Exploratory studies on the influence of socio-culture on tobacco suggest that culture controls many aspects of tobacco and that tobacco use - including its plants and products are symbolic for many of its users across the world (Egbe et al., 2014; Rusell, 2019; and Arcury and Quandt, 2006).

Take, for instance, Rugkasa et al., (2001) presented data that suggest that children and young adults may indulge in tobacco use as a means of communication and negotiation of social status among their peers. Likewise, literature identified other socio-cultural contexts that explain tobacco use as viewing tobacco use as a symbol of hospitality; as a prestigious behaviour resulting in significant personal satisfaction; and association of tobacco use with religion or tribes, to mention a few. While there are indications that culture plays a profounding role in determining human behaviour, culture and cultural change are predisposed to evolve through time (Creanze, Kolodny, and Feldman, 2017). Thus, the complex dynamic nature of culture requires taking a holistic look that includes understanding the culture within and outside the environment in which it exists.

Anthropological studies have demonstrated that understanding the concept of cultural change means recognising that culture is as a result of human actions and interactions embedded in a social environment (Gavac, Murrar and Brauer, 2016; Creanze, Kolodny, and Feldman, 2017; and Unger et al., 2003). Also, human actions and interactions are considered kinds of social practices that respond to the expanding scope of the social environment (Doku and Asante, 2011). Thus, following the illustration in figure 1.1, the study conceptualised the scope of the social environment as a local society and global environment where rapid technology advancement, media proliferation and transnational exchange serves as the bridge between the people and the environment. This claim conforms with the works of Jain (1987); Czinkota and Ronkainen (1993); Assael (1995); and Bullmore (2000) that suggested that culture in the context of way of doing things around the globe is increasingly becoming homogeneous.

Likewise, Little et al., (2012) suggest that interaction on the macro-level (global environment as a result of global proliferation) is increasingly defining contemporary culture. Thus contravene the traditional belief that micro-level interactions (local society including family, friends and neighbours) are primary factors that shape culture. Culture is said to be more than ever similar from country to country. Besides, multinational corporations in an attempt to push their products around the globe have contributed to this phenomenon by opposing local variation (Czinkota and Ronkainen, 1993). The implication of this is that it alters traditional practices, inevitably homogenising global consumers' needs and desires. Lastly, the pervasiveness of social media also plays a critical role in broadening social connection and learning skills, meaning that self-identification can be formed by interacting with others without physical contact (Stangor, Jhangiani, and Tarry, 2017; Unger et al., 2003).

#### The social context of tobacco use

In recent times, there has been increasing demand in the field of tobacco control to consider the social context of tobacco. While the demand has continued to gain momentum, it has remained clear that the intention behind the call is not to replace the biological basis of tobacco addiction but to have an encompassing perspective on the study of tobacco use behaviour (Poland et al., 2006; Unger et al., 2003). In particular, the demand for the study of the social context of tobacco is to search for useful information that will help solve the growing concern of tobacco use behaviour, especially among vulnerable, and socially and economically marginalised groups (Poland et al., 2006; and Lantz, 2003). Likewise, there is the belief that the study of this nature is capable of revealing other factors that encourage and sustain tobacco use, and ultimately, proffer avenue for the effective control of tobacco epidemic (Poland et al., 2006; Center for Disease Control, 2012; and Panaino Soares, and Campos, 2014).

In the traditional sense, social context is the circumstance that forms the setting or environment for an activity or event and in terms of which the activity or event can be fully understood (Baez, Garcia and Ibanez, 2018). In other words, social context completes the condition for understanding a focal event or activity and is determined relative to the focal event or activity (Absar,

O'Brien and Webster, 2014). Thus, going by Unger et al., (2003) it is believed that the primary purpose of employing the concept of social context in tobacco studies is to look beyond the long-held belief that biological factors solely guide tobacco use. It is understood that the situations in which tobacco use occurs, especially in the context of the collective or group characteristics of social settings also play a critical role in tobacco use. This reorientation conforms with Glass and McAthleen (2006, p.15). They argued that the study of behaviour such as tobacco in isolation from the socio-environmental context is incomplete, and has contributed to the disappointing results of experiments aimed at changing tobacco use behaviour. Likewise, Curry (2005) argued that to gain a holistic understanding of behaviour require a conscious attempt that takes into consideration the individuals' choices or action from its social context.

Scientific studies have demonstrated that biological bases (that is, the pharmacological effect of components, such as the nicotine present in tobacco) drive tobacco use behaviour. However, convincing evidence from the literature suggests that the social environment (that is the immediate surrounding and social settings which an individual inhabits) also play an essential role in tobacco use behaviour and in determining the reaction to the biological effect from tobacco (Unger et al., 2003; Curry, 2005; and Poland et al., 2006). A number of these studies conceptualised tobacco use from a socio-ecological perspective that considered the broader socio-environmental context in which tobacco use occurs (Wedge and Bondurant, 2009; Nilsson, 2009 and Sussman and Ames, 2008). This perspective recognised that individuals inhabit a complex system of layered social and environmental context in which the individuals learn, socialise and go about their daily activities. Thus, they reckon that both intrapersonal (that is biological characteristics) and socioenvironmental predictors influence each other to determine the probability of tobacco use. Going by the Center for Disease Control (2012), the social environment of people can shape their daily experience, and directly or indirectly impact on the intrapersonal characteristics, as well as lifestyle and behaviour.

In line with this view, the theoretical model proposed by Sussman and Ames (2008) to understand the social context of tobacco viewed factors that predict tobacco use behaviour from a nested broader socio-environmental structure. According to the model, the biological or psychological variables that reinforce tobacco use function within a broad context of small social groups (including family, and peer groups), that operate within a broader socio-environmental context (including immediate community or neighbourhood). Similarly, in a study conducted by Nilsson (2009) on the social context of tobacco use in adolescents summarises the predictors of tobacco use as micro (including genetic and biological influence, and demographic variables like gender, age and ethnicity), embedded by meso (including immediate such as family, peer and school-related) and entrenched by macro (including policy, social acceptability and media). While these studies have used multilevel modelling technique to examine the relationship between interpersonal characteristics and environmental structure, not much attention is given to the impact the expanding scope of a social environment in the context that an emerging global society has on tobacco use behaviour.

The general purpose of studying the social environment and human behaviour in behavioural science is to generate insight of the impact of the social environment on individual behaviour and how individual actions (particularly in terms of collective or groups of people) affect the social environment (Stangor, Jhangiani and Tarry, 2017; and Patterson, 2015). On the one hand, there is a perception that the social environment of individuals can create in them emotions about an object or event based on how they interpret their environment, that can then influence their decision-making process. In other words, individuals interpret their social environment and make a perception about an object or event based on their intrapersonal factors, that inevitably impact on their behaviour (Stangor, Jhangiani and Tarry, 2017). While, on the other hand, there is a perception that individuals as social beings interact together in an environment, whereby, a change in particular behaviour leads to change in the social environment (Patterson, 2015).

Thus, given that contemporary consumers are increasingly sensitive to their surroundings to survive and they rely on it to make decisions (Grubor and Maric, 2015), brings another dimension to the study of social environment and behaviour, particularly the study of tobacco use. Firstly, the expanding scope of a social environment, more than ever, means more people are connected than ever before (Stangor, Jhangiani, and Tarry, 2017). Thus, it suggests that contemporary decision-making process forms alongside the backdrop of the interpretation of the global events, within the constraints of the local surroundings (Grubor and Maric, 2015). Secondly, going by Procter-Scherdtel and Collins (2012) who argued that exposure to social attitude and behaviour towards tobacco could hinder or encourage its use, suggest that the change in the reception of tobacco use in the broader environment can impact on individual tobacco use intention. Hence, this further supports the relevance of this study that aimed to generate relevant insight into the impact of the contemporary global tobacco use environment on individual behaviour and usage intention.

#### **1.2** Justification for the research

The World Health Organisation has continued to call for stern action to control tobacco and to curb the growing tobacco-related epidemics in the world, particularly in developing countries (World Health Organisation, 2019). This call is primarily due to the disadvantages associated with its use, and the imminent threat it has on the development of any nation. Tobacco is generally referred to as the most common and highly dangerous risk factor responsible for many chronic non-communicable diseases that are responsible for about 70% of deaths in the world (World Health Organisation, 2019). By the end of the 20<sup>th</sup> century, tobacco was responsible for about 100 million deaths in the world, with over 70% of these deaths occurring in developed countries (Anderson et al., 2015). At that time, developed countries were the ones disproportionally impacted by the tobacco epidemic. While the current predicted estimated tobacco-related deaths seem to be troubling as it appears that the figure will grow higher. This time developing countries are the ones forecasted to be most impacted. Going by the current figure of global tobacco users, there are estimates of 1.1 billion tobacco users in the world with reports suggesting that 880 million of them reside in developing countries (World Health Organisation, 2019). As such, unless they stop, they are likely to die

prematurely. If so, what is learnt from past events regarding the change in the proportion of tobacco users by countries?

Studies have generally associated the change in the proportion of the global tobacco epidemic to the ratification of the World Health Organisation Framework Convention on Tobacco Control. The convention developed in response to the globalisation of the tobacco epidemic has since its inception seen 176 countries become members (World Health Organisation, 2019). The World Health Organisation established the convention to protect the present and future generation from the devastating health, social, environmental and economic consequences of tobacco and exposure to tobacco smoke, by providing a framework for member states to build on for tobacco control measure implementation at national, regional and international levels. It sets out to reduce continually and substantially the prevalence of tobacco use and exposure to tobacco smoke (WHO FCTC, 2005).

A high-level implementation of the World Health Organisation Framework Convention on Tobacco Control (WHO FCTC) is capable of reducing tobacco use and exposure to tobacco smoke. Already, literature has demonstrated that substantial and sustained actions, particularly the ones taken by governments of developed countries, have led to several achievements in tobacco control in many of these regions. For instance, Australia is known for being the pioneer of introducing one of the most stringent tobacco promotion laws in the world; plain packaging legislation (Mostafa and Kashiwabara, 2016). Upon initiating the plain-packaging policy, the country witnessed a decrease in the population of adults smokers from 18% in 2010 to 14% in 2016 (World Health Organisation, 2017). Likewise, developed countries including the United States and the United Kingdom have seen a decline in the total population of tobacco users (Jamal et al., 2018; Department of Health and Social Care U.K., 2018).

While studies have demonstrated the benefits of the Framework Convention on Tobacco Control on a global level, emerging evidence suggests that the benefits come with an unintended consequence such as creating inequalities in the prevalence of tobacco use among countries (Oladele et al., 2013). There are reports that the gradual decline in global tobacco use, particularly in developed countries, is being offset by the increase in the tobacco uptake in developing countries. The rise in population in developing countries, as well as the tobacco industry's market shift and aggressive marketing activities in these regions, have primarily contributed to the phenomenon (World Health Organisation, 2019). In particular, there are reports of tobacco industry using investment and trade liberation to seek new customers and markets in developing countries to keep up with the challenges of doing business in their traditional market (Gilmore et al., 2015). These claims explain the possible reason for the gradual increase in cigarette smoking among many African countries while other developed countries are experiencing a decline (English, Hsia and Malarcher, 2016; Egbe et al., 2014; Blecher and Ross, 2013).

Figure 1.2 shows a significant growth in tobacco use in developing countries, particularly in the African region, where tobacco use is relatively low. It appears that there is an increase in the prevalence of tobacco in parts of sub-Saharan Africa, where traditionally, smoking is not necessarily part of their culture. Take, for instance, tobacco use in Cameroon. There are reports that the smoking rate in this country rose from 7% in 2000 to 22% in 2016 (World Health Organisation, 2017). Likewise, there is a notable increase in tobacco use in Senegal. In the case of Senegal, it is worth noting that 95% of the total population of the country are Muslims, and smoking is not known to be part of their tradition. As such, many religious neighbourhoods of the country frowns at smoking. However, despite the religious and legal safeguards, youth in Senegal are said to have continued to light up cigarettes (Ba et al., 2017). Other countries that have shown an increase in the prevalence of tobacco use include Mali, Congo and Nigeria. All of these countries appear to have experienced a rise in tobacco use (World Health Organisation, 2017). While tobacco use in the African region is still in an early stage (Lopez et al., 1994), it is marked as the most significant threat area regarding the future growth of the tobacco epidemic (World Health Organisation, 2016)

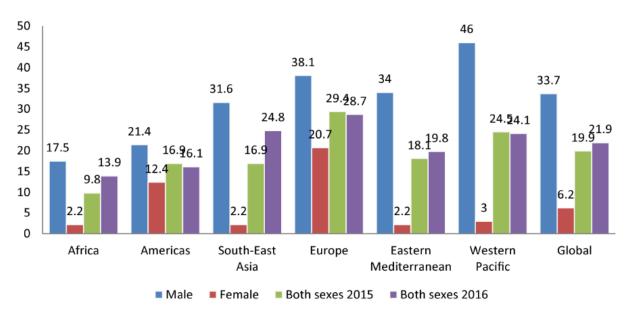


Figure 1. 2: Global and regional estimates of the prevalence of tobacco use by sex

#### Source: Magitta, 2018

The previous section has presented how continued tobacco use and accompanying difficulties to quit is determined by several psychosocial, environmental, and biological factors (Unger et al., 2003; Velupillai et al., 2008; and Sussman and Ames, 2008). It showed how the pharmacological effects of nicotine widely considered as highly addictive, underline the continuous smoking of the cigarette (Motschman et al., 2016). However, several studies have shown that environmental stimuli (including peer and family pressure) are the most active facilitators for initiating and sustaining cigarette smoking, particularly among young people. According to Williams et al., (2013), to successfully address the issue of cigarette smoking in the real-world setting, there is the need to understand the underlying dynamics of smoking behaviour not only the individual-level characteristics of the smokers but their immediate environment.

Smedley and Syme (2001) argued that people would find it difficult or almost impossible to change their behaviour if their social environment conspires against such changes. It explains the possible reason behind the gradual decline in the population of tobacco users in several developed countries. Since the release of reports on the relationship between cigarette smoking and cancer, extensive studies have been conducted to ascertain the claim (U.S Department of Health and Human Service, 2006), resulting in the continuous increase in the awareness of the danger attributed to smoking both on a local and global scale. Several governments of developed countries have continued to take strict measures to reduce tobacco smoking (Pampel and Denney, 2011). Subsequently, led to many to be conscious of their health and smoking behaviour, thereby resulting in the inevitable change in how smoking is perceived globally (Cumming, 2009).

The literature has identified ways to reduce cigarettes smoking to include changing the behaviour that supports and maintains its consumption. Another way is by changing the social context that motivates its use. Lastly, by preventing the activities of the tobacco industry that hinders the goals of tobacco control (Sandford, 2003; McDaniel et al., 2015; U.S. Department of Health and Human Services, 2012; and Cumming, 2009). All of which can be solely achieved by government intervention (Cohen et al., 2000; Sandford, 2003; and the Scottish Government, 2013). Stebbins (1990, p.233) highlighted the importance of government commitment in taking action against tobacco and argued that the solution to reduce tobacco use is 90% political and 10% science.

While this may seem like an end road for the fight against tobacco use in developing countries because of the apparent absence of political will that prioritises the nation's health ahead of tobacco revenue, the cultural dimension by Hofstede (2003) provides an alternative and practical means to understand tobacco control. It suggests that the control of tobacco use is not purely through enforcement, but by promoting the specific aspect of the consumer culture that discourages it. In support of this claim, emerging evidence demonstrates that the effectiveness of health information that encourages smokers to quit smoking and make a better healthy choice has limitations (Kozlowski and Edwards, 2005; and Kelly and Barker, 2016). Likewise, the effectiveness of taxation and many bans on tobacco in the public sphere is limited (Hiscock and Bauld, 2013). It explains why the rate of smokers quitting have slowed down in some developed countries despite the gain from government policies to dissuade cigarette smoking (Scotland I.S.D, 2018; and Triandafilidis et al., 2018).

In synopsis, as the world is rapidly becoming a global village with the aid of advancement in technology, media proliferation and transnational exchange, so is the expanding contemporary social environment is increasingly impacting lives. Thus contrary to early years were the norm of the immediate social environment dictates individual behaviour, the contemporary social environment comprises of exchange of cultures and experiences on a global level and has continued to impact on behaviour. Understanding the impact of this on smoking behaviour helps advise possible ways to tackle the impending tobacco epidemics. While Hofstede's cultural dimension inspired this study, it took a holistic approach by critically evaluating other relevant frameworks that provided adequate evidence to support findings from the study.

## 1.3 Research aim and objective

The general goal of research on tobacco control is to identify effective ways to reduce tobacco-related morbidity and mortality by preventing people from initiating tobacco use and by helping those who use tobacco to quit (World Health Organisation, 2019). This research is particularly interested in translating global consumer culture into effective control of tobacco use (Wang, 2007; Poland et al., 2006; Unger et al., 2003). The study is an example of ways in which improvement in research on global consumer culture and tobacco use can advance tobacco control. It explored the impact of the change in the global tobacco environment on behaviour in the context of the effect the changed behaviour in one region or culture has on the behaviour in another region or culture. Specifically, the research investigated the extent the current anti-tobacco regime in major developed countries affects the usage of tobacco product in developing countries.

In order to achieve the set-out aim, the research spelt out the following objectives:

- To review literature and documents on tobacco consumption in developing countries, particularly in Nigeria to determine existing knowledge gaps
- To examine the level of awareness of consumers on the harm caused by tobacco use and the impact on tobacco consumption.

- To investigate the impact global consumer culture has on the behaviour of tobacco use.
- To conclude from the empirical evidence that will further inform the debate and contribute to the discussion on tobacco control in developing countries.
- Furthermore, to recommend more effective tobacco control in these regions and suggest a relevant area for further research.

# **1.4 Research questions**

The key research question for this research is "to what extent is the current antitobacco regime in major developed countries impacting on tobacco use in developing countries?"

In an attempt to answer the following question, the research set out to investigate the following questions:

- Since it appears the government of most developing countries lack the political will to enforce strict tobacco control policies (Stebbins, 1990), will the trend in global tobacco use regarding consumer behaviour have an impact on the prevalence of tobacco in developing countries?
- Moreover, if it does, what will be the nature of this impact? Ordinarily, the literature suggests that tobacco consumption in these regions will dramatically increase because they are vulnerable new target markets for multinational tobacco companies (Cummings et al., 2014; Lawrence and Williams, 2015). However, the emerging argument suggests that the change in global attitude and behaviour towards tobacco will rub off on tobacco use behaviour in developing countries, thereby leading to a worldwide decline in its use.
- Lastly, how can the evidence from this research be utilised in developing more decisive measures to curb the use of tobacco in developing countries, given the detrimental impact tobacco use have on society?

# **1.5** Research methodology

Given the purpose of this research, a critical theory approach was reckoned as most appropriate because only through interpreting the elements of the study with the belief that knowledge stems from human experience can one gain an understanding of the subject matter (Korte and Mercurio, 2017). The study explored existing related studies on the subject matter to understand the dynamics of establishing a new tobacco use behaviour in the context of consumer behaviour. It became clear that both qualitative (in the form of the focus group) and quantitative (in the form of a questionnaire) approach of data collection were appropriate for the study. The justification for this is that the qualitative method of data collection focuses on unveiling people's views, experience, belief and motivation in a particular context (Austin, 2014). The quantitative method, on the other hand, helps to overcome the weakness of the focus group, such as the complexity of establishing validity and reliability (Queirós, Faria, and Almeida, 2017). In recognition of this, the study conducted a focus group interview with groups of stakeholders ranging from 18 to 65 years—the process allowed for flexibility during the exercise that allows for follow-up of the unexpected themes that emerged. The administering of the questionnaire allowed for gathering empirical data from a larger sample size.

In respect to the selection of stakeholders for this research, the initial proposition included different essential groups, comprising of community leaders, government agencies, tobacco companies and tobacco users (both present and past). While this would have provided robust data for the study, it was not logically possible to attempt this because of the cost involved time constraints and the issue of handling extensive data. Thus, the study focused on the downstream in the context of tobacco consumers in Nigeria. The justification for this was that it allowed for total control of the research process.

Considering the complexity and the risk involved in data collection in Nigeria, convenience sampling was reckoned as most appropriate for the focus group exercise, following the recommendation of Easterby-Smith, Thorpe, and Jackson (2015). The researcher utilised purposeful quota sampling for conducting the questionnaire by following the recommendation of Kumar, Stern and Anderson (1993). Due to the challenges involved in analysing both sets of data gathered together (because of the nature of data collection), the researcher analysed each data sets independently. Since the purpose of the research was not to seek confirmation that a particular phenomenon was going to occur, the analysis of the sets of data collected was exploratory. The researcher analysed the qualitative data by using the content and thematic

method and adopted correlation and multiple regression method for analysing the quantitative data.

## 1.6 Research assumptions

There is a general assumption that tobacco is a learnt behaviour before resulting in the physical addiction of nicotine for many of its users. The common belief is that the nicotine in tobacco is the principal constituent that functions as a behavioural reinforcer responsible for maintaining the repetitive and compulsive use of tobacco products (Lynch and Bonnie,1994; Benowitz, 1996; Stolerman and Shoaib, 1991). Likewise, that variation in tobacco consumption has a strong biological underpinning (Jiloha, 2010). All of these has prompted vast clinical experiments on behaviour associated with cigarettes smoking to determine the nature and effective treatment. Consequently, early health policy interventions to dissuade smoking has taken the form of clinical-related treatments and programmes.

However, the lack of medical and clinical approaches to cause significant changes in smoking behaviour among its users suggests that the behaviour is essentially non-medical (Robert, Kerr, and Smith,2013). Thus, tobacco use cannot be controlled solely on medical and clinical bases. This claim is becoming increasingly evident from the observed disparity in its contextual use and the response to its control. Despite the belief that the nicotine in tobacco is primarily responsible for sustaining its use, there are no strong indications that clinical measures are necessarily effective. While several clinical related methods have been studied and utilised to dissuade tobacco use, there is little evidence suggesting that any singular or sets of clinical techniques are instrumental in inducing long-term changes in volunteer users.

The literature suggests that tobacco is used all over the world, and the value associated with its use appears to shape the specific type and pattern of its use (Smoke and Smoking, 2004). It explains the disparity in the prevalence of tobacco use, as the prevalence of tobacco use varies substantially across different individuals as well as other defined groups. While there are no known genetics or biologicals bases responsible for this variation, the study in the context of cross-cultural research provides possible causes. This research in agreement with Hofstede's cultural dimension (2003) assumed that economics and technology affect culture as well as consumer behaviour, and as a result, there are differences. It establishes that the precedence and evolution of culture show that often the leadership of technology and economics is in developed countries and later emulated in developing countries. It further agrees that this does not just apply to technology, but also to trends such as behaviour, dress code, type of music, language, to mention a few. In this line of thought, one can argue that behavioural change at the level of actual individual behaviour in developed countries will eventually transfer and then diffuse into the local economy.

## 1.7 Research contribution and originality

The general perception is that nicotine is the principal constituent in tobacco that functions as a behavioural reinforcer. However, the uncertainty that nicotine by itself is capable of maintaining tobacco use behaviour has prompted studies to understand the consumer entity from the context of consumer behaviour. Although the pool of research generated in this area in the attempt to approach the issue of tobacco use has continued to gain more attention, none of these studies, to the researcher's knowledge, have conducted a study in the context of this study. An identified gap is that most cross-sectional research conducted on developing countries approached tobacco use behaviour from the context of policies or successful implementation of evidence-based measures proposed by the World Health Organisation. Behavioural factors that are particularly relevant to address the issue of tobacco use in real-world settings successfully are hardly understood. The paucity of knowledge prompted this research.

The research contributes to the body of knowledge by covering the implications of the global culture, such as the transfer of culture on tobacco use in developing countries. It builds on existing research and integrated welldeveloped theories of consumers' socio-psychological behaviour to develop a holistic framework that can inform tobacco control. Although the primary data for the analysis was obtained in Nigeria, the study anticipated that the model developed is transferable to other developing countries. Likewise, the evidence generated adds to the academic literature by contributing to an essential social debate on tobacco control technique in developing countries. Lastly, it contributes to the prediction of the tobacco epidemic forecasted to happen in developing countries by 2030 by the World Health Organisation.

## **1.8 Outline of the thesis**

This thesis is on the impact of global consumer culture on consumers' attitude toward tobacco consumption in developing economies and is presented in six chapters. Each of the chapters has several sections and subheadings reporting on all aspects of the research carried out in this study.

**Chapter One** provides a general introduction and background information to the research, the justification for the research, the research aim and objective, and posed essential questions the research intended to answer.

**Chapter Two** provides existing and relevant literature on global consumer culture. It lays out the argument for the research by identifying pertinent themes and redefining research question. It also provides the research model, as well as the research framework for the study.

**Chapter Three** provides a detailed research design and methodology employed for this research. It discussed the research paradigm underpinning the research and justification for the action. It comprises of the details of the design of the survey instrument, data collection and ethical considerations. It also discussed the limitation of the research.

**Chapter Four** examines and discusses the results of the data collected from the focus groups interview and the survey conducted. It provides a detailed description of the analyses and findings.

**Chapter Five** provides an account of the contribution of the current study to previous studies, particularly in terms of theory, knowledge and practice.

**Chapter Six** provides a summary discussion of key findings by comparing result gathered with the subject matter of the research. It also covered the limitations of the study and concluded the research by making recommendations for practice and suggesting areas for further research.

# 1.9 Summary

This chapter laid the foundation for the research by providing a general introduction to the study. It also described the background of the research, the aim and objectives and the purpose of the research. Likewise, it captured the methodology and conceptual models for the study, and the outline of the six chapters.

Chapter two provides an in-depth literature review for the study. It comprises of the theoretical foundation for the study and the research context. It also discussed the development of the model and the hypothesis for this research.

#### **CHAPTER TWO**

#### Literature review

#### 2.0 Introduction

The previous chapter introduced the research topic and provided a general background for the study by employing relevant literature and past research to make an argument for the relevance of this study. It further presented the justification for the study and outlined the aim and objectives of the research. Among the outlined objectives was to conduct a comprehensive literature review pertinent to the subject matter of this study. Going by Rowland (2017), an extensive literature review serves as a mental roadmap of the past, present and future of a study. It provides findings from other studies that are closely related to the current study, and link the study to the broader, ongoing dialogue in literature. It also provides the framework for establishing the significance of a study, as well as a benchmark for comparing the findings from the study with other studies (Creswell, 1999; Fraenkel and Wallen, 1990; Marshall and Rossman, 1989). Thus, this chapter presents a comprehensive literature review detailing the ideas, theories and previous findings relating to contemporary consumer behaviour in general, and how it links to current tobacco use behaviour. It aims to strengthen the case introduced in the last chapter and elaborates on the identified knowledge gap that serves as the motivation for the research propositions and the subsequent research questions.

#### 2.1 Research context

This section discusses the current state of tobacco use by examining the impact of the current social environment on tobacco use behaviour. It sets against the background of globalisation, and the contemporary consumption environment by way of understanding and ultimately addressing the issue of tobacco use in developing countries.

As identified in the previous chapter, the advancement in technology, media proliferation and transnational exchange play a critical role in shaping contemporary consumption environment (Kraidy, 2002; and Knobler, Mahmoud, and Lemon, 2006). More often than not, research interested in preventing tobacco use or facilitating tobacco cessation concentrates on studying tobacco consumption and factors that sustain it at a single level of investigation. Although, the study of this nature can be informative, exploring multiple contextual levels that examine the various dimension of life associated with tobacco use can produce a more robust and complete understanding of the issues surrounding tobacco consumption (Westin, 2010). This claim is in agreement with the argument that no entity can function in isolation, as there are many factors that closely or distantly surrounds them that influence their behaviour (Templeton, 2010). The concept of the social environment demonstrates that consumers generally are exposed to several factors that significantly impact their consumption behaviour.

A study conducted by Unger et al., (2003) to understand the impact of social environment on consumption broadly classified social-environmental factors that influence consumption into three categories, including micro-environment, meso-environment and macro-environment. While these classes of socioenvironmental factors apply to the context for this study, attention is mainly on the macro-environment and micro-environment. As demonstrated in figure 1.1, the relationship between consumer behaviour and social environment as applied in this study can be viewed from the angle of micro-environment and macro-environment in the context of the local environment and global community, respectively. The multiple dimension framework mainly designed for this research to investigate contemporary tobacco use behaviour allows us to view tobacco use from two nested levels of investigation: the microenvironment (that is, the local community, including local culture, social setting or immediate environment and social development) and the macroenvironment (that is, the global environment including the increasing process of globalisation in terms of social integration, transfer of ideas and information as a result of information technology, and global culture as a result of social interaction). Arguably, any dynamic change in any of the classes of the social environment tends to influence consumption (Unger et al., 2003).

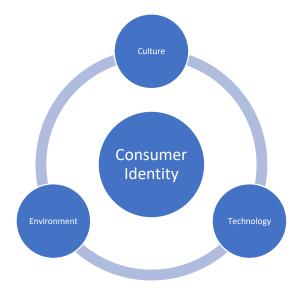
The social environment provides new and exciting dynamics and challenges to the study of tobacco consumption. Considering that consumption practice is an essential element that provides significant insight into the contextual use of consumer goods such as tobacco in a social environment and that consumers behaviour and their social environment are inherently predisposed to change elucidates the significance of the study of this nature (Kolb, 2017; Kelly and Barker, 2016; and Gaur and Squires (2018). As mentioned in the early part of this report, the impact of the increase in global interconnectivity, and the development of science and technology has continued to empower contemporary consumers. Consumption practices are no longer made in isolation or on lack of knowledge, but connectivity and exchange of knowledge. The advancement in global marketing of products and services has also contributed to this phenomenon, as ideas and trends are now a mix of international and local influences (Dahl, 1998). Thus, as globalisation gives way to identical consumption of goods and services, so does it paves the way for diffusion of practices, expansion of relations across borders, the formation of social life on a global scale and growth of shared global awareness. Subsequently present to the consumers a proliferation of choice. According to Voinea and Filip (2011), all these have led to contemporary consumers becoming individualistic, independent, generally well informed and involved in the consumption process. Castells (2011) and Friedman (2000) adds that contemporary consumers have become discerning, demanding, and use the consumption habit to demonstrate and reinforce their identity.

Consequently, in recent years consumers have become a significant focus of subject in contemporary social science, as it appears that consumers use products and services to express their identities. In line with this, there have been several attempts to understand the relationship between consumption practices and identity projects. Orcan (2008) suggests that consumption has social and economic associations, and is also connected to time and space, depending on the demands such as needs, wants, desires, products, services and money or some value substitute for money that is necessary for fulfiling demands. Firat et al. (2013) further express consumption as liberating and meaningful collective experience, while Friedman (2000) and Halberstam (1993) believe that consumption is a culturally accepted means of seeking success, happiness and the populist notion of a good life. Jackson (2005) believes that consumption is an integral part of the representations and systems of society and culture. Hofstede (1991), on the other hand, express

that all products have cultural connotations. In other words, there is no identity or meaning unless considered in relations to other people and things, often within a local context. It appears that group affiliation plays a critical role in the relationship between consumption practices and identity project.

While conventionally ascribed 'identity categories' such as religion, race and ethnicity have a role to play in consumption practice such as described above, it seems group affiliation and identity projects are becoming more fragmented in the contemporary world (Shectman et al., 2013). In the modern world, consumers in the pursuit of satisfaction, pleasure and fulfilment are becoming more active in defining their self-identity. It appears contemporary consumers no longer consume products and services merely for satisfaction. Instead, consumption practices are, more and more, based on the communication of values, and products usage is a unique source of symbolic meaning for the construction and maintenance of self-identification. Likewise, it appears contemporary consumers no longer solely rely on their immediate group affiliate to make consumption decision. A strong, positive and particularly stable self-identity, rather than the one imposed on consumers appears to be critical to psychological well-being and happiness of the contemporary consumer (Shectman et al., 2013; and Larsen and Patterson, 2018).





Source: Developed for this study

However, the consumption process as a means of communicating self-identity is a complex one, because identity project continually evolves as the social environment changes mostly due to consumer desire rather than need (Larsen and Patterson, 2018). Likewise, the advancements in the proliferation of information, the exposure to the extended range of goods and services and the increase in global cultural interaction contribute to the complexity of this phenomenon. Thus, the interplay among culture, social environment and technology, as demonstrated in figure 2.1 contributes to the increase in fragmentation of the consumption process and the consumer market (Robertson, 1992). This claim explains why the consumer market has gone past the traditional era where marketing revolved around critical concepts such as market segmentation through demographics, age and gender that companies in the past used to identify groups of consumers with similar needs. In recent times, companies are increasingly treating consumers individually by interacting with each consumer uniquely. They achieve this by providing value for their wants, creating an overwhelming consumer experience that ensures the conversion of each consumption experience into a memorable, repeatable experience that fits into and improves the lifestyle of the consumers. Thus, the entire consumer experience is the basis of value, not the product (Prahalad and Ramaswamy, 2004).

In an attempt to demonstrate the process of tobacco consumption in the contemporary consumer environment as introduced in this section, this study argues that consumptions are made base on the consumers interpretation of the dynamic interplay and continually changing consumer environment (that is, the global environment and the local community). Likewise, contemporary consumers tend to decide the consumption that communicates their identity, rather than allow their immediate social environment solely dictate for them. Thus, efforts to understand contemporary tobacco use behaviour requires taking into consideration the growing importance of consumer identity in the levels of the contemporary consumer environment. The rest of this study examines the constructs relating to consumption and the social environment base on existing research. The subsequent section presents the justification for the context for this study and provides the rationale for using 'culture' as a focal point to smoking

#### 2.1.1 Justification for the research context

Consumption is a universal phenomenon that cuts across basically all ramification of every society, from the private to the public sector (Gbadamosi, 2016). Irrespective of our status, age, gender, lifestyle, or nationality, people consume one product or another (Goodwin et al., 2008). Mostly, people purchase various products to satisfy their wants and needs. While the literature suggests that consumption, as well as consumer behaviour, is consistently linked to consumer products via the value derives from its associated transaction including the price of the product, prices of related products, individual income and tastes (Guilloux, 2014), McCracken (1986) argues that it goes beyond this. According to McCracken (1986), the significance of consumer products to establish a behaviour resides mainly in the ability of the product to carry and communicate cultural value. It explains why it is imperative to have an understanding of the underlying issue that drives tobacco use behaviour in the context of culture. Although these According to Ariely and Norton (2009) can be a very challenging task to achieve, because consumers are all different in many ways or various contexts (including demographically, emotionally, and culturally). However, if thoroughly executed, the result can offer tremendous benefits. The emergence of global culture provides the avenue to discuss tobacco use behaviour in the context of culture (that is, the way of doing things) because as the transnational spreads and the globalisation process deepens, so does these have an unsurprising impact on cultural values attached to tobacco (Goodwin et al., 2008).

The study of culture relating to tobacco use behaviour is significant because as with many consumer goods, there are believes that culture shapes what type of tobacco products consumers use and how consumers use tobacco (Smoke and Smoking, 2004). Study of this nature helps illuminate reasons for variations as well as similarities in the prevalence of cigarette smoking across nations, ethnic groups, genders, and other demographical groups. While there is no singular definition of culture, it appears to encompass a broad spectrum of behavioural traits: from what principle people hold dearly; to their way of living (Spencer-Oatey and Franklin, 2012). Kotler (2003), when describing consumer behaviour, identify culture value as the fundamental determinant of consumer want and behaviour. Other notable numbers of qualitative studies

also suggest that consumer behaviour, in its entire complexity, can be comprehended only within the context of the culture in which it develops (Nemethova 2015; Kire and RajKumar, 2017; De Mooij, 2019). There is the belief that the study of culture does not only provide the opportunity to understand the underlying issues that drive consumer behaviour but also allows for the comparison of cultural traits within and across samples of societies.

The technology development witnessed across the globe comes with a significant amount of changes to consumer behaviour. These changes range from the way people reason, to the way they perceive certain things or phenomena (Spencer-Oatey and Franklin, 2012). There is the claim that culture change as a result of people changing, and as people change, inevitably their way of life and belief changes (Keirns et al., 2018). In line with this, Gaur and Squires (2018) believe that all cultures are inherently predisposed to change and at the same time to resist change. While there are dynamic processes that operate to encourage cultural change (such as acceptance of new ideas), there are others that operate to discourage such changes. It appears that social and psychological chaos occurs when there are no forces resisting change. Thus, Spencer-Oatey and Franklin (2012) suggest that cultural changes are as a result of social conflict, the development of new technologies or ideas, and also the environment.

Likewise, Gaur and Squires (2018) highlight that forces at work within a society, contact within and between societies, and change in the social environment are sources of influence responsible for both change and resisting change of culture. Studies have grouped the processes that result in a change in culture within a society into culture invention and culture loss. Culture invention occurs as a is a result of innovation developed by people that is not a material object and spread through cultural transmission (Gaur and Squires, 2018). It includes sets of ideas and behaviour adopted by groups of people that are shared so that it becomes a cultural reality. Culture loss, on the other hand, is an inevitable result of old culture being replaced by a new one, usually due to change in the environment (Papastathopoulou, Avlonitis and Gounaris, 2006).

By applying this to the context of tobacco, the impact global culture has on tobacco use (or otherwise globalisation has on cultural change) cannot be overemphasised. Reason being that the world is increasingly becoming a global village where an occurrence or event in a country tends to impact other countries (Dixon, 2009). Studies on tobacco use control have continued to link some of the developments in global tobacco control scene to the ongoing events on the global level. Some of these include the decline in tobacco use in many developed countries as a result of the link between tobacco and ill-health (Dani and Balfour, 2011), the increase in the crackdown of tobacco use by many governments as a result of a broad understanding of the harm caused by tobacco (Pampel and Denney, 2011), the change in the societal view towards tobacco use in countries around the world as a result of continuous tobacco control, and the expansion of the tobacco industry beyond its traditional markets to search for new markets (Lee, Eckhardt, Holden, 2016).

Consequently, studies have recognised the increase in the transnational exchange to have both positive and negative impact on global tobacco use. A positive impact is a decrease in the prevalence of tobacco use, particularly in developed countries, as a result of transnational exchange. A notable case is the reduction of tobacco smoking in Australia as a result of implementing the plain-package. It appears that the success of plain-packaging has led to other developed countries, including France and the United Kingdom, to adopt the same measures to control tobacco use (Smith et al., 2015). Conversely, a negative impact is an increase in the prevalence of tobacco use, notably in developing countries, due to tobacco companies market expansion in search of a new market.

### 2.1.2 Cultural evolution

As mentioned in the introductory chapter, a limitation in cross-cultural studies of smoking behaviour in developing countries is the understanding of the concept of cultural change on smoking behaviour as proposed in this study. The world as suggested by Liebes (2003) and Ritzer (2015) is increasingly experiencing homogenisation in terms of consumption culture becoming similar and uniform, causing cultural loss as new ones are replacing old cultural patterns. This line of thought, when applied to tobacco, can help shed light on contemporary cigarette smoking in developing countries (Wang, 2007). Could it be that the exchange of information on the current attitude towards tobacco consumption on a global level will eventually impact consumers perception towards tobacco in developing countries as being undesirable and unfashionable?

Although it might be tempting to answer yes, however, within a society, cultural changes do not occur automatically. As mentioned earlier, some processes result in the resistance to change, which include habit, and the integration of culture traits (Spencer-Oatey and Frankling, 2012). Kunze et al. (2013) argue that older people, in particular, are often introverted to replace their comfortable long accustomed cultural patterns. Likewise, habitual behaviour is known to provide emotional security to withstand the hostile world of change (Spencer-Oatey and Frankling, 2012). Another process that results in resistance to change includes religion by providing strong moral justification and support for upholding conventional ways (Kalberg, 2014).

According to anthropology studies, three theories explain the process leading to cultural change as a result of contact between two or more cultures. They include diffusion; acculturation; and transculturation (Petkovic, 2012). Wagoner (2014) describe diffusion as the spread of cultural elements from one society to another that inevitably result in a culture change. Acculturation, on the other hand, though similar to diffusion in terms of change in culture as a result of contact with culturally dissimilar people, groups and social influences (Gibson, 2001), is mostly applicable to individuals living in regions or countries other than their state of origin (Berry, 2006). Lastly, Onghena (2008) describe transculturation as the process whereby an existing culture is influenced by a new culture, thereby resulting in the formation of a new culture (Onghena, 2008). Although these three processes possess their unique characteristics that explain the cultural change, this study leans more towards the process of diffusion as it gives more insight to tobacco use in the current research and is more suitably applicable to the subject matter. It appears that several cultural changes regarding tobacco use in Nigeria and other African countries occur as a result of cultural diffusion (Spencer-Oatey, 2012).

Several theories have been utilised in studies to understand cultural diffusion, and has become apparent that there are general principles attributed to diffusion. Firstly, the adoption of the cultural elements by a cultural group from another cultural group through diffusion does not occur indiscriminately. The adoption of the cultural element occurs on the basis that such elements are useful or compatible with the existing culture. Secondly, the adoption of cultural elements is a two-way process. Before now, the general conception was that culture diffuses from developed countries to developing countries. However, emerging evidence demonstrates that cultural traits diffuse in both directions. Thirdly, cultural groups hardly adopt cultural elements in their original form. Most times, cultural groups reinterpret and reconstruct cultural traits to fit into their culture. Lastly, not all cultural traits are quickly adopted, as some cultural traits diffuse more easily than others (Spencer-Oatey, 2012; Rogers, 2004; and Dibra, M., 2015). Thus, base on this overview and figure 1.1 introduced in chapter one, figure 2.2 shows the broader context guiding the remaining of the literature review on the subject matter, particularly in the context of Nigeria, as shown below.

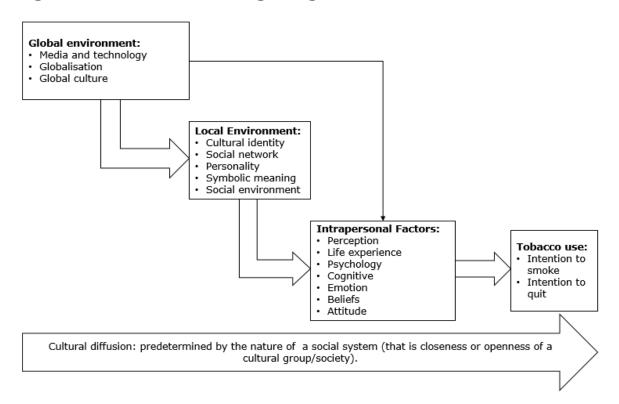


Figure 2. 2: Broader context guiding the literature review

Source: Generated for the study

Figure 2.2 shows the broader context guiding literature review as applied in this study. It has become apparent that cultural diffusion plays a critical role in understanding issues of tobacco use facing the world today as studies on diffusion of culture establish that such diffusion is capable of modifying behaviour as well as product usage. Components such as ideas, practices and behaviour patterns increasingly shared when two or more cultural groups get in contact inevitably results in some form of mediation (Spencer-Oatey, 2012). Rogers (2004) identify elements that determine the spread of these components as the characteristics of the component itself, the communication channels, time and the social system. Accordingly, Robinson (2009) demonstrates that ideas, practices or behaviour patterns perceived as new spread through communication channels (through interpersonal channels or mass media). In this case, time refers to the rate a component diffuse, or the relative speed members of a social system adopt such component. All of the processes of diffusion occurs within a social network. Depending on the nature of the social system determines the likelihood that ideas, practices or behaviour patterns will be adopted and at what rate.

### 2.2 Theoretical foundation

This section examines the relationships among culture, social environment and technology, as demonstrated in figure 2.1, and how they relate to consumer behaviour based on existing studies. The theoretical foundation provides the lens for the evaluation of the research problem and research questions. Going by Hofstede (1991), understanding and predicting the influence of culture is central to consumer behaviour. Thus, the theoretical foundation provides the background to explore the origin of culture, the social environment, technology, the relationship between them and how they relate to tobacco use behaviour, especially in the context of identity project. Reflecting on information gathered so far in this study, it is apparent that consumers, most times, interact with the social environment when making decisions. Likewise, different types of environmental interaction include the micro-environment (such as family and friends) and the macro-environment (such as the global environment can be view as a system where a change in any

part of the system usually affects other parts. In some cases, the change affects the whole system.

People interact with their immediate environment daily, and the local context and the social network within such an environment influence peoples way of life. Stacy (1998) identify elements of a social network as members from the formal family (through blood and legal relations) and the informal family tied by feelings of belonging and emotional closeness. The macro-environment, on the other hand, broaden the scope of peoples' interaction with the environment, as it relates to interaction in a broader environment such as the international and global environment. Although various environmental factors influence behaviour, for the purpose of this study, the environmental factors examined are confined to macro-environmental (that is factors that promote global brands and marketing, global integration and interaction and global transference of culture), and micro-environmental factors (that is factors relating to personal history or experience, symbolic meaning, social networks, cultural identity and social environment).

# 2.2.1 Culture

Disciplines such as sociology and cultural anthropology have long studied and interpreted the role and function of culture in shaping individual behaviour (Bicchieri, Cristina and Muldoon, 2011). Going by Spencer-Oatey and Franklin (2012), culture encompasses a broad spectrum of behavioural traits: from what a person holds dearly, to the person's way of living. It is said to be the reason people think and behave differently from one cultural group to another (see: Little, 2012). Culture embodies a range of phenomena that are transmitted among a cultural group through social learning in human society. Cultural norms, on the other hand, provide order in society; as it guides and directs human behaviour. According to Albert (2010), cultural norms provide the key to understanding environmental influence such as the identifiable elements in the physical, cultural, demographic, regulatory or technological environment on human behaviour, particularly in terms of conformity. It helps make sense of, understand why, and predict how an individual will behave.

In the traditional sense of it, cultural norms act as a social standard for appropriate or inappropriate behaviour that governs what is or not accepted in the interaction among people from a specific cultural group. Thus, going by Bicchieri et al., (2014), cultural norms can be said to be the agreed-upon expectations and rules by which culture guides the behaviour of members of a cultural group in any given situation. In recent times, the study of culture is increasingly incorporated in public health research to understand behavioural health outcomes, as it appears cultural norms is highly influential over individual behaviour in a wide variety of contexts including tobacco use and its prevention. According to the National Academies of Sciences, Engineering, and Medicine (2018), cultural norms can create an environment that can either foster or mitigate unhealthy behaviours such as tobacco use and its harmful effects.

A considerable number of studies have established cultural norms to serve a useful purpose as they create the basis for predicting and dictating behaviour. Researchers hypothesis that when an act is perceived as being performed by majority members of a cultural group, such an act is deemed as acceptable in the society, thereby, influencing how an individual will behave or respond in a given situation (Holt-Lunstad, 2015). Take, for instance, a cultural group that reflects patriarchies will expect the man to pay for the woman's meal when out on a date (Breines, Connell, and Eide, 2000). While the claim may seem straightforward, studies demonstrate that cultural norms can vary widely across cultural groups. Thus, an act may have a different meaning, perception, or performed in a different way across different cultural groups. This claim, according to Whitworht and Ahmed (2013), is due to the differences in environments that produce different social systems. It explains why an act can be deemed acceptable within a cultural group, while another cultural group perceive the same act as unacceptable. For instance, the symbolic meaning of eye contact when conversing with people. The Americans see maintaining fairly direct eye contact when conversing with others as a sign of respect. Conversely, Asians will avoid eyes contact as a sign of politeness and respect (Brown et al., (2018).

While the literature demonstrates that culture prescribes what behaviour is or not acceptable, it is also said to condemn deviation (Robertson, 1976). In

general terms, deviance is the violation of culture (whether formal or informal rule). Formal deviance is said to occur when an individual act or behaves contrary to formally-enacted rules. Such behaviour includes but not limited to stealing, robbery, theft, rape and murder. Informal deviance, on the other hand, involves acting or behaving contrary to norms that are not formally-enacted (cultural norms). In this context, an individual will be considered to have deviated from cultural norms if such individual acts or behaves contrary to the defined norm by the majority members of a cultural group (Palmer and Humphrey, 1990). Take, for instance, behaviour such as nose-picking, coming late for an appointment, or standing unnecessarily close to another person may be seen as deviating from a cultural norm, thereby, carrying consequences such as being perceived as not trustworthy or lacking respect. In this context, both the cultural reinforcement and social sanction maintain the cultural norm

It appears that as cultural norms are relative across cultural groups, so does deviance varies considerably across cultures. In other words, what may be considered as deviant by a cultural group may be acceptable by another cultural group (Clinard and Meier, 2015). Take, for instance, the practice of female genital mutilation (FGM) that involves partial or total removal of external female genitalia typically for cultural reasons. While the practice is unthinkable and punishable in some countries in the world, including the United States and the United Kingdom, some countries including Indonesia, Malaysia, and Nigeria still see such practice as an acceptable practice. Likewise, as culture is predisposed to change, so does deviance change overtime. Take, for instance, the general attitude toward tobacco use in many developed countries. Before now, it was acceptable for people to smoke tobacco indoors. However, in recent times, smoking indoors is increasingly seen as deviant and comes with consequences.

While deviance has been attributed to various negative impacts, such as disruption of society, weakening established cultural norms, and creating division and disorder, it is believed that deviance comes with its benefits. Robertson (1976) has argued that deviance is one of the ways culture and cultural norms changes. According to Kidwell and Martin (2005), a widely accepted deviance is capable of evolving to legitimacy if an increasing number

of people partake in such deviant behaviour, thereby, resulting in a new cultural norm. Deviance allows people to adjust to a change, as it provides an alternative lifestyle and eases the shock of culture change due to its slow process. Besides, it promotes solidarity by distinguishing cultural groups. In this regard, it increases social cohesion in the broader society by establishing social boundaries defining what is acceptable behaviour. Lastly, it allows individuals and groups to introduce their agenda to the larger society and elevate their status while at it (Konty, 2007). The literature identifies three broad sociological classes that describe deviant behaviour as Structural functionalism, Symbolic interaction and Conflict theory.

### 2.2.1.1 Structural functionalism

While the literature demonstrates structural-functionalism to have been in existence since the mid-1800s, it was solidified by Emile Durkheim in the late nineteenth century (Little et al., 2012). The approach views society through a macro-level orientation (a broad focus on the social structure that shapes society as a whole). It emphasises social solidarity, divided into organic and mechanical typologies, and stability in social structures that aim to answer the question "how does any given social phenomenon contribute to social stability?" by investigating deviance. Going by the structural-functionalist approach, in creating social stability, deviance plays two primary roles. First, it functions as systems for recognising and punishing deviance, creating norms and telling members of a given cultural group how to behave by laying out patterns of acceptable and unacceptable behaviour. In this regard, there is a general expectation that an individual is aware of what deviant behaviour is. Secondly, it acts as a social parameter that creates boundaries between populations and allowing an "us vs them" mentality within different groups. It allows similar individuals to unite around their normality at the expense of the marked deviant (Little et al., 2012).

An example is the members of the LGBT community unifying around pride. Subsequently, a marked deviant can bolster solidarity within a marked community, as members take pride and ownership in their stigmatised identity and create their cohesive units (Konty, 2007). The structural functionalism is also an excellent example of how the society or cultural groups change, regarding establishing norms and deviant behaviours (Little et al., 2012). The theory states that:

- An individual can accept the cultural goals and means together by working under conformity.
- Also, an individual can accept the cultural goals but uses illegitimate means to achieve them. In this regard, such an individual have deviated from emulating the values of those who conform. In other words, the individual uses innovation to achieve a social goal.
- Likewise, an individual may have lost faith in social goals but still feel obligated to work under the routines of legitimate daily life. Such practice is otherwise known as "ritualism".
- An individual can reject both the cultural goals and means all together and fall under retreatism.
- Lastly, an individual can reject the cultural goals and the institutionalised means and seek to redefine new value for the society. Such adaptation is otherwise known as being rebellious.

# 2.2.1.2 Symbolic interactionism

The symbolic interactionism is a micro-level theory that focuses on the relationship among individuals within a society or cultural group. Social scientists have widely adopted the theory to explain how societies or cultural groups view behaviour as deviant or conventional (Little et al., 2012). The theoretical perspective looks at how people navigate their interactions with others and assigns meanings based on their interpretation of those interactions. Study of this nature is more likely to use qualitative research methods, such as an in-depth interview or participant observation. According to literature, Mead (1863-1931) laid the groundwork for symbolic interaction in the context of self (a dynamic organism that is a living being of its own), by breaking down self into two phases (the I and ME phase) that take place in human interaction (Little et al., 2012). The 'I' phase describes the unorganised response of the self to the attitude of others (the natural disposition or impulse to act). The 'ME' phase describes the set of organised attitudes of others that the individual assumes in response (those perspectives of the self that the individual has interpreted from others). Cooley (1902) further illuminates that self defines how individuals perceive themselves by how they think others

perceive them. That is, redefining the self base on the interpretation of other's reaction. In this regard, Blumer (1969) highlights that humans interact with things based on the meaning ascribed to those things; that the ascribed meaning of things comes from the individual's interaction with others in the society; and that the meaning of things is interpreted by a person when dealing with things in specific circumstances. The theory states that:

 Deviance comes from an individual who learns deviant behaviour. The deviant may grow up together with other deviants or may learn to give excuses for deviance. Unlike Structural functionalism theory that focuses on the institution where the norms come from, the symbolic interactionism theory focuses on the consciousness and the mind of an individual.

## 2.2.1.3 Conflict theory

Conflict theory is concerned with inequality in society. It is a macro-level analysis of society that draws attention to the power of differentials (Little et al., 2012). That is the social patterns that exist between social classes in a society, the problems caused by the conflicts between social classes, and how social classes affect deviance. A society consists of different kinds of groups with different interests, and conflicts are almost inevitable due to their interests (Dootson et al., 2017). Although conflicts in this regard may seem to denote negativity, it can sometimes lead to a positive change. Take, for instance, a social change that discourages risky social behaviour as a result of conflict can become a desirable one if it leads to definite improvement. In this line of thought, deviance can be as a result of inequality in society which can be solved by creating equality among members of society (Little et al., 2012). Going by Merton (1938), social inequality can be as a result of a person's action (also known as relative deprivation theory) such as comparing the personal situation with another person.

Putting this as a prospect, a person can become desirous of another person's lifestyle. Such action can either lead to a positive or negative outcome. Desire can lead to envy (a negative influence) that can encourage actions (deviant behaviour) to make the other person's life difficult. While on the other hand, desire can lead to healthy competition (positive outcome) that encourages a

person to act in a certain way to be able to compare with the other person. There are also cases where the person may not have the resources to match the other person. Such a situation can lead to deviant behaviours, such as stealing to match the other person (Little et al., 2012). The theory states that:

• Tension and conflict arise when there is an uneven distribution of resources, status, and power between groups in a society and that these conflicts can become the engine for social change.

Table 2.1. Breaks down the social classes that describe deviant behaviour.

Sociological Class Level of analysis Focus Structural Macro Focus the social on functionalism structure that shape society as a whole. Symbolic Micro Focus on the relationship interactionism among individuals within a society or cultural group. Conflict theory It draws attention to the Macro power of differentials.

Table 2. 1: Sociological classes that describe deviant behaviour

Source: Little et al., 2012

# 2.2.1.4 Critics of sociological classes

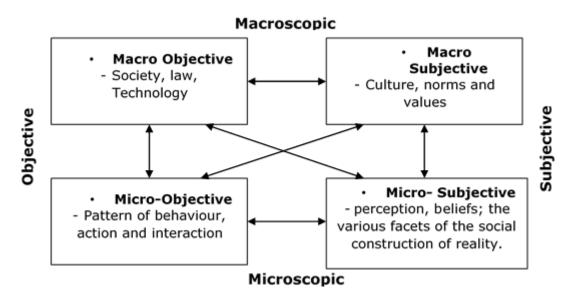
Sociological studies often use both theory and practice to understand realworld events and how such events occur (Bhattacherjee, 2012). The reason being that both theory and practice have a reciprocal relationship in the sense that theory deterritorialises practice and practice reterritorialises theory. As indicated in the previous chapter, sociological theories explain social phenomena. These theories propose a relationship between two or more concepts that aim to explain why and how a phenomenon occurs. However, due to their high dependence on context and specification to a particular situation, they are developed at multiple levels that range from grand theory to highly contextualised and specific macro range theories. Take, for instance, a hypothesis that proposes that the more members of a cultural group stop performing an act, the lesser members of the cultural group will perceive such actions as acceptable in society. In this case, the concepts are members of cultural group engagement and acceptance of behaviour and both concepts are said to have an inverse relationship (that is one goes up, and the other goes down). Likewise, it represents a context where a phenomenon explains another. The practice, on the other hand, is the actual operation or experiment, in contrast to the theory. It is the observation of disparate concepts (phenomena) that need to be understood. However, it appears that the practice cannot position itself without the theoretical questions (the why) guiding a study. Going by Vickery and Vickery (2005), without theory, it may become difficult to explain the relationship between different observed phenomena from data generated. The link between theory and practice is symbolic in the sense that the advancement of theory, will undoubtedly lead to an advancement in practice and vice versa.

It is significant to understand the relationship between theory and practice and how it applies to a study as this serves as the blueprint that guides the research process (Kessels and Korthagen, 1996). The next chapter demonstrates in details the use of theories and practice for this study. The previous section highlights the sociological classes and how they relate to deviant behaviour. While they are not without their glitches, they appear to have remained widely used and cited in sociological studies due to them surviving a great deal of criticism. The structural-functionalism has been criticised for downplaying the role of individual actions and for not being able to account for social change. The reason being that the sociological class focus on society and its institutions as primary units of analysis. It appears that individuals are only significant in terms of their place within a social system. According to Barkan (2011), by downplaying individual roles, structural functionalism restricts the likelihood of recognising how individual action can change the social institution. Symbolic interactionism suffered criticism for neglecting the macro-level of social interpretation (the bigger picture) (Dennis and Martin, 2007). Accordingly, it appeared that symbolic interactionism risks the chance of missing the more significant issues of society due to its close focus on individual role (the tree) rather than the social institution (the forest). Likewise, symbolic interactionism suffered criticism for slighting the influence of social forces and institutions on individual interactions (Nalah and Ishava, 2013). Lastly, conflict theory suffered criticism for its overly negative view of society. It attributes the

positive aspect of society to capitalistic design to control the masses, not to inherent interests in preserving society and social order (Barkan, 2011).

However, while these sociological classes defer as to what they focus on, they are thought to be more useful and informative when viewed as though they complement one another. Going by Bhattacherjee (2012), a theory may explain an element of a society better than the other, or, can be applied together to explain social life. The reason is that all these theories in a usual sense of it offer a compelling explanation for social phenomena. It appears this prompted Ritzer and Yagatich (2012) to propose an integrated model of the micro-macro theory of analysis to understand the sociological and cultural phenomenon, as shown below.

Figure 2. 3: Ritze's Integrated Micro-Macro Theory of Social Analysis



Source: Ritzer and Yagatich, 2012

The previous section established the concept of conformity and deviance and their relevance to understanding real-world events and their occurrence. In particular, conformity and deviance are not necessarily positive or negative in the traditional sense. Instead, they demonstrate opposing actions which conflict with cultural values in terms of the dominant of a cultural group on what is acceptable or not. As such, the concept of conformity and deviance is socially constructed phenomena (Bhattacherjee, 2012). Thus, no act in itself is right or wrong; instead, action interpretation depends on the dominant group that decides what norm or deviant is. Normality and deviance appear to change over time, mostly as a result of cultural contact. Robertson (1976) has attributes the cause of change in normality and deviance to pressure from forces to change the way of doing things, generally in the form of new ideas entering a culture. The impetus for the change may occur from within or outside society. A change may occur within if there is conscious or unconscious pressure for consistency that causes enough people to adjust from an old way of doing things and thinking to a new one. Likewise, a good deal of culture change may occur because of stimulation from changes in the external environment. These claims explain the shift in norms from what used to be unacceptable to be acceptable. Take, for instance, in recent times; it has become common to see doctors, lawyers, educators and even politicians bear tattoos.

In an attempt to explain how cultural norms change, O'Neil (2012) identify three general sources of influence or pressure that cause a change to culture as contact or interaction (usually between or among the cultural group), technological development, and change in the environment. It appears that the contact or interaction of cultural groups allows for the introduction, communication and exchange of ideas, information, or arts. Thus, leading to the formation or reformation of ways of doing things. Agents, including diffusion, acculturation and transculturation, allow for the process that leads to change in culture caused by contact or interaction of cultural groups (McCracken, 1986). The technology development, on the other hand, is thought to aid culture change massively (Inglehart and Baker, 2000). Technology is a general term in sociology used to denote the application of knowledge, techniques, and tools use to adapt and control physical environments and material resources to satisfy wants and needs. It has become apparent that technology alters both individual and collective behaviour daily to add up to a change in culture. Take, for instance, researchers have hypothesised that the media (accessed via technology) is capable of shaping values and the vision of the "self" in terms of what is acceptable and what is not acceptable.

The process function in an environment that is continually changing. Going by Dixon (2009), culture leans most heavily on the environment. Thus, a change

in the environment can lead to a change in a particular culture. At the same time, Coreil (2010) broadly categorise the environment into social aspects (that is family, peer groups and communities) and physical aspects (that is, ecological and geographical factors). The social aspect is probably a more frequent stimulus for culture change than the physical aspect (Van Hecke et al., 2016).

# **2.2.1.5** The relevance of conformity and deviance to culture change.

As demonstrated in the previous section, the norm serves a useful purpose in dictating behaviour. In the context of conformity, there is the expectation and perception that members of a cultural group share the same norm that guides their interactions with others and the ways of doing things. According to Cialdini and Goldstein (2004), humans are more likely to choose to conform to society rather than pursue their desire, because it is often easier to follow the path already made by others, rather than create a new one. The social aspects of the environment such as one's family, peer groups and community are most likely to influence conformity. Typical evidence in the study of tobacco use is that an individual has a high tendency to smoke if the social environment encourages the behaviour. It demonstrates an instance where people follow social norms. They tend to follow such a norm even when they are alone. According to Bhattacherjee (2012), people often conform from the desire for security within their social group. While conformity is often associated with adolescence and youth culture, it is said to affect humans of all ages strongly. The reason being that acting contrary to or unwillingness to conform comes with the risk of rejection. As stated in the previous section, although rejection may suggest negativity in its real sense of meaning, it allows for the reformation and maintenance of social norms.

There are instances where members of a group misperceive social norms. It is otherwise known as pluralistic ignorance (that is, no one believes, but everyone thinks everyone believes) (Pariera, 2013). The condition demonstrates a situation where a group privately rejects a norm, but such a norm is misperceived as being accepted, therefore leading to members of a group conforming to it. It explains why some risky behaviour such as tobacco smoking, unhealthy diet, and drug abuse to mention a few are still prevalent in some societies. It explains the reason some people do not view their behaviour as risky as they misperceive such behaviour as being acceptable (Berkowitz, 2005). Members of a group that is a carrier of misperception also contribute to the acceptance of behaviour, even though they do not practice such behaviour but still misperceive the norms (Perkins, 1997). Correcting misperceived behaviour requires providing alternative information perceived as right. However, not all misperceptions have negative consequences; some come with positive benefits (Lee et al., 2010). Take, for instance, a case where an individual or social system holds a negative opinion about the misperceived behaviour of another group; say, smoking is synonymous to crime. The misperception may cause an individual or social system to suppress the urge to take up such behaviour considering the negative perception against the behaviour within their group. Such suppression over time can become a norm (Helliwell, Wang, and Xu, 2016).

According to Cumming (1999), a societal attitude that consents to a behaviour drives such behaviour, and for the behaviour to change requires a change in societal attitude. Thus, for any socially mediated practice to be altered, there must be a change to the social customs that support it. It requires a response to an opposite belief or practice that modifies the attitude. Social norms theory predicts that any intervention that corrects societal attitude towards a behaviour by creating healthier norms always have a beneficial effect on the majority of individuals in a social setting. Likewise, leads to a reduction in the participation of such risky behaviour or encouraging the engagement in healthier behaviour (Berkowitz, 2003). A significant debate in the literature is distinguishing the role of a leader (that is an influential member of a social group) in causing a change to a social norm. It remains unclear whether or not a leader is required, or whether the change in norms occurs organically over time, even without a strong leader to set or change norms (Helliwell, Wang, and Xu, 2016).

Evidence of group conformity and social influence suggests that the position a majority holds within a social system always prevails and that social pressure from the majority is stronger than the minority. Tradition always prevails over innovation, except in a situation where innovation has a clear advantage over traditional practises or technology (Bocchiaro and Zamperini, 2012). If that is true, how can opinion leaders (influential member) institute innovation or in this case, behavioural change leading to a social norm? As suggested in the previous section, deviant behaviour can lead to a change in the norm. Helliwell, Wang, and Xu, (2016) argue that to correct social norms; there is a need for a member of the group with an opposite belief or conception to correct a social norm. While Amiot, Sansfacon and Louis (2013) argue that continual exposure to external forces such as mass media and interaction with other cultural group tends to make a practice become the norm over time. Bandura (2001) believes the change in norms from outside of a social system is improbable and that external forces act mainly as a catalyst, and that the key player that influences change in norms needs to be within the social system.

A common point in these arguments is that no matter what the case is, for a behavioural change to occur within a group, there needs to be a change in perception towards the former behaviour as being problematic and the latter being a better option. As long as a group does not see anything wrong with former behaviour and still accept it as the norm, it runs the risk of ignoring any change (Helliwell, Wang, and Xu, 2016). A typical example is the issue of open defecation in India. According to Mara et al., (2010), the practice of open defecation in India is the leading cause of diarrhoeal deaths among children under the age of five, making India the country with the highest number of cases of child diarrhoeal deaths in the world. Although it appears various factors drives the massive practice of open defecation, a prominent reason is that cultural norm actively guides the practice, and many do not perceive the practice as being problematic.

# 2.2.2 Culture and environment

This section builds on the previous discussion on culture and aims to establish the role the environment plays in the behavioural process. Before now, discussion on culture was in relation to cultural groups as the attitude and behavioural pattern shared by members of a cultural group. Likewise, the study discussed norms as the attitudes and behaviours considered to be acceptable by the majority members of a cultural group. According to Macionis and Gerber (2011), culture is the social behaviour and norms found in human society. It explains why people of a cultural group think and behave alike. Culture is said to be what differentiates one cultural group from another, as different cultural groups possess different cultural norms that govern behaviour. Going by Bhattacherjee (2012), cultural value shape culture and norms. It is hereditary and forms the core of the culture. In this instance, cultural values are the ideas and beliefs of a society, and though they are sometimes used interchangeably with norms, it appears they represent different functions. Norms are standards, rules, guides and expectations of behaviour, while values are abstract conceptions of what is essential and worthwhile (Bhattacherjee, 2012). Take, for instance, a culture that portrays respect as a universal value will expect people not to act in a certain way (such as tobacco smoking) and particularly in certain situations or conditions (such as around family or religion environment). Similar to norms, values condemn deviance and usually have strict laws against it.

As mentioned in section 2.2.1.5, it appears that cultural norms are impacted by components of the environment as cultures are formed and operational within the environment that influences it. The environmental components that influence culture include physical and social components. While environmental components influence culture, it appears that the social components such as family, peer groups and communities (immediate environment) are most likely to cause a significant impact on culture. Bhattacherjee (2012) demonstrates that the social environment influences the behaviour process by allowing transmission of cultural value through existing systems. Going by the demonstration, components of the social environment such as the government, religious leaders, or authoritative personnel establish ideas and beliefs. Other components of the social environment such as family, school or community uphold the ideas and beliefs, and the behaviour that supports. In this context, the cultural value is the sets of ideas and beliefs expected of members of a cultural group to abide by, while the social value is the actual practising of such values. It explains how components of the environment impact on culture. Take, for instance, the cultural value attached to tobacco products as an essential item during a burial ceremony has resulted in the prevalence of tobacco use in many parts of the world, as it has become a norm for people to

follow such cultural values as a social value. Tibb (2011) argues that to change such social value will require a change in the cultural value.

However, it appears that cultural values do not change automatically, as it requires people to change them by changing their ideas, customs, attitudes and action (social values) (Rockwell, 1994). It explains why the social environment is significant, as people tend to interact and react to changes in their immediate social environment that inevitably impact on culture. A change in social value can lead to a change in cultural value that impacts the core of a culture. Both internal and external forces from the social environment cause a change in social values. The paragraph above captured one of the ways internal forces cause a change in social value. In this instance, the government generally attempt to engineer social change through policies, laws or incentives most times to promote healthy behaviour. Contrarywise, external forces such as migration, imperialism, international trade and technology can also cause a change in the social environment (Mussa, 2000). Again, reflecting on cultural value and norms, it is expected that individuals have to behave in support of cultural value to become a norm. Likewise, the discussion on culture in the context of the social environment portrait culture as the biological, social and homogeneous characteristics individuals share as a member of a group. Thus, from the description of the contemporary social environment, it appears that the complicated sense of social environment means that individuals share culture with numerous overlapping and non-overlapping cultural and subcultural groups as they interact with others through multiple sources. This form of interaction impacts on cultural identity (Schwartz, Luyckx, and Vignoles, 2011).

Humans, as social beings generally identify with culture to give them a sense of belonging. The culture individuals identify with reflects in everything they do and become part of their sense of self (Bhattacherjee, 2012). Several studies have approached cultural identity through various lenses depending on the aim of the study, the researcher's background, and perspective about the nature of cultural identity. While this is so, it remains clear that cultural identity represents a general construct to encompass related group identities (for example, nationality, race, ethnicity, age or gender). There is the claim that culture shape and is shaped by communication choices, behaviours, and negotiation through people's interaction. However, considering the formation of cultural identity is based on interaction with others, it appears to be dynamic and continuously change as the social environment changes, thereby, shifting the understanding of self-identity (Little et al., 2012). The complex social environment and the growing interdependence of societies make it challenging to predict the consequences of social choices/ social change. The reason being that the contemporary environment embodies the plurality of cultures and unique identities, and cultural adaptation is becoming a norm (Demangeot and Sankaran, 2012). In other words, the increasing globalisation means that different societies and cultural groups are getting closer than before, thereby resulting in the exchange and adaptation of culture. Thus, a change in one society or cultural group can have an amplified effect on the other. The impact of such a change can be beneficial, as well as detrimental. Thus, understanding and predicting the impact of such change is crucial to solving real-world issues such as tobacco use behaviour.

### 2.2.2.1 Cultural value orientations

Understanding and predicting cultural influence are central to the study of behaviour (Hofstede, 2003; Schiffman and Kanuk 1994; McCarthy and Shrum, 2001). However, as diversity exists among cultural groups, so does the diversity of cultural orientation exist among members of a cultural group. The concept of cultural orientation explains the tendency that an individual will think, feel or act in a culturally determined way. According to Schiffman and Kanuk (1994), it defines the basis of difference among cultures and self-identity, interpersonal relationship, communication, and resolving conflict. As discussed in the previous section, the complex social environment (social world) means that cultural orientations are not clear cut, as such, individuals identify with multiple cultures. Thus, it appears that an individual's cultural orientation lie along a continuum bounded by the extreme on both ends. Going by Hofstede (2003), the four most significant cultural orientations that are relevant to this study are; individualism-collectivism, power distance, time orientation, and masculinity-femininity as discussed below.

#### 2.2.2.1.1 Individualism and collectivism

The works of Kim and Choi, 2005; Sarigöllü, 2009; Leonidou, Leonidou, & Lulea, 2010, argue that Hofstede's individualist versus collectivist orientations has become key variables or explanatory features in a wide variety of behavioural research. The reason is that people around the world live in societies that are characterised by dominant of either individual or group interests. Thus, people define themselves and their relationships with others according to this dimension. An individualistic society considers individual goals more important than group goals. Thus the attitude and preferences of individuals dictate the behavioural decision process such as the prescribed cause of actions that conform closely to the individuals' values and beliefs (normative) and how individuals incorporate them into their decision (descriptive). Take, for instance, a society that promotes the belief that everyone is responsible for their destiny; individuals in such society will behave in individual accord. Individualist society promotes personal freedom, and communication tends to be direct, explicit and personal. According to Merkin (2015), members of an individualistic culture appreciate clear, direct and explicit communication that can easily be understood. Their thinking process reflects a direct cause and effect pattern, and they also express personal accountability.

On the contrary, in a collectivist society, group goals are more important than individual goals. According to Sorensen and Oyserman (2009), the central unit in this type of society is the group and group members act according to the group's set out objectives. In other words, the relationship with other members of the group defines self-identity, and the patterns and sets of prescribed mutual goals shape the public presentation of self. The behavioural decision process is dictated by the attitude and preferences of the group, as such priorities are more on groups than individual needs. Going by Darwish and Huber (2003), collectivist society put more emphasis on 'We' over the 'I', and the values cherished are harmony, personal dignity and respect for elders. In a collectivist society, space and privacy are less significant than relationships, as shared space is preferred both in general or personal space. Unlike individualistic society, communication in a collectivist society is intuitive, complicated and impressionistic (that is indirect and ambiguous). In addition to these, Hofstede (1980) implies that collectivistic cultures can appear as affiliation, admiration, and status, which tend to be one of the main driving forces of individual behaviour. Kim and Choi (2005) have argued that members in a collectivist society are more likely to develop environmentally-friendly attitudes because they tend to demonstrate cooperative behaviour, provide help to others and give priority to the goals of the group rather than their personal goals. Thus, it appears that members of a collectivist society are likely to react quickly to changes in the social environment than people from the individualistic society.

#### 2.2.2.1.2 Power distance

According to Hofstede (2003), power distance, likewise known as the communication distance, focuses on the relationship between people of different status in society. It is concerned with the extent less powerful members of a society accept and expect power distribution. Society is described as a low power distance culture if individuals of a society expect equal power distribution. In other words, individuals in a low power distance culture perceive themselves as though they are equal. Thus, power distribution is through a democratic process where superiors and subordinates are interdependent. The low power distance culture does not attach much importance to the subordinate's respect for superiors; as such, communication flow up and down the counterparts. The disparity of power among people in such a society will require additional justification (Bhattacherjee, 2012). Take, for instance, people from a low power distance culture may not necessarily accept orders to change a value without a given reason as to why.

On the other hand, society is described as a high-power distance culture if individuals in the society view and expect power to be unequal (Khatri, 2009). This form of culture puts much emphasis on coercive power; that is the dependence of the subordinate on the superiors. Thus, much importance is put on the subordinate respecting the superiors and needing no further justification. Communication is said to be restricted and emanates from the superiors. In addition to these, because of little resistance from subordinate members of a high-power distance culture, decisions are made and implemented faster compared to a low-power distance culture. However, due to the lack of input from subordinates and poor communication and information sharing, the quality of decision is said to be one-sided in a high-power distance culture.

# 2.2.2.1.3 Time orientation

The next cultural value orientation is time orientation. It is concerned with the ways cultural groups value time and believes they can control it. In other words, it reflects the preference towards past, present and future thinking. According to Hofstede (2003), time value can be a monochronic or polychromic time pattern. The monochromic time pattern means time is linear and is a commodity that must be saved, spent or squandered. This time orientation pattern explains why some cultures accomplish set out goals on time. In the case of polychronic time pattern, making sense of the present activities and future targets usually required referencing the past incident. The process is otherwise known as the time orientation circle. Cultures perform activities in a circle, and information is always passed from one generation to another, and context is built on how their ancestors did things. There are cases where time is not only circular but also undifferentiated and a limitless resource. This type of time orientation pattern is peculiar to African communities with very little hurriedness or being on time. Unlike monochronic time orientation pattern, which means a timely schedule, the undifferentiated time patterns mean devoting time to activity at the expense of other activities.

# 2.2.2.1.4 Masculinity and femininity

The masculinity and femininity cultural value orientation of a culture defines the stance of gender in society. In other words, it describes the emotional gender roles in society. A masculine culture is characterised by social gender with distinct roles: that is, men are assertive, tough and materialistic (focus on material success), while women are thought to be more caressing, discrete, and focused on their quality of life. Overlapping roles characterise a feminine culture for both genders. Both men and women are inclined to the same roles, such as being modest, discrete and concerned with the quality of life (Hofstede 2003). Each of these types of culture will respond differently to situations in different ways. The table below illustrates Hofstede's ranking for Masculinity and Femininity.

	Masculinity	Femininity		
Social norms	Ego oriented	Relationship		
	• Importance of	oriented		
	material things	<ul> <li>Quality of life and</li> </ul>		
	such as money and	people are		
	things	important		
	They live to work			
Politics and economics	Economic growth is	Environment		
	highly prioritised	protection is highly		
	Conflicts are solved	prioritised.		
	by force	Conflicts are solved		
		by negotiation.		
Religion	High importance is	Less importance is		
	placed on religion	placed on religion		
	• Only men take a	<ul> <li>Both the men and</li> </ul>		
	leadership post	women take a		
		leadership post.		
Work	• There is a	There is a little gap		
	significant gender	in the wages		
	gap in wages	between the two		
	between the two	genders.		
	genders	<ul> <li>Management posts</li> </ul>		
	• The men	are equal or		
	predominantly hold	predominantly held		
	management post	by women		
	• There is a	• There is a		
	preference for	preference for		
	higher pay.	fewer working		
		hours.		
Family and Peer group	Traditional family	• Flexible family		
	structure	structure.		
	• Failing is a disaster.	• Failing is a minor		
	Men are expected	incident		
	to be sturdy, and	Men and women are		
	women feeble.	strong.		

# Table 2. 2: The Hofstede's ranking for Masculinity and Femininity

Source: Hofstede, 2003

While the explanation of the masculinity and femininity dimension appeared to be in the context of gender differences, it appears that the dimension is used predominantly in the context of cultural differences, particularly among countries, and not withing countries, as differences within countries can be described as gender differences (Hofstede 2003). The dimension demonstrates how masculine or feminine a country or culture is from another country, and such information can be useful to solve real-life issues. Take, for instance, Japanese men and women appear to be more masculine than their Swedish counterparts. Thus, it will be essential that any effort to control tobacco use behaviour in this country consider that the country operates in a hierarchical and traditional patriarchal society (An and Kim, 2007). Here, the traditional family structure is the norm. Thus, intervention proposed at the family level can cause a significant drop in the prevalence of tobacco use behaviour.

## 2.2.2.2 Cultural orientation and environment

As demonstrated in the previous section, the human behavioural process consists of two interrelated facets known as the normative and descriptive. Going by Beresford and Sloper (2008), these facets describe the cognitive process of selecting a course of action from several possible alternatives, based on the values, preferences, and beliefs of individuals. Daily, people make copious decisions, ranging from what to eat, to how to dress or choice of music, to mention a few. Understanding how individuals arrive at a decision such as the ones listed has continued to gain popularity, particularly in behavioural science. It provides a valuable basis to encourage healthy lifestyles such as healthy eating and exercise and provides the source to discourage unhealthy behaviour such as tobacco smoking. While various sociological studies have studied the behavioural process, many of them are in the perspective of culture and its influence on the individual decision-making process, particularly in the context of the group system. Going by Muller et al. (2014), one common way to understand the behavioural process and the drivers thereof lies in identifying cultural differences. The Hofstede's cultural dimension has been widely adopted in studies to understand the behavioural process based on group cultural differences and commonalities, and to demonstrate differences in values and behaviour of people from different cultural settings.

Hofstede's cultural dimension proposes that cultural variance exists as a result of different cultures possessing different values, beliefs and philosophical systems that influence individual decision-making (See: Muller et al., 2014; Beresford and Sloper, 2008; Little et al., 2012; and Bhattacherjee, 2012). However, while different cultures are characterised by their different cultural standards that distinguish individual decision-making from one culture to another, it appears that individuals make decisions based on the awareness of their culture and the interpretation from their interaction with others. It explains why some cultures tend to allow teenagers or young adults to smoke around parents and elders, while another culture will rebuke such behaviour. Going by the cultural orientation as demonstrated in the previous section, an individualistic culture is likely to allow teenagers and young adults to smoke around family and elders as opposed to the collectivist culture that tends to scold such behaviour. This way, culture impacts on factors that influence decision-making such as desire, motivation, and symbolic meaning. It explains Morley and Robins (1989) argument that the value and symbolic meaning individuals attach to behaviour will only be meaningfully understood when considered in the context of other people within a value system. Self-concept tends to vary from culture to culture and consequently influences individual behaviour and goals in decision making. An independent self-construct predominantly dominate the individualistic cultures and are more likely to rely on feelings and consequently be more impulsive in their decisions as opposed to individuals in a collectivist culture with an interdependent self-construct.

Even though it seems decisions are determined solely by individual interaction within the traditional social network (in this case, cultural orientation), it appears that it is not always the case. The emergence and continuous development of technology mean that there is an increase in the source for resource extracted from the environment. The increasing impact of globalisation as a result of technological development has resulted in a new perspective in examining individual decision based on their interaction with the contemporary social environment. There is a general argument that technology has inevitably allowed for greater cultural diversity to occupy a given social space (Inglehart and Baker, 2000). Thus, the increase in resources available in the social environment appears to impact on attitude and beliefs of individuals that later manifest in the individual's behaviour, since there is the suggestion that exposure to elements of the social environment shapes behaviour.

While the contemporary social environment is more and more characterised by different cultural variants that are transmitted among individuals from different cultural groups, there are suggestions that these most impacts teenagers and young adults. They are more prone to creating new recombinations of diverse cultural variants. Such cultural variants can also be transmitted up to the older ones, as demonstrated by the low power distance culture. The wave of cultural globalisation has resulted in individuals from different cultures being able to relate to meta-symbols. However, Castells (2014) argues that the contemporary social environment is a combination of local and global culture, and the contemporary culture allows individuals to reconcile with global events or occurrences, while they maintain their traditional cultural values associated with their identity.

## 2.2.3 Culture, environment and technology

Before now, this study attempted to establish the role culture and environment play in the behavioural process. By building on that, this section further examines the relationship between culture, environment and technology as it relates to tobacco use behaviour. As established in the previous section, the relationship between culture and environment is complex, dynamic and continuously changing. While there are various reasons responsible for this, it appears that technology plays a significant role in the complexity (See: Inglehart and Baker, 2000; Stewards, 2006; and Rahmati, Darouian and Ahmadinia, 2012).

Going by Head, Trigger and Mulcock (2005), the relationship between culture and environment is socially constructed. In other words, the fundamental building block of culture is social learning within a social environment. Thus, attitudes, values and beliefs that are socially transmitted in a social network (for example, family or peer groups) within society influences culture. Already, anthropology theory describes culture as the sets of communicative acts (that is, communication as a means for groups and individuals to represent themselves and interact with each other through norms and values). Technology, on the other hand, is said to dissolve the barrier between cultures by helping to bring different cultures into contact and aid the communication process amongst them. This process facilitates change in social behaviour, attitude, beliefs and customs. According to Inglehart and Baker (2000), technology transforms culture in a powerful and unforeseen way, and such transformation applies to culture change towards tobacco.

Although several studies suggest a substantial expansion of the tobacco industry and the possible consequences to developing countries, little is known about the impact of diffusion of information or a new behavioural trend. Take, for instance, the transmission of information on the danger of tobacco use through media. Such information is capable of impacting tobacco use behaviour (Davis, 2008). Going by Kaul (2012), contemporary consumers appear to embrace communication technology and information in their daily activities. Though the media is not the only means of transmission of information, there is the argument it has the most potent effect and also helps spread knowledge to a large population quickly.

Another source of information is interpersonal ties. There is the argument that it plays a more active role in the formation and change of firmly held attitudes and beliefs. This is because communication exchange about behaviour within a setting create firm attitudes and beliefs (Myers, Zhu and Leskovec, 2012). Again, reflecting on the argument on tobacco consumption as highlighted early stage of this chapter, it is a learnt behaviour imposed directly or indirectly on developing countries through interaction with the Western world primarily via trading and the mass media. By following such argument, there is the expectation that the change in the trend of consumption in the industrialised countries will have a degree of impact on the formation of attitudes and perceptions towards tobacco use in developing countries. Understanding the impact of this on the acceptance or rejection of tobacco use can help inform effective tobacco control in these regions (Roberts, Kerr, and Smith, 2013).

Cultural imperialism explains one of the ways West impose cultures on people in developing countries (Tomlinson, 2012). As noted by Wherry (2015), exposure to Western influence causes changes in peoples' core values and beliefs, thus, leading to the loss of most cultural ideas as people imitate the foreign culture. In Nigeria, for instance, the new trend for the dissemination of information and lifestyle is via mass media, and it is the core source of cultural imperialism (Isaac, 2010). Nigerian youths are the most affected as studies show them to be more technology inclined and prone to imitate behaviour from Western culture (Iyorza, 2014). Although the general belief holds of 'media imperialists' is that it propagates violence and encourages risky behaviour (see: Musa and Domatob, 2011), it is not always the case. Raikhan et al., (2014) argue that the influence of westernisation also comes with a great deal of sound scientific and technological breakthrough, and also increases awareness of new hazards and risky behaviour from epidemiological research that opens peoples' mind to a healthy lifestyle.

This claim tends to fit into the purpose of this study. It illuminates the probability that information conveyed via the media on the change in attitude towards tobacco consumption in the industrialised countries will eventually make smoking undesirable in poorer countries as tobacco will no longer be perceived as fashionable. Tobacco use is continuously experiencing rejection in most developed countries, and developing countries look up to them as a role model (Pampel and Denney, 2011). Alternatively, it may help answer questions such as how tobacco consumer, particularly among teenagers and young adults in Nigeria, will perceive proven tobacco control intervention such as the ones proposed by the World Health Organisation FCTC. It can help inform whether it will be accepted or not? Information gathered in this context can advise on which proven intervention can be transferred from the developed countries to control tobacco consumption in developing countries effectively.

The rationale behind this is that with the increase in communication technology, information from social networks is said to be transforming the nature, reach, speed and loci of human influence. Exposure to communication technology is on the increase among the youth of developing countries (Bandura, 2001). Many developing countries, including Nigeria, imitate behavioural trends from the Western world. In the case of tobacco consumption where its use is getting continuous rejection by countries supposed to have imposed its use on poorer countries (Musa and Domatob, 2011), one can safely assume that this will have an impact on tobacco smoking in the rest of the world. While the study cuts across all the age categories of tobacco users in

Nigeria, more emphases are on the youth because they are more vulnerable to tobacco addiction and are the prime target of the tobacco industry. The youths also make up half of the total population of Nigeria.

In general, understanding the impact of global tobacco control on tobacco consumption in developing countries, as proposed by this study, is paramount. A better understanding of the level of openness or resistance to tobacco control strategy, such as the ones proposed by WHO FCTC, by consumers in these regions can help advise tobacco control advocates, researchers and practitioners on how best to tackle the issue of tobacco control. It also aids in identifying significant elements to be considered when proposing intervention for tobacco control in developing countries with particular reference to Nigeria. It appears many of the interventions proposed to deter smoking habit usually lead to a social trade-off between the individual's rights and the public good; for instance, the ban on tobacco smoking in public places (Bayer and Bachynski, 2013; Lawrence et al., 2008). Different people perceive trade-off differently, and this usually leads to either compromise or continuous discord. As highlighted by Bayer and Bachynski (2013), getting relevant information from reliable sources and experts, understanding the role values and power struggle plays in the decision-making process, and the inclusion of affected people in planning can help achieve a peaceful effort at changing risky behaviour in a society.

### 2.3 The study of tobacco use

An attempt is made in this section to examine further the interplay among culture, environment and technology and how it relates to tobacco use in developing countries, particularly in the context of Nigeria. It takes into consideration the impact of local and global environmental factors on tobacco consumption in contemporary society.

Epidemiological studies have revealed that non-communicable diseases are the most critical drivers of population health in the world. They are the leading causes of death globally, killing more people in the world than any other causes of fatalities combined (De Maio, 2011). According to reports, non-communicable diseases kill an estimated 41 million people annually; the equivalent of 71% of the total global deaths recorded annually (World Health

Organisation, 2014). Accordingly, nearly 80% of global deaths as a result of non-communicable diseases occurred in low and middle-income countries. Placing these figures in perspective, by 2015 the estimate population of the African continent, home to 54 low and middle-income countries was at 1 billion, with some 9.2 million deaths registered in the same year (World Health Organisation, 2017). Out of the total death recorded in that year, the estimated death caused by infectious diseases was at 56.4% (a total of 5.2 million deaths). At the same time, the estimated death caused by non-communicable diseases was at 33.5% (a total of 3.1 million deaths).

The record is in contrast to the report from 2010, with estimated death caused by infectious diseases recorded at 61.4% (a total of 5.6 million deaths), and estimated death caused by non-communicable diseases was at 29.4% (a total of 2.6 million deaths). The differences in the figures were attributed to urbanisation and higher standards of living. Likewise, the adverse effects of globalisation such as the increase in the unfair trade and irresponsible marketing of harmful products, for example, the marketing of cigarettes has also contributed to the increase in the deaths caused by non-communicable diseases. Although these figures show that communicable diseases are on the increase and projected to become the leading cause of death by 2030 (World Health Organisation, 2017).

Various studies have identified four main categories of non-communicable diseases to include cardiovascular disease (such as heart attack and stroke), chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma), cancer (such as lung cancers), and diabetes (World Health Organisation, 2014; Boutayeb and Boutayeb, 2005; and Siegel, Patel, and Ali, 2014). These four categories of disease are understood to be responsible for about 80% of all deaths caused by non-communicable diseases. Studies have revealed what risk factor these categories of diseases have in common: tobacco use (World Health Organisation, 2014). Having established that tobacco use manifest and generally formed during the adolescence stage and the one that sets the stage for non-communicable diseases in later life supports the purpose of this study. The recognition of the growing burden of non-

communicable disease in developing countries, particularly the ones caused by tobacco use has led to the continued call to prevent and control its growth. One such call is to understand how behaviour can be modified to discourage tobacco use behaviour. As established in the previous sections, elements in the social environment are capable of influencing behaviour. This section discussed how all these are applicable in the context of tobacco use in the contemporary consumer environment.

### 2.3.1 Concise account of Tobacco use

The increase in the global prevalence of tobacco use and the accompanying disadvantages reflect the early globalization of the tobacco product. The tobacco leaves alleged to be initially discovered by the natives of North and South America and used in the Central American and Caribbean regions soon made its way to Europe through its discovery by Columbus on his visit to America (Goodman, 2016). Not long after the introduction of tobacco to the Europeans, its cultivation and use spread rapidly throughout the region. What started as an act of curiosity in Europe late became a source of pleasure. Due to the addictive nature of the substance, it soon became a necessary pleasure, which later turned into a source of trade. The literature identifies tobacco dependence and its commercialization as the facilitator for its rapid spread. Today, tobacco is used everywhere in the world; with the tobacco industry becoming global, and tobacco companies becoming multinationals. The industrial revolution, coupled with the global marketing of tobacco products, resulted in the unparalleled increase in the growth of tobacco consumption as well as its associated disadvantages throughout the world.

Tobacco was alleged to arrive in Africa in 1560 when it was shipped in from America by the Portuguese and Spanish merchants to East Africa, from there it spread to Central Africa and West Africa (Goodman, 2016). By the 1650s, the European settlers in South Africa had started growing tobacco and using it as a form of currency. Although the history of tobacco use in Africa dates back well over five centuries, its use was relatively low and uncommon. Tobacco only began to grow in popularity in Africa decades ago when the region became a prime target for big tobacco companies expanding beyond their traditional market. The improving economy and health in many countries of this region have resulted in raising income levels, thereby providing transnational tobacco companies with potential markets. The continent is also characterized by a growing population, with a median age of 19 years. The population increased from 1 billion in 2010 to 1.2 billion in 2017. Besides these, between the late 1990s and early 2000s, Africa experienced a rate of economic growth likened the rest of the world. It peaked at above 6% by 2004 and remained higher than the global average post- 2001 (Blecher and Ross, 2013). Even though the continent is commonly perceived as been plagued by poverty, it appears that transnational tobacco companies see it as an economic opportunity.

It has become apparent that to describe the extent of tobacco use in a region and to inform a coherent strategy to prevent the burden associated with tobacco lies in understanding the pattern and the prevalence of tobacco consumption between and with such region, and among different population groups (including gender, age, ethnicity, socio-economic status) in the region. However, a major limitation in the study of cigarette smoking in the African region is the lack of comprehensive and periodic tobacco consumption and prevalence data at the national level. According to the World Health Organisation, (2017), the availability of data in this regard can provide significant evidence to prove the rise of tobacco use and its associated burden and inform evidence-based intervention to curb current tobacco use. However, many African countries are yet to undertake national surveys on smoking prevalence, thus making this improbably applicable.

The early study of the prevalence of cigarette smoking in Africa was recorded in 1970 and was only available in a few countries (Pampel, 2008). Tobacco use surveys in many African countries usually comprise of relatively low selection and also aimed at selected groups, making their reliability uncertain. However, the World Health Organisation (2017) argue that it will be erroneous to ignore trends of the data generated by these surveys as they suggest a continuous increase in tobacco use in the region as compared with developed countries. A study conducted by Boisclair and Guidon (2003) on the past, present and future trends of tobacco use illuminated that as developed countries experienced a decline in per capita cigarette smoking by 14% from 1970 to 2000, tobacco use rose by 46% in developing countries. Likewise, in Africa, the total cigarette consumption from 1980 to 2016 rose by 52% (that is from 164 million sticks to 250 million sticks annually: gender-specific smoking prevalence) as shown in table 2.4 (Drope and Schluger, 2018).

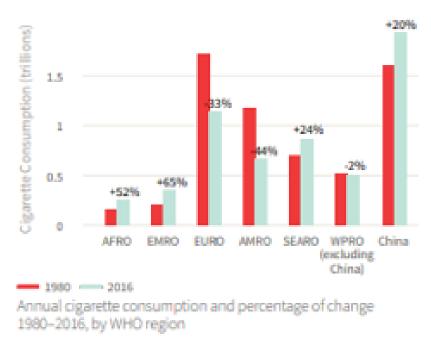


Figure 2. 4: The changes in consumption from 1980- 2016, by WHO regions.

*Source: Drope and Schluger, 2018* 

Although it is a logical argument to blame the increase in tobacco use in developing countries on the ongoing tobacco control success in developed countries, there is no clear evidence to support this. Going by Warner's (2000), the recent expansion of the tobacco industry to these regions could be because of an unintended host of economic circumstances accompanying international business. In this case, it might be to relieve the barriers to international trading such as technological and economic improvement in product distribution and marketing, as well as to remove any legal obstacle. Since transnational tobacco companies are profit-orientated firm and have the resources to multiply, it is expected of them to expand overseas to seek out profit wherever possible.

Nevertheless, there are strong pieces of evidence that suggest that tobacco companies play a significant role in shaping tobacco use behaviour. The transnational tobacco companies are known to employ a wide variety of marketing techniques to increase their sales, gain market share, attract new users, and retain existing customers (Elder, 1997). All of which translates into tobacco use behaviour by creating awareness of tobacco use and brand appeal, the recognition and recall of the brand, attitudes about smoking, and causes the intention to use tobacco as well as leading to the actual use of tobacco. Likewise, transnational tobacco companies marketing leads to the interaction of streams that influence tobacco use behaviour. Already, epidemiological studies on tobacco consumption and prevalence in many African countries reveal that transnational tobacco industry activities are primarily responsible for the increase in cigarette smoking. Evidence from studies suggests that:

- The future of the tobacco industry lies in the increase in tobacco use particularly among vulnerable groups (that is, teenagers, young adults and women), many of whom reside in low and middle-income countries including countries in Africa. This factor, coupled with inadequate attention towards tobacco use control by many African governments provides the tobacco industry with an enabling environment to market their products. The tobacco industry's marketing activities in low and middle-income countries, including Africa, is high and well documented (Otanez et Al., 2009).
- The tobacco industries are known to consistently contest and strive to circumvent the implementation of effective tobacco control by persuading government authority with highly misleading arguments. They claim to boost the economy by providing governments with huge revenue, creating job opportunities for citizens, and creating revenue for the non-tobacco industry such as restaurants and bars. In some cases, they intimidate government officials against comprehensive tobacco control measures with the threat of domestic litigation and arbitration under economic agreements (Gilmore et al., 2015).
- While the perception of the tobacco industry by both government officials and the public is a significant determinant for the level and success of tobacco control, evidence shows that the tobacco industry consistently strives to be on the good side by positioning themselves as a reasonable and consumer-friendly industry. Some of the ways they achieve this is by providing a consistent brand experience and making

their products readily available and accessible to the target market (Friedman, 2009).

- There is evidence that the basics of addressing tobacco use are through changing the attitude towards tobacco, by exposing the tobacco industry's marketing activities and interference by exposing its conducts (Gilmore et al., 2015).
- Lastly, even though the World Health Organisation has provided a framework for governments as a guideline to set strategies to protect the public from the tobacco industry's marketing activities, it is underutilized in many low and middle-income countries including countries Africa (World Health Organisation, 2017).

Several studies have demonstrated the significance of implementing effective measures or policies to reverse the current trends of cigarette smoking in low and middle-income countries. However, the contention is whether the successful implementation of proven measures such as those proposed by the World Health Organisation FCTC can achieve this, or if there is need to proffer a more radical evidence-based endgame solution applicable to the region. The reason for this is because while many developed countries have made tremendous, measurable success with tobacco control by building on the FCTC, studies suggest that implementing the FCTC can be challenging for many developing countries (Owusu et al., 2010). Many developing countries appear to lack the national capacity building that is vital for the successful implementation of FCTC.

There are suggestions that effective control of tobacco use lies in the attitude towards its use, and that unless the attitude changes an endgame solution is improbable. Gilmore et al., (2005) in a study suggest that a solution to the imminent tobacco epidemic is by changing the attitude towards the tobacco industry and its products, by actively monitoring and exposing the tobacco industry's conduct and educating the public on the consequences of tobacco use to their health and the immediate environment. Understanding tobacco control in this contest can serve as a basis on which to build measures.

#### 2.3.2 Tobacco in Nigeria.

Going by Mamudu et al., (2019), tobacco existence in Nigeria is dated back as far as the early 1800s. By then, tobacco farming was predominantly in the southern part of Nigeria. However, tobacco farming in commercial volume only began in 1912 when the British American Tobacco company started buying Nigeria Tobacco leaf at high volume (Environmental Rights Action/Friends of the Earth Nigeria, 2015). By 1933, the British American Tobacco had established her first factory in Oshogbo, to produce Bicycle brand cigarettes. Since then, several other transnational tobacco companies have found their way to Nigeria either through subsidiary, merger, or acquisition of local tobacco companies. Some of the notable events include the International Tobacco Corporation establishment in 1962, the establishment of Kwara Tobacco Company by Unilever in 1966, and the taking over of Kwara Tobacco Company by Philip Morris in 1967. Today, transnational tobacco companies dominate the Nigeria tobacco industry and are majorly responsible for the farming, production and distribution of tobacco products in Nigeria (Mamudu et al., 2020, and Onyekwena et al., 2019).

Over an extended period, the Nigeria tobacco industry thrived primarily because of the favourable environment offered by the Nigeria government for the tobacco industry to operate (Egbe et al., 2014). There were no restrictive regulatory framework or tobacco control measures in place up until the late 1990s, as outlined in table 2.3 (Mamudu et al., 2017 and Egbe et al., 2019). At that time, the tobacco industry was perceived by the Nigerian government as an important source of employment and source of tax revenue. They considered tobacco farming, manufacturing, distribution, and sales to constitute significant economic activities of the country. There was an estimate of 600,000 farmers in various parts of the country that depended on tobacco farming as a source of revenue (Copppock, 1965, and Mamudu et al., 2020). At the same time, another hundred of thousands benefited working in tobacco products manufacturing, distribution, and retailing (Mamudu et al. 2020). In addition to these, a significant percentage of the country's working population worked in supplier industries, providing services to the tobacco industry. The control of tobacco at that period was presumed to lead to a massive disruption of the country's economy, causing many to lose their source of livelihood, fall in income, and drop in tax revenue. Trade surpluses were also presumed to veer dangerously in the direction of deficit (Warner, 2000; and Mamudu et al., 2020).

Table 2. 3:	Timeline	of Nige	ria's Tobace	o Control	Legislative	Efforts
From 1990-	2015					

Date	Event
1990	Decree 20 enacted
1995	Unsuccessful attempt to review of Decree 20.
1999	May 29; Advent of the Fourth Republic after 16 years of military rule
2000	BAT Nigeria (BATN) incorporated as a Nigerian company
2000	Hon. Tony Anyanwu and Hon. Adamu Fanda introduces the Tobacco Smoking (Control) Amendment Bill. Presumably, this was the process to convert Decree 20 to become an Act.
2001	February 6; first reading of Tobacco Smoking (Control) Amendment Bill.
2001	British American Tobacco Nigeria (BATN) buys the remaining 40% shares of Nigerian Tobacco Company (NTC) becoming the sole owner of NTC. NTC's name is changed to BATN.
2002	Senator Nnamdi Eriobuna (representing Anambra South) introduces Cigarettes and Other Tobacco Products Bill.
2002	Advertising Practitioners Council of Nigeria (APCON) publishes guidelines banning all forms of tobacco advertising in the media.
2002	March 20: Cross River State passes a law prohibiting advertising cigarette and other tobacco products under Governor Donald Duke.
2004	June 28: Nigeria signs FCTC.
2005	October 20: Nigeria ratifies FCTC.
2005	Senator Muhammed Abba Aji (representing Borno Central) introduced A Bill to Regulate the Production, Marketing and Consumption of Tobacco and Tobacco Products.
2006	January 18: FCTC comes into force in Nigeria.
2007	Federal Capital Territory, Abuja passes smokefree public places law under Minister Aliyu Modibo.
2008	Senator Olorunmimbe Mamora (representing Lagos East) introduces the National Tobacco Control Bill (NTCB).
2009	February: Second reading on the NTCB.
2009	July 20: Public hearing on the NTCB.
2009	October 20: Osun State passes comprehensive smokefree public places law.
2011	March 11: Senate passes NTCB.
	May 31: House of Representatives passes NTCB.
	May 29: NTCB dies without a signature by President Goodluck Jonathan

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2012	Hon. Yacoob Bush-Alebiosu introduced the Tobacco Smoking (Control) Bill in the
	House of Representatives.
2012	Senator Ifeanyi Okowa (representing Delta North) introduces NTCB.
2012	September 26: Ekiti State passes Prohibition of Smoking in Public Places Law under
	Governor Peter Fayose.
2013	March 21: Tobacco Smoking (Control) Bill passes second reading in the house.
2014	February 17: Lagos State passes Lagos State smokefree law under Governor Raji
	Fashola.
2014	April 9: Federal Executive Council approves draft Tobacco Control Bill (Executive NTCB
	2014) to be sent to the National Assembly.
2014	September 24: Tobacco Control Bill passes first reading in the Senate.
2014	July 16: Public hearing on new tobacco bill in the House of Representative.
2014	October 15: Public hearing on tobacco bill in the House of Senate.
2015	May 12: Both houses of the National Assembly pass new tobacco bill.
2015	May 26: President Jonathan signs the NTCA into law.
2018	2018 Nigerian Industrial Standards (NIS: 463:2018), Standards for Tobacco and
	Tobacco Products. Specifications for Cigarettes.
2018	Nigerian Industrial Standards (NIS: 1031:2018), Standards for Tobacco and Tobacco
	Products. Smokeless Tobacco Products

Source: Egbe et al., 2019 and Mamudu et al., 2020.

The aggressive expansion of transnational tobacco companies into developing countries, including Nigeria prompted the World Health Organisation to call for tobacco control in these countries to reduce tobacco use. This call, in return, stimulated efforts to develop tobacco control regulations in Nigeria and other African countries. The establishment of the 'Tobacco Smoking (Control) Decree 20' of 1990 marked the beginning of the control of tobacco and exposure of tobacco industry activities in Nigeria and many countries in Africa (Egbe et al., 2017 and Mamudu et al., 2017). However, the efforts of the transnational tobacco companies to circumvent tobacco control in Nigeria mirrored strategies they employed in several countries, to resist tobacco control.

The tobacco companies were involved in the drafting and implementing of decree 20. The Decree 20 included provisions proposed by the industry which excluded hospitality venues from the smoke-free area, set minimal marketing restrictions in marketing, and put vague clauses in the health warnings that weakens the effectiveness of the Decree (Egbe et al., 2017). The tobacco industry also participated in the improvement of Decree 20 after indications

showing the ineffectiveness of the Decree. Likewise, in addition to successfully lobbying the exclusion of hospitality venues from smoke-free environments and minimizing restriction on advertising and promotion, they tried to debunk scientific evidence on smoking and health. The industry recruited prominent politically well-connected members to divert tobacco debate from public health to social and economic issues, including trade and benefits of growing tobacco (Egbe et al., 2019).

In the continual effort by the Nigeria government to improve on tobacco control, Nigeria signed the World Health Organisation Framework Convention for Tobacco Control (FCTC) in October 2005 (Egbe et al., 2014). As with many other African countries, the FCTC played a vital role in the development of the nation's National Tobacco Control Bill (NTCB) to reduce tobacco use. After years of deliberating on the bill, the Senate and House of Assembly passed it to the then President to assent to it. However, the President failed to consent to the bill, thereby resulting in the formation of new bill facilitated by the Federal Ministry of Health, which was passed as an Executive Bill to the Federal Executive Council and Senate for approval. With the mounting pressure from tobacco control advocates, the President eventually approved the bill. Evidence suggested that the delay in the approval of the bill was because of stiff resistance from the tobacco industry (Mamudu et al., 2017).

Although the current National Tobacco Control bill 2015 is a comprehensive, FCTC- compliant legal instrument that addresses all tobacco measures, it appears elements of the bill are poorly implemented. Likewise, government actions on tobacco control are inconsistent (Mamudu et al., 2017). While the National Tobacco Control Bill emphasizes the reduction in tobacco use for public health, it appears some government actions are in contrary to the set-out aim. Take, for instance, in 2001; the Nigerian government signed a memorandum of understanding with British American Tobacco Nigeria to build the potential for regional export (Oladepo et al., 2018). This, in return, resulted in a significant increase in the quantity and quality of locally grown tobacco. Likewise, in 2001, the Nigeria government waived tax for tobacco companies to entice investors into Nigeria to boost the economy. While the current governments have since increased the tariff on alcoholic beverages and tobacco products by 20%, the increase is significantly low as per World Health Organisation advise who recommended the excise tax burden of 70% (Modebe et al., 2014). Lastly, though the Nigerian government developed most of the tobacco-related policy documents after FCTC ratification, it appeared that tobacco industry was involved with the development of the Standard for Tobacco and Tobacco Products-Specifications for Cigarette 2014, which is contrary to the FCTC recommendations (Mamudu et al., 2017).

As with Nigeria, there are indications that tobacco control effort in many African countries are frustrated by the political and economic influence from strong transnational tobacco companies, even though these countries are members of FCTC and have ratified it (Egbe et al., 2014). Take, for instance, Cameroon has ratified the FCTC, and have developed a national comprehensive law project on tobacco, using the FCTC recommendation. However, it appears the law is still under consideration, as it is yet to be passed into law, though it was last revised in 2012. The farmer subsidies granted by the government through the parliament appears to be a significant contributing factor for the delay in passing the comprehensive law. Similarly, Kanya is a member FCTC and have ratified it. However, the tobacco industry interference plays a significant role in delaying the formation and poor implementation of some key laws. Likewise, Malawi has a long history of tobacco production, and at one point, relied heavily on tobacco production and sales to support its economy. It appears there is consensus among the stakeholders in the country that implementation of any form of tobacco control law will result in the decline in tobacco manufacture that will negatively impact the national economy. While Malawi is yet to ratify the FCTC, there are indications that they are willing to learn from other countries that have ratified FCTC such as Nigeria, to learn how to reduce the overreliance on tobacco crops (Wisdom et al., 2018). Other countries with similar issues of transnational tobacco companies interference include South Africa, Togo, Gambia, and Mauritius, to mention a few.

Understanding tobacco use in Nigeria could be instrumental in addressing the issue of tobacco use not only in Nigeria but other parts of Africa as it appears there are similarities in the interference from transnational companies in countries they operate. Likewise, several African countries look up to Nigeria to set the trend for them to follow. While the tactics are not unique to Nigeria, knowing how consumers react to them can inform tobacco use behaviour and reaction to its control (Egbe et al., 2019). The impetus behind this is because any change in Nigeria is not only crucial to Nigerians and its economy but many countries in Africa, taking into consideration Nigeria's political and economic importance in Africa where any change in the country tends to impact on other parts of Africa.

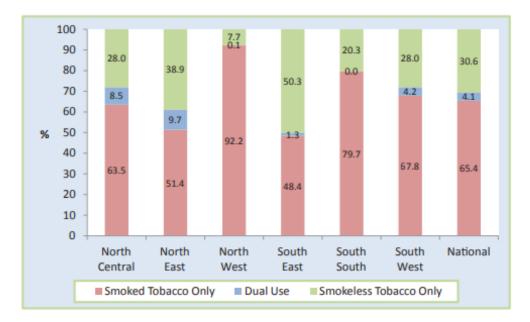
### 2.3.3 Tobacco use prevalence in Nigeria.

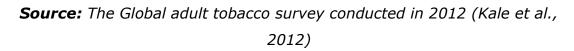
Nigeria is known as the most populous country in Africa. While the Nigerian government last conducted a detailed census in 2006 with the population totalled at 140,003,542 (Idike et al., 2015), the current Nigerian population is estimated to have grown over 200million people. Most of Nigeria population are young population comprising an estimate of 42.45% between the ages of 0-14 years and 19.81% between the ages of 15-24 years (Kale et al., 2012). Nigeria is also a country with cultural diversity, consisting of a variety of customs and tradition. It home over 250 ethnic groups, with over 500 languages. The three largest ethnic groups are the Yoruba, Hausa, and Igbos making up 21%, 27.4% and 18% of the population, respectively. The three prominent religious groups in Nigeria include the Christians, the Muslims and other indigenous beliefs making up 45%, 45% and 10% of the population, respectively. Nigeria has six geopolitical zones comprising of 36 states, and a Federal Capital Territory, and 774 Local Government Area (LGAs). The geopolitical include North Central, North East, North West, South East, South-South, and South West sharing 29.6%, 35.8%, 53.2%, 18.5%, 36.6, and 26.3% of the country's population respectively (Kale et al., 2012).

It appears that as Nigeria population is diverse in terms of ethnicity, culture, religion and language, so does tobacco use vary among its people. Going by Adeniji et al., (2016), as of 2015, there were an estimate of 11 million current smokers in Nigeria, with 20 million people that reported to have ever smoked. While several reports on tobacco use in Nigeria conform with the prediction that many smokers started at younger age between the age of 11-15 years, it appears that older people from the age of 34 and above were more likely to smoke, particularly in the public sphere (Aniwada et al., 2018). Likewise,

studies on smoking prevalence and gender distribution in Nigeria show that smoking prevalence in men is high when compared to women. According to the Global adult tobacco survey conducted in 2012, from the 3.7% of the population that smoked cigarettes, 7.2% were men, while 0.3% were women (Kale et al., 2012). Many studies have attributed the difference in the prevalence of tobacco use in gender to societal perception as most African countries perceive smoking as a sign of masculinity. The social value of these countries discourages smoking among women. There are also considerable variations in the distribution of tobacco users across the geopolitical zones in Nigeria, as demonstrated in figure 2.5. The North West has the highest, and the South East has the lowest number of tobacco users in the country.







Several studies conducted to understand tobacco use in Nigeria have identified multiple levels of influence that include individual, interpersonal, and community to affect tobacco use behaviour. In the case of individual factors, they are attributes that reside within the individual that influences tobacco use. These factors include demographic, biologic and psychological components. Although it appears that an individual can modify some of these factors (such

as the educational status), they are not able to alter some other factors (such as genetic makeup and age) (Egbe et al., 2014). Interpersonal factors, on the other hand, are agents or forces within an individual sphere of life-space or activity, that exert the conforming influence (such as acceptability or intolerance of smoking) on the individual. Typically, such pressure comes from family, peers, colleagues and romantic partners. Lastly, an individual's community directly or indirectly influence their behaviour. In which case, the community encompasses factors such as culture, tolerance to set of actions, community-level activities, and policy and leadership that may influence tobacco use.

While this is so, it appears that the psychosocial construct of tobacco use behaviour (including personal belief, opinions, subjective norms or social norm) operates at all of these levels of influence to determine tobacco use behaviour. Take, for instance; there is consensus in the study of tobacco use that most smokers begin smoking during their adolescent years before growing to an established tobacco user. In agreement to this, the works of Omokhodion et al., 2007, Adebiyi et al., 2010, Odunkoya et al., 2016 and Onyiriuka et al., 2011, on tobacco use among adolescents and young adults in Nigeria have identified peer influence as the most common risk factor among the studies reviewed. According to the World Health Organisation (2017), adolescents and young adults at that stage of their lives are more vulnerable to peer pressure, especially when it comes to risky behaviours such as tobacco use. Some of the prominent reason for this include, the assertion of independence, exploring self-identity, craving approval from peers, and the worries of being rejected.

Another common factor identified in the literature that contributes to tobacco use behaviour is the use of tobacco as a coping mechanism. Stress, loneliness and depressive symptoms appear to be the most common psychosocial risk factors for smoking tobacco as a coping mechanism in Nigeria (Oyewole et al., 2018). People who resort to tobacco use as a way to deal with stress, loneliness, and depression do so with the belief that tobacco takes away these symptoms. Likewise, people smoke as a way to cope with the different challenges they face in their daily lives ranging from work stress to economic pressure and to using tobacco to pass the time. In line with this, a study conducted by Wakil (2015) to examine how the Nigerian police officers cope with stress at work also reveal that police officers resort to tobacco use and other substance as a way of dealing with job induced stressor. Similarly, a study conducted by Oku et al., (2015) to understand the prevalence of stress and coping strategies among medical students in a Nigerian medical school suggest that medical students often resort to tobacco and other drugs to deal with stress.

Studies also identify media advertisement and increasing age as risk factors for tobacco smoking in Nigeria. In particular, exposure to tobacco advertising is said to lead to the likelihood of initiation and continuation of smoking among adolescents and young adults. Lienemann et al. (2019) suggest that the effectiveness of tobacco advertising depend on the extent such advertisement appeal to people. Smit et al. (2006) further explained that people are more likely to pay attention to an advertisement that appeals to them, which can lead to more significant message processing. Given that advertisement is an extension of a brand, a tobacco product advertisement that is appealing can lead to the purchase of such product. Likewise, attractive advertising tends to influence information processing by stimulating positive arousal and activation, improving information recall, and leading to a favourable judgement of the message and product. Lastly, a positive emotion towards an advertisement can arouse positive attitudes that can result in the brand appeal. Subsequently, lead to the amplification of the benefits and reduction in perceived risk of the product.

Other psychosocial factors identified in studies on tobacco use in Nigeria include substance use (including alcohol use), parental smoking, parental level of education, male gender, and family condition. While the National Tobacco Control Bill 2015 accommodated for the ban of any form of tobacco marketing, there are reports that exposure to tobacco marketing, especially among adolescents and young adults in Nigeria remain high (Chido-Amajuoyi et al., 2017).

#### 2.3.4 The culture of tobacco use in Nigeria.

The literature has continued to attribute the aggressive marketing strategies of transnational tobacco companies to the increase in tobacco use in developing countries, including Nigeria. While this may appear to be the case, it seems that culture controls many aspects of tobacco use. Tobacco products, whether smoke or smokeless, are symbolic in many traditions across the globe (Egbe et al., 2014). Likewise, symbolic meaning attached to tobacco use varies across culture and determines how people use tobacco. Some of the symbolic meaning early societies in Nigeria attached to tobacco use include tobacco use as a symbol of hospitality, tobacco use as means of communicating with the gods and spirits, smoking as a prestigious behaviour, and perceiving tobacco to possess healing powers capable of curing diseases. Studies have demonstrated that smoking behaviour, particularly across ethnic groups in Nigeria, can be understood culturally. A survey conducted by Egbe et al., (2013) on community participation in tobacco control in a Nigerian setting, have shows that culture play a crucial role in sustaining tobacco smoking in many communities in Nigeria.

Although culture encourages tobacco use, there is evidence that culture is also capable of preventing tobacco use. Some cultural traditions, such as religious traditions that frown against tobacco use, are capable of discouraging tobacco use among people that participate in such cultural activities (Egbe e al, 2014). Take, for instance, Christianity and tobacco use. While the Bible does not explicitly condemn smoking, it appears that many Christians generally interpret the addictiveness of tobacco as being a slave to cigarette, which the Bible preaches against slavery behaviour. Likewise, this cultural group belief that smoking is unhealthy, which the Bible also preaches against unhealthy and unclean habits. Thus, smoking is generally seen as a sin for many Christians (Brigham, 2019). This extrapolation may explain the variation in the prevalence of smoking across religious groups in Nigeria. It appears that the numbers of Christian tobacco user are always relatively lower when compared to Muslims tobacco users. It seems that while Christians read meanings to the teachings from the Bible that portray tobacco as sin, the general underlying principle of Islamic law is such that everything is permitted, except such thing is explicitly prohibited in the Quran. Thus, since there is no direct mention of tobacco smoking in the primary source of law (the Quran), tobacco smoking is regarded as an acceptable sociable activity (Ghouri et al., 2006).

Likewise, ethnic traditions influence a person's personality morally. Since it is the social experiences saved up by the person in the course of their progressive activity, it is capable of creating beliefs (Sakenov et al., 2012). Thus, a person's subjective experiences of cultural identity and corresponding place in the society dictate whether or not, or how the person will indulge in tobacco use (The United States, Office of the Surgeon, 2012). The variation in ethnic traditions in Nigeria may explain the differences in the prevalence of tobacco use across ethnic groups. This is because each ethnic groups in Nigeria have sets of values that distinguish one ethnic group from another. It is not an uncommon practice for ethnic groups to protect themselves from influence arising from contending cultural paradigms from other ethnic groups by members of the ethnic group promoting and sustaining their ethnic identity. Take, for instance, the Igbos that predominantly dominate the Southern part of Nigerian. According to Egbe et al., (2013), cultural practices in this region require the provision of cigarette and tobacco-related items for traditional ceremonies. The failure to supply tobacco-related items comes with consequences such as postponement or disruption of the ceremony. In contrast, the Yorubas that predominantly dominate Western Nigeria frowns against the provision of tobacco as an essential requirement for any form of ceremony.

While society shape behaviour, it is said to send contrasting messages on tobacco use among various social groups. Take, for instance, while studies show tobacco-related products as an essential commodity in Southern Nigeria, tobacco use in Western Nigeria, particularly among young adults, has always be frowned against. The Yorubas generally perceive tobacco use as irresponsible behaviour and a sign of deviancy. In the case of age and gender, it appears that tobacco use among children and young adults, and female counterparts carry an even more negative connotation. This extrapolation explains why many young adults and female tobacco users in Western Nigeria conceal their smoking habit. Studies have identified respect for older members of cultural groups to contribute to this phenomenon. On The Contrary, going by Egba et al., (2013), it is not an uncommon practice for more senior members of cultural groups in Southern Nigeria to present tobacco to young males as a way to mark maturity. In contrast, age does not count among more senior members of cultural groups in Western Nigeria, as no matter how old a person gets, they still get frowned at when they indulge in tobacco use.

The respect for more senior members of a community comes with its disadvantages. The literature shows that some practices associated with respect for more senior members of a community result in tobacco use among younger members of such cultural group. A common practice is the one that involves older members of a community sending younger ones on errands to purchase tobacco products. There are cases where young kids are required to light up the cigarette at the point of sale (Eqbe et al., 2014). This actions, in return, lead to a norm for underage to easily purchase tobacco, as studies show that once a child says an older adult sent him or her to buy tobacco products, he or she does not get questioned. The narrative indicates that the cultural norm of obedience and unquestioned respect for more senior members of a cultural group such as purchasing tobacco has a negative influence on children and younger adults. The practice exposes children and younger adults to a culture of tobacco smoking from a tender age. The practice also creates easy access to tobacco as children or younger adults can easily disguise to purchase tobacco products for their use (Gilmore et al., 2015).

As culture is inherently predisposed to change, as demonstrated in the early part of this chapter, so does cultural practices changes. The concept of emerging cultural practices explains current practices that are fast becoming as strong as primordial cultures. Media exposure and exposure to external cultures play a crucial role in the process of emerging cultural practices (Egbe et al., 2013). Take, for instance, the requirement of tobacco products at cultural ceremonies in Southern Nigeria. It appears that the tradition was not originally part of the cultural tradition in that region. The practice evolved through adoption before becoming an established cultural practice. Media, mainly through advertisement and movie, was identified to contribute to this norm (Egbe et al., 2013). This extrapolation is also applicable to tobacco use among adolescents and young adults, as it is not uncommon for them to be a target of tobacco companies. It explains the growing norm among these groups that perceive smoking as 'cool' thing to do. Evidence from studies shows that tobacco companies make advertisements that appeal to their target market. Advertisements targeted at adolescents and young adult depict tobacco to possess self-projection qualities such as identity for success, a sign of maturity, a sign of independence and a symbol of toughness (Gilmore et al., 2015).

## 2.3.5 Activities of tobacco companies in Nigeria.

The presence of transnational tobacco companies in Nigeria can be understood from the context of the global tobacco market and the growing importance of opportunities presented in emerging markets (Gilmore et al., 2015). It is not an uncommon practice for transnational tobacco companies in search of profit to expand their global sales by using investment and trade libration to enter new markets (US Department of Health and Human Service, 2012). This is because the future of transnational tobacco companies depends on driving consumption and stretching profit margins in existing markets. The population size, growing number of adolescents, as well as access to other markets in Africa, has made Nigeria a key hub to transnational tobacco companies for tobacco production and distribution (Egbe e al., 2019).

Nigeria happens to be one of the leading tobacco markets in Africa. According to Onyekwena et al., (2019), Nigeria manufactures an average of 19 billion sticks of cigarettes annually. On average, a person consumes 162 sticks of cigarettes annually in Nigeria. In 2015, the country sold an estimate of 18.4 billion cigarettes sticks, of which 12.2 billion were produced locally, with British American Tobacco holding significant market power, accounting for 75% of the overall domestic production (Onyekwena et al., 2019). Connolly (1992) has extensively covered transnational tobacco companies approach to market extension and shown to drive rapid increases in tobacco use. Typically, transnational tobacco companies drive up sales through immense marketing, making sure the products are as cheap and accessible as possible, and systematically flaunt existing tobacco control laws and preventing future policies by lobbying. It turns out that they apply the same strategies in all of their markets. They capitalize on the dysfunction of tobacco control policies

present such market, to carry out their promotional activities (Gilmore et al., 2015).

While this may be the case, transnational tobacco companies are known to strategically position themselves and their effort to stay in business in ways that encourage increases in tobacco use among their target market (Gilmore et al., 2015). They market their product primarily through tobacco advertising, promotion and sponsorship (TAPS). In Nigeria, forms of TAPS that exit include direct marketing such as billboards, merchandising, sponsorship such as music events, brand stretching, product packaging, product placement, corporate social responsibility, and point of sales (Mamudu et al., 2020). Though transnational tobacco companies have repeatedly claimed that their marketing activities are only for existing smokers, to encourage brand switching, they continue to face criticism. Several studies have called-out their marketing activities, as it appears that they are deliberately targeted at non-smokers, especially women and young people (Egbe et al., 2017, Mamudu et al., 2017, and Gilmore et al., 2015). While the prevalence of tobacco use among Nigerian women and young females is lower when compared to their counterparts, transnational tobacco companies marketing activities appears to aim to conciliate smoking culture between the opposite sexes as shown in picture 1. One of such strategies is the use of trendsetters to promote and normalize the image of the African female tobacco user in an attempt to mollify the cultural barriers to female smoking Adebiyi et al., 2017).

Picture 1. 1: A billboard showing a trendsetter advertisement in Lagos, Nigeria.



Source: The Pump Handle 2007

Evidence from studies also indicates a causal relationship between tobacco advertising and distribution and tobacco use initiation (Gilmore et al., 2015). There are suggestions that the slightest exposure to tobacco and its advertising, and easy access to tobacco products, as shown in picture 2 is capable of influencing people to smoke, especially children and young adults. In this regard, there have been reports of tobacco companies intentionally conducting their sales and advertisement, and distribution in a way that is easily accessible and appealing to non-smokers, including children and young adults. In Nigeria, tobacco sales and distribution are made mostly through newsagents tobacconist and kiosk that are present in most neighbourhoods. They are usually situated where they are easily accessible (Mamudu et al., 2017). These retail outlets typically have a heavy presence of point-of-sale advertisements. The tobacco companies understand the effect of advertising and promotion on awareness of smoking and what brand to smoke, the recognition and recall of product advertising, attitudes about smoking, intention to smoke and actual smoking (Gilmore et al., 2015). Thus, supplies these retail outlets with free promotional items that contain appealing imagery and information for them to display around the retail store.



Picture 1. 2: Showing exposure to tobacco and its advertising

Source: Adebiyi et al., 2017

Likewise, there have been reports of tobacco companies conducting sales and advertising of tobacco within a 100-metre radius of school premises to drive tobacco use among these groups. A study conducted by the National Tobacco Control Research Group to investigate the tobacco companies sales and distribution activities around school premises found out that out of the 221 schools surveyed in 5 states in Nigeria, 193 (87%) had a tobacco point of sale within the 100-metres of the school premises. At the same time, 127 (66%) of the 193 points of sales were within the visible range of the schools' immediate environment (Mamudu et al., 2017). It is understood that the proximity of tobacco retail to school, place children and young adult at risk of smoking initiation, as studies have established that proximity of tobacco retail outlets to schools is associated with smoking initiation among children and young adult. These retailers display tobacco products close to other products that appeal to children, such as household items and candy, as shown in picture 3 (Adebiyi et al., 2017). They also sell single sticks, making smoking affordable and accessible, particularly for the poor and young adults. Efforts to ban sales of single sticks of cigarette have continued to be keenly contested and circumvented by transnational tobacco companies (Adebiyi et al., 2017).

Picture 1. 3: Tobacco retail store close the premises of a school.



Source: Adebiyi et al., 2017

The tobacco companies are aware of the importance of the retail stores in driving initiation of smoking and the overall consumption of cigarettes. It explains why they spend the significant portion of their marketing budget on advertising and promotions in store. In addition to tobacco activities already discussed, it appears that tobacco companies are actively involved with registration and approval of the location of retail stores in Nigeria. Evidence from the work of Adebiyi et al., (2017) suggest that tobacco companies make deliberate efforts to locate retail stores where it is accessible to their target markets. Picture 4 shows a certified sticker placed on a container containing confectionaries as a symbol of authenticity. Likewise, tobacco companies are known to partner with distribution companies for effective distribution of their product. A typical example is the Great Brands Nigeria Limited that is the sole distributor of British America Tobacco products. The company has a highly effective distribution network that penetrates all the corners of the country, as shown in picture 5. It also prides itself as the Nigeria leading consumer product sales and distribution company (Mamudu et al., 2017).

Picture 1. 4: Branded sticker on a transparent container for tea and candies.



Source: Adebiyi et al., 2017

Namey Doseder Maradi Soluto Katsina Naicogun Zaria Naicogun Zaria Naicogun Zaria Naicogun Zaria Naicogun Carota Makurd Dos Dodo Enupu Katsina Carota Makurd Dos Dodo Enupu Katsina Carota Makurd Bafor Dodo Enupu Katsina Carota Makurd Radon Dodo Enupu Katsina Carota Makurd Radon Carota Makurd Carota Makurd Radon Carota Makurd Carota Makurd Radon Carota Makurd Carota Makurd Radon Carota Makurd Carota Carota Makurd Carota Carota

Picture 1. 5: The Great Brands distribution network.

Source: Adebiyi et al., 2017.

Other activities by the tobacco companies in Nigeria include the employment of various innovation and strategies to respond to the evolution of consumerproduct demands to ensure maximum sales (Mamudu et al., 2017, and Adebiyi 2017). Such invention includes the manufacture and sales of flavour tobacco products targeted at non-conventional tobacco users. Another of such invention is the manufacture and sales of sophisticated smokeless tobacco and vapour products targeted mostly at middle and upper-income consumers (Mamudu et al., 2017, and Adebiyi 2017). In this respect, there has been a marked increase in the sales of tobacco product, particularly within the flavoured range and the forms of nicotine delivery products. The tobacco companies also use illicit trade to undermine the tobacco control in Nigeria and other African countries. They achieve this by seeking cooperation and partnership with agencies tasked with the control of illicit trade. Take, for instance, in 2007, British American Tobacco made donations in the form of cash and vehicles to the Nigerian Customs Service tasked with the control of illicit goods in Nigeria (Mamudu et al., 2017).

Despite the prohibition of tobacco activities by the Nigerian government, the pervasiveness of tobacco use and its marketing have continued to linger. Although there is no singular cause for this phenomenon, studies have continued to link it to lack of awareness to tobacco control law, lack of enforcement by the authorities, and lack of prioritization of enforcement (Mamudu et al., 2017, Egbe et al., 2019 and Adebiyi 2017).

#### 2.3.6 Public knowledge of tobacco use

A large body of research on tobacco control over the years has shown the role of public knowledge on the prevalence of tobacco use. The incessant global control of tobacco use, particularly in many developed countries was born out of the knowledge acquired of the danger of tobacco use to self and others. The works of Samet, (2016) and Berg et al., (2018) show how epidemiological research on tobacco use has grown over time. They also highlight how through research, studies have continued to build on other studies to understand and contribute to the knowledge of health and the diseases caused by tobacco, by addressing gaps in the evidence to distinguish the presence and absence of causal association clearly. The discovery from epidemiological studies appears to have brought about the advent of legal restrictions on smoking in public space. Likewise, mass media counter-marketing campaigns to dissuade people from its use, and higher taxes on cigarettes to limit its affordability and accessibility, particularly to young teenagers, were as a result of the discovery from epidemiological studies. These invariably have improved public knowledge on the health risk associated with tobacco use, thereby facilitating change in the public image of tobacco use. Among the many forces identified in epidemiological studies that helped drive the change in the public image of tobacco use is the increase in the recognition that tobacco use is an addictive substance. Also that it is a major cause of life-threatening illnesses such as cancer for its users (US Department of Health and Human Services, 2006).

Typically, public knowledge comprises the insight attained through the communal processing of public information and depending on the public information available to be processed can impact on consumer behaviour either positively or negatively (Ashley and Cohen, 2003). In the context of tobacco use, studies have shown public information available to people within a given society to impact significantly on the prevalence of tobacco use. Take, for instance, the prevalence of tobacco use in a society that gives room for tobacco companies' marketing activities. Such a society usually experience higher

prevalence in tobacco use when compared to a society that does otherwise. The works of Lantz, (2003); and Savell, Gilmore and Fooks, 2014) has extensively covered these claims. It appears that exposure to tobacco marketing and brand properties that make tobacco use attractive and appealing can reinforce tobacco use as a mainstream or normal activity in a society. Thereby causing an increase in tobacco consumption among users and lure non-users, especially young teenagers into tobacco use.

In a different context, the prevalence of tobacco use appears to be lower in a society that has some form of restrictions on tobacco companies marketing activities. Such restrictions include limiting the medium of sales, advertisement, and the use of tobacco, and by running some form of anti-tobacco media campaigns to counter tobacco companies marketing activities (Henriksen, 2012). An extensive body of literature has covered this area of study. It validates the significance of the control of tobacco companies marketing activities of any kind and the importance of public knowledge and appropriate awareness in helping the consumer make a healthful choice.

The integration of the perception of a product and the self-identity of a consumer appears to be crucial to consumer behaviour, as the combination of both conditions can create an environment in which both the prevalence and acceptability of behaviour can become embellished and easily evolve to habit (IIaw, 2014). The works of Hastings and Angus, 2008; and Bandura, (1999) demonstrate how the mix of social, personal and environmental influences encourage both the onset and continuance of a behaviour. There are suggestions that consumers often encounter brand imagery through three sources, including their social environment, the popular media and tobacco companies marketing. The work of Zhang (2015) shows how brand imagery can impact on the use of a product. A positive image can drive the onset and continuous use of a product, while a negative image can upset the use of a product.

Since consumer behaviour is predisposed to change based on information available, a product image can change from positive to negative and vice visa. This claim explains the impact of change in the image of tobacco, that used to be associated with maturity, glamour, and friendship. It has over the years been faced with feelings of discrimination and rejection by many of its users. The continuous increase in tobacco regulation by governments around the world, particularly the ones that limit tobacco companies' marketing activities appear to have facilitated these changes (Henriksen, 2012). Take, for instance, the tobacco control policies in the United Kingdom that include smoke-free legislation, age restrictions for sales of tobacco, steady taxation increases, and high-profile health warnings are rated to be among the most comprehensive in Europe. The effectiveness of these policies has been well captured in studies and reported to have a positive effect on driving down the prevalence of tobacco use. The rate of tobacco use in the United Kingdom is reported to have fallen by nearly 50% since the 1970s. The reduction in the rate of consumer exposure to product imagery and an increase in the anti-tobacco related campaigns that empower the consumers to make a healthy choice have contributed to the decline (Office for National Statistics, 2014).

The pressure in favour of banning tobacco use and its consequent ramification and influence on the perception and attitude towards tobacco use appear to create an unfavourable image for tobacco, its users and the tobacco industry. The growing change in the public image of tobacco use is a marker of the growing denormalisation' of tobacco use (Ling et al., 2014). The term denormalisation has been the central theme in the study of tobacco use behaviour in recent times. The term describes the transition in the status of tobacco use from a widely appreciated practice and socially acceptable behaviour. The works of Bell et al., (2010) show that increasing implementation of public health policies that combat tobacco use by altering the social context and incentive for using tobacco is mainly responsible for the evolution of tobacco use status.

In the same manner, the tobacco industry experience denormalisation in line with the decline in its public image. There is an increase in the use of denormalisation strategy to depict the tobacco industry as a powerful, deceptive, and dangerous enemy of health, responsible for tobacco-related diseases, and that uses manipulative strategies to promote its deadly and highly addictive product (Calabro, Costello, and Prokhorov, 2010). Many developed countries utilize extensive denormalization strategy to discourage tobacco use. Take the United Kingdom, for example; there is an increase in the limitation of where tobacco can be consumed, thereby causing segregation of tobacco users from non-users (Anyanwu et al., 2018). The newer generation of cars no longer has smoking accessories such as cigarette lighters and ashtrays (Frauendorfer et al., 2014). The preference of non-smoking behaviour over smoking behaviour is increasingly becoming evident as it has become a trend in the advertisement such as dating or accommodation sites overwhelmingly specifying a preference for non-smokers (Hennrikus et al., 2003).

At this point, it is imperative to have a clear synopsis of the public image in terms of the cognitive behavioural process. Typically, public awareness is a crucial indicator of public image. Psychologist often describes awareness in the context of consciousness as the state wherein a subject is aware of information when such information is directly available to bring to bear in the direction of a wide range of behavioural processes (Rochat, 2003). Awareness is used as the term to describe consumers' consciousness of themselves and the world in which they live. In this regard, consciousness is the driver of consumer behaviour based on the individual's awareness of their internal states as well as the events going on around them. What this suggests is that a conscious process drives consumer behaviour.

However, Dijksterhuis et al., (2004) believe that although the decision-making process is automatic, that involves either conscious information processes or simply non-conscious processes, they believe that non-conscious process mostly drives consumer behaviour. Regardless of these, a growing body of literature in the field of automatic processes has identified environmental features to be responsible for activating the automatic process that subsequently leads to a behavioural outcome (Corr, 2010). The environmental features that include social situation, the presence of other people, events, objects, places to mention a few. The impact of environmental features on the automatic process includes attitude activation, automatic evaluation of emotions, nonconscious behavioural mimicry, automatic trait and stereotype activation, and nonconscious goal pursuit to mention a few. In return, the

automatic process then leads to an outcome that includes, behaviour, motivation, judgement and emotions as illustrated in the diagram below.

#### Figure 2. 6: Model of Automatic Processes



Source: Pavitt, 2014

Going by the model, the environmental features are responsible for triggering automatic processes that lead to an outcome. However, studies demonstrate that consumers can either be aware or unaware of the environmental features that trigger an automatic process for an outcome to occur. In other words, while it is expected consumers to be aware of the environmental feature that triggers the automatic process that leads to an outcome, awareness of the environmental feature is thought not to be a necessary condition for an automatic process to be triggered (Ningrum and Heriansyah, 2018). This claim is particularly accurate in the case where a consumer is aware of an activity (say smoking), and the activity is so ingrained that the subject no longer has to regulate the activity consciously. The activity becomes automatic. In the case where a consumer is not aware of the environmental feature, the influential situation that triggers an automatic process will most likely not be noticed or ignored, thereby resulting in an uncontrolled outcome. However, in the case where the consumer is aware of the environmental feature that triggers automatic processes, the consumer can choose whether to avoid such triggers or associate the situation with more constructive behaviour, that over time becomes the new automatic association (Dijksterhuis et al., 2004).

Conversely, social psychology and consumer behaviour study generally discuss automatic processes as a mediator between environmental features and outcome that more or less occur outside the consumer's conscious awareness (Chartrand, 2005). The literature has demonstrated that consumers are often aware of the environmental features and outcome, but often unaware of the automatic process that leads to the outcome. This illustration explains why tobacco consumers report smoking more when with friends and family than when they smoke alone. The environmental feature can trigger a process that leads to a given outcome. Since the intervening process will rarely be accessible to conscious awareness, the individual cannot change, modify or override it. In other words, the consumer's decision to smoke more when with family or friend is a relatively innocent event, that can have a significant impact on the consumer's health. If the consumer becomes aware of the automatic processes (in this case, the consumers become aware of smoking more when with family and friends) can make an effort to change or stop the automatic processes.

There are cases where consumers are not aware of the outcome of automatic processes. In this case, the consumer does not recognise smoking more when with family and friends (Chartrand, 2005). In such a scenario, consumers often do not see any reason for a change to happen, thereby leading to a repetitive outcome. The awareness of an outcome can often lead to consumers making an effort to understand the factors responsible for the occurrence and further making an effort to change such an outcome. Overall, the significance of identifying the consumer's awareness of a product cannot be overemphasised as the control, modification, elimination, and change of behavioural outcome can only come with awareness.

#### 2.3.7 Public attitude towards tobacco use

The previous section discussed the role public knowledge plays in shaping the public image towards tobacco use. It suggested that public knowledge and appropriate awareness can lead the consumers to make a healthy choice. The automatic process model was adopted to demonstrate how awareness leads to a behavioural outcome. The automatic processes model is a linear progression of environmental features leading to an automatic process (attitude) that, in turn, leads to a behavioural outcome. In the context of tobacco use, this model suggested that by educating the public or exposing the public to the information on the negative health impact of tobacco use would automatically lead to a more proactive and positive behavioural outcome. Burgess et al. (1998) referred to the automatic processes model as a deficit model of public understanding and action.

In recent times, there has been an increase in the trend of government and non-governmental organisations around the world to base their campaigns and strategies to curb tobacco use in the form of educating the public with the expectation that it will lead to more enlightened behaviour. However, studies have shown that this is not always the case, as behaviour appears to be difficult to change, even if the latter behaviour has a distinct advantage over the former. According to Ajzen and Fishbein (1980), people are rational, in that they make systematic use of the information available to them, and not controlled by unconscious motive, or overpowering desires, neither is their behaviour capricious or thoughtless. The theory of reasoned action demonstrates that the ultimate determinant of any behaviour is the attitude that influences behavioural intention, the behavioural beliefs concerning its consequence and normative belief concerning the perception of others (Ajzen and Fishbein, 1980, p.239).

Before advancing into the details, it is useful to clarify the terms attitude, belief and norm as they relate to this study. Going by Fazio (2007), attitude represents a person's summary evaluation of attitude objects (in this case, whether smoking is good versus bad). The belief, on the other hand, is thought to represent characteristics that one attributes to or is associated with the attitude object. Take, for instance; a person may believe that tobacco use causes cancer. Lastly, the norm represents the belief about what one thinks others do or ought to do. According to the theory of reasoned action, an individual intent to partake or not partake in an activity is a strong determinant of that behaviour (Ajzen and Fishbein, 1980). Sequentially, intention depends on both the individual's attitude towards behaviour and the individual anticipation that significant others will approve or disapprove the behaviour. Putting this in the context of tobacco use, it proposes that there will be a strong intention for tobacco use if the consumer evaluates it favourably and if the consumer believes significant people around expect him or her to smoke. This claim suggests that the importance of attitude and norm depend on intention, population and a submissive consumer. Likewise, extensive empirical studies, usually in cultural context, appear to agree that attitude and norms are essential antecedents of tobacco use behaviour.

Often, studies that measure people's attitude to tobacco use usually are operationalised as questions about their beliefs in the health risks associated with tobacco use, and norms and values regarding tobacco use (that is, annoyance or tolerance of environmental tobacco use) (Burgess et al., 1998). The findings from relating studies on the relationship between tobacco use status and belief in the danger of tobacco use and the behavioural outcome are as follows:

- Knowledge of issues: it represents a person's familiarity with the environmental problem and causes. Studies including Popova et al., (2018) demonstrate that people who evaluate tobacco use negatively do so in part with their knowledge of the negative effect associated with tobacco use.
- Knowledge of action and strategies: It represents a person's action based on the knowledge of the environmental problem. Studies, including Minh An et al., (2013), demonstrate that non-smokers are most likely to be more knowledgeable about the health consequence of tobacco use than tobacco users. The negative evaluation of the health effect of tobacco often contributes to the intention not to use tobacco.
- Normative component: it represents how things are or ought to be. Although there are expectations that the increase in knowledge about the harmful effect of tobacco use is significant to change attitude, emerging evidence suggests that other factors, including social norms, have stronger holds on attitude change. Studies including Buller et al., (2003) on the predictors of tobacco use behaviour have emphasised the significance of the influence of the social environment on tobacco use behaviour. It reflects the secular trend of decline in the social acceptability of tobacco use.

Studies have demonstrated the dramatic change in tobacco use behaviour and public attitudes towards tobacco use around the world, particularly in many developed countries. It shows that the rate of tobacco users in many of the regions experiencing a change in attitude towards tobacco use have reduced by almost half. Some of the reasons attributed to the decline in the rate of tobacco use are the continual efforts by the government to reduce the affordability and accessibility to tobacco, mostly by continually increasing the tobacco tax. Likewise, the continuous restriction of places where tobacco use is allowed and denormalisation of tobacco use by governments and nongovernmental organisations has made tobacco use behaviour undesirable. All these undoubtedly contribute to the transformation of the environment that supports tobacco use and to the social marginalisation of tobacco use as acceptable behaviour.

Generally, it appears that a change in the environment that supports tobacco use has a direct independent ability to foster change in tobacco use behaviour. The literature demonstrates that the environment plays a critical role in determining how intrinsic biological factors that are involved in nicotine dependency get expressed at the population level. It suggests that, unless the social environment supports tobacco use, having a genetic profile that makes one vulnerable to nicotine dependency does not automatically guarantee that an individual will become a tobacco user or will be unable to stop tobacco use. Christakis and Fowler (2008), in a study, illustrate the importance of the social environment in influencing trends in tobacco use behaviour by demonstrating the link between trends in tobacco use behaviour and the individual's social ties. According to the study, an individual whose social network includes an increasing share of tobacco users is likely to continue tobacco use. Whereas, an individual whose social network includes an increasing share of non-tobacco users, has a strong tendency to quit over time.

In brief, the literature suggests that the solution to tobacco problems lies in changing individual tobacco use behaviour; changing the social context that supports tobacco use; and exposing the tobacco industry's activities to prevent it from circumventing the goals of tobacco control. Cumming (2009) has argued that an intervention that has the highest chance to reduce tobacco use is the one that reaches a larger population of tobacco users rather than the one that targets a tiny fraction of tobacco users. Thus, understanding the mechanism by which attitudes and social norms are likely to exert influence on tobacco use at the population-level is significant to the knowledge of tobacco control. This is because, in theory, attitude and subjective social norms (the perception of others' behaviour or attitude) are distinct concepts predicting a

specific behavioural intention, and subsequently predicting behavioural change.

In practice, the social ecology model has been widely utilised in tobacco control-related studies to explain health behaviour and has set a broad policy agenda in a social context to promote change to tobacco use behaviour. While the model is exclusively focused on interventional programmes to reduce tobacco use behaviour, the denormalisation effects as a result of this are said to often lead to healthy anti-tobacco use norms. This is because the natural effect of policies on tobacco control often leads to tobacco use behaviour becoming undesirable. Over time, the attitude towards tobacco use at population-level can reasonably capture and represent a change in tobacco use related norms, based on the premise that social norms are a collective perception of appropriateness. Going by Keohane and Nye (2000), one can conceptualise the link between social environment and change in attitude towards tobacco use at population-level in the context of three different relevant dimensions of globalisation that include: economic (the long-distance flow of goods, capital and services as well as information and perceptions that accompany market exchange); political (the diffusion of government policies internationally); and social and cultural (the spread of ideas, information, images and people).

#### 2.4 Contemporary tobacco use

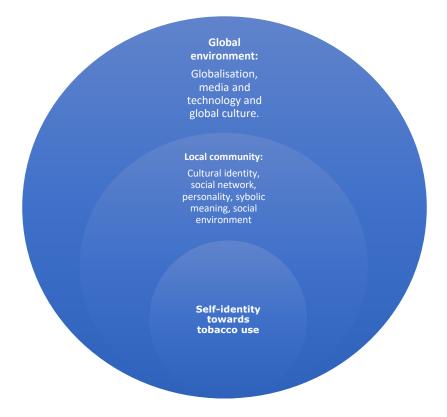
Section 2.2 described consumers as social elements that interact with different social elements belonging to a unique culture. Likewise, they are said to be unique in themselves, and because of the multidimensional aspect of consumers and the dynamic consumer environment that is inherent to social change and technology development further makes understanding consumer behaviour and consumption difficult. An increasingly significant area in consumption theories is identity construction. According to Fournier (1998), consumers use possessions and brands to create their self-identities and communicate these selves to themselves and others. In other words, identity construction explains the relationship between identity and consumption and attempts to explain why consumers may behave the way they do. Take, for instance, why will someone feel comfortable to use tobacco when around

specific sets of people but will feel uncomfortable to use tobacco around other sets of people? Could this be a result of value expression? Or the need for affiliation? Veblen (1965), propose the trickle-down effect to explain consumption in the context of identity construction through emulation. It illuminates how people with different socioeconomic status emulate behaviour from other people with a different socioeconomic status. An example includes emulation of behaviour from people of higher social status (example: celebrities) by people of lower social status (example: peers). Likewise, people appear to change their identity to distinguish themselves from other people. Take, for instance, wealthier people changing their consumption habit to remain distinguished.

A considerable number of studies suggest that society and culture play a significant role in consumption and identity. Going by Mach (2007), identity is a symbolic construct (that is the image of oneself) built by the process of communication with others. It is said to continually evolve through acquisition, maintenance, latency or disposition and possible reconstruction. Stryker (2007) illustrates that change in identity often followed a change in the external environment (one's social network) and the use and display of possession. While the change in self-identity (that is, the way one thinks about, evaluates or perceives oneself) is said to be influenced by both biological and environmental factors, the social interaction appears to play a significant role as well. Thus, there is a chance that the constant change in environment and personal situation can cause re-evaluation and modification of individual identity. This study discussed the change in the social environment in the perspective of contemporary consumption environment, and base on the literature review covered so far the study further discussed factors considered to influence the consumption environment in the context of identity as the local community (that include: culture, social network, personality, symbolic meaning, social environment) and global environment (that include: globalisation, media and technology and global culture).

Figure 2.7 illustrates the relationship between the factors in the microenvironment and macro-environment and how they relate to the self-identity of tobacco use. As indicated in section 2.2, factors in the micro-environment and macro-environment play a significant role in shaping contemporary consumption. In the context of tobacco use, the influence of this can be seen in the use and displacement of possession (tobacco) to reinforce self-identity.

# Figure 2. 7: The relationship between microenvironment and macroenvironment and self-identity as it relates to tobacco use



Source: Developed for this study

# 2.4.1 The local community

The local community (microenvironment) represents the factor in the external environment that influences behaviour at the individual level. The microenvironmental factors, as shown in figure 2.7, include cultural identity, social network, personality, symbolic meaning and social environment. Subsequent sections discussed these factors as they relate to tobacco use.

# 2.4.1.1 Cultural identity

Section 2.2.1 described culture broadly to encompass a broad spectrum of behavioural traits: ranging from what principles people hold dearly, to their way of living. It defines the way people reason and acts per societal group principles (see: Little 2012). The significance of culture on consumer behaviour has been well documented and shown to be a substantial factor that determines how products and services are used and disposed of. The reason being that culture in itself is said to be a result of social interaction. Thus, while individuals acquire sets of values, beliefs, perceptions and preference that determine the use and disposal of goods and services by social interaction, values, beliefs, perceptions and preference can in themselves generate to culture. Some of the lessons learnt from studies on culture and self-concept include that:

- Culture is said to be comprehensive in the sense that all parts of it must fit together in some logical manner.
- Culture is said to be learnt rather than something that is inherited.
- It is ever-changing and non-static (referred to as cultural evolution).
- Cultural change is said to be a complicated process that includes intervention and diffusion.
- Culture manifest within the boundaries of acceptable behaviour.
- The conscious awareness of the cultural standard is said to be limited.
- Lastly, it is said to fall on a continuum between static and dynamic depending on the openness to change.

Why is the discussion of culture in the context of self-concept important to tobacco use research? Typically, self-concept is the perception or recognition of one's characteristics as a particular individual, especially concerning social context. In other words, what a person identifies with determines the person's identity. By substituting this in the context of culture, describe a person's cultural identity or the feeling of belonging to a cultural group (Bhattacherjee, 2012). Therefore, a person's behaviour is informed by what the person comes to identify with and sets of ideas (characteristic of the broader cultural setting) that a person attaches to. Thus, by accepting the sets of ideas exhibited by the larger cultural group indicates the acceptability of the person as part of the cultural group exhibits ideas or behaviour contrary to the cultural group, it may result in such person being persecuted or marginalised. This claim is remarkably accurate of cultural groups with a high intolerance to the members defaulting on the cultural expectation. A person with a contrary view or

behaviour may be pressured to suppress or hide such view or behaviour, or in some cases, identify with another cultural group.

Building on the point already made, Topalova (1997) demonstrate self-identity in the context of individualist and collectivist culture to describe the degree to which a person is attached to a cultural group. It suggests that members of an individualist culture are of the view that self exists independently of the other, comprises personal attributes, and a person is an independent agent of their actions. The individualist culture appreciates beliefs, attitude and behaviour that benefit the individual self (Booker et al., 2004). In contrast, members of a collectivist culture tend to view the self as it relates to others, stressing the interdependence of the self as part of a more significant network of people who shape each other. The collectivist culture appreciates beliefs, attitude and behaviour that support the family, community, and the collective unit (Booker et al., 2004). The psychological belief is that change in behaviour is quicker in a society that emphasises collectivism. The rationale being that when an idea has taken hold, societal pressure acts as a catalyst to quicken the spread and confirmation of such an idea. On the contrary, it appears that the pattern of behavioural change is slower in a society that emphasises individualism as there is less social pressure to conform to it. Hofstede (2003) popularise the classification of societies by developing ways to measure differences in cultural values and ideology.

In the effort to understand and categorise cultural identity at the country level, researchers have had to narrow their focus to the study of values. Kluckhohn et al. (1961) have described value as the principles that give order and guidance to people in their thought and action as they face common human problems and issues. Thus, by observing the principles that different cultural groups exhibit in their thought and action has made it possible for researchers to deduce the values shared by various groups. This makes it possible to categorise societies and compare them based on commonly shared values. Thomas (2008) did a review of the major frameworks that have emerged out of value studies including Hofstede's model, the Global Leadership and Organisational Behaviour Effectiveness (GLOBE), the Klukhohn and Strodtbeck framework, Trompennars's value dimensions, and the Schwartz Value Survey. The review intends to find consensus in studies of national culture in terms of

value measurement. The dimension common to these studies of value is the individualist and collectivist dimension. The study of social behaviour has extensively applied the individualist and collectivist dimension, particularly in the attempt to predict behavioural patterns. It appears that the individualist and collectivist construction is critical to basic psychological processing, as it serves as a powerful explanatory tool for understanding the disparity in the behaviour of individuals from different parts of the globe.

Several studies conducted to understand the prevalence of tobacco use and to determine tobacco use behaviour transmission through society, suggest that tobacco use in a population is similar to how epidemics are transmitted (Lang et al., 2015; Du et al., 2014). These studies suggest that the critical factor that determines how tobacco use behaviour is transmitted lies in the individualism and collectivism of society. Following the study of the network effect in a cultural group, it appears that an individual is likely to align values with the values of others when there is social pressure present. The rationale for this is that an individual conforming to society tends to receive the direct benefit of reduced social pressure. However, there is emerging evidence from the study of tobacco use that suggests otherwise. In particular, an emphasis was made on independence and self-reliance as opposed to dependence and collaboration to be critical to the spread of tobacco use behaviour. It is said that cultural groups that exhibit collectivism experience more social inertia, causing decision making to be slower. Putting this in the context of network effects, when fewer people are partaking in behaviour, there are little direct benefits for taking up the behaviour. Likewise, when a behaviour reaches its alp and people are aware of its consequence, they are slower to give up such behaviour since there is little benefit from stopping. It explains why different national populations respond to the issue of tobacco use differently.

In general, sociological research on national culture has shown that Western culture tends to promote individualism. What this suggests is that individuals in this category of culture are of the view that the self exists independently of others, and comprise of personal attributes. Likewise, individuals are independent agents of their actions. On the other hand, Eastern culture promotes collectivism as the dominant perspective of oneself. It suggests that individuals in this category of culture view self as it relates to others, stressing

the interdependence of self as part of a more extensive network. This claim is similar to the finding from the study by Christopoulou and Lillard (2014) on immigrants visiting another country. It appears that when members of a Western culture visit another country, they most likely make the journey by themselves and will not necessarily seek help from within their cultural group already settled in the host country. Besides, when they do, they tend to still aim for personal goals. The case of members from an Eastern culture visiting a host country is slightly different, as it appears that members tend to move in groups, and in most cases identify with community members of the cultural group already settled in the host country to receive and assist them. Fernandez and Fogli 2009; Luttmer and Singal 2011; Algan and Cahuc, 2010; and Fisman and Miguel 2007, discovered similar findings, by demonstrating the way the cultural group influences self-construction, and the influence on individual decision making.

Typically, studies of this nature represent behaviour in the context of ethnic boundaries to demonstrate how the pattern of social interaction gives rise to and subsequently reinforces, in-group members, self-identification, and outsiders' confirmation of group distinction. While they conceptualise selfconcept in the context of individualism and collectivism as extreme or dichotomy dimensions on a continuum, Triandis (1995) argue that researchers should treat culture as multidimensional on a continuum. For instance, American individualism is different from the Swedish individualism, and Korean collectivism is different from that of Israeli. According to Dixon (2009), as the global culture gets similar, cultural influences slowly gain ground in both directions. This claim further explains why union within Japanese families contradicts the theory of Eastern collectivism, and also why Latin Americans are more collectivism inclined. This school of thought is similar to Bunka's (1997) line of reasoning that believe culture can no longer be determined by individualism and collectivism theory. Instead, by examing individual and the movement towards the self. The rationale behind this is the increasing contact of the West and East, breaking down boundaries which are, at one point, invisible-thereby causing cultural and territorial boundaries to become obsolete. The self-consciousness, personal individuality, and self-concept are increasingly determined by individual consciousness of the environment at

large. Going by Bunka (1997), the transition between cultures in the world creates one's consciousness through one's meaning, perception, understanding, thoughts, feelings, and adoption strategies.

Section 2.3.6 described consciousness in the context of the environment as a driver that determines behaviour based on an individual's awareness of their internal state and the events going on around them. Thus, if there is the argument that the contemporary environment is characterised by increasing contact between West and East, it implies that the environment within which decision making takes place is elastic. This assertion follows the Fite (1912) school of thought on consciousness, which implies that all the intentions of an individual should receive consideration, and as long as the act is fully conscious, all the intentions will be satisfied in the activity chosen by the individual. While this involves comprehension of the environment, it also involves the freedom of the conscious individual, the freedom that lifts them above the material law and mechanical order of nature. Similarly, Class (1897) argument states that an individual is the essential expression of the meaning of the universe that an individual carries. Thus, individuals peculiarities which are found within them must also have an ultimate logical statement in the movement of the thought process. In Class (1897) view, perfect individuality or a fully developed personality rather than a social construct is the result of a deep and profound consciousness of the actual social relations.

#### 2.4.1.2 Social network

Various work has captured social network and its impact on behaviour. Although the concept is prominent in sociology, it is increasingly attracting attention from other academic disciplines. In sociology, social networking is a concept for the structure of relationship linking social actors (Marden, 2000) or the set of actors and the ties among them (Wasserman and Faust, 1994). According to Pescosolido (1991), interactions are the basic building blocks of human experience, mapping the connections that individuals have with one another, and the structure of these interactions among actors appears to have a significant consequence for individual behaviour and the social system as a whole. While the concept of a social network is viewed and expressed in different ways by sociologists, it appears that there is a clear connection between network, social structure and social interaction. Going by Simmel (1955, p.163), "Society arises from the individuals and individuals arises out of association". In addition to this, studies suggest that society evolves as a result of human association. In order to understand how society evolves, Pescosolido (1991) examine the evolution of human society in two ideal configurations that include 'the premodern form of a concentric social circle' and 'the modern form of interaction of social circle', and the impact on behaviour, particularly on the construction of personality and belief systems.

The social network in premodern society is thought to be encapsulating and comforting, but often intolerant of the outsider. It is said to be characterised by a sense of security and solidarity that minimises psychological tension for the majority of individuals. It limits freedom, individuality and diversity. The modern society, on the other hand, brings about individuality, allowing individuals to increasingly interact with a greater number of networks, with more numerous, but fewer multi-stranded ties. Unlike premodern society where networks are intolerant, and self-concept imposed, networks in modern societies are more tolerant, and self-concept is made by the individual self, thereby reducing the guidance created by networks. It is, for this reason, many believe that crafting individual identity in modern society is challenging. Following the argument that identity is a product of socialisation, they believed that the freedom, individualism and diversity modern society possesses make it difficult for individuals to construct behaviour and self-concepts including personality and belief systems that predetermine a behavioural outcome (Pescosolido, 2006). In other words, they believe that the behavioural process is no longer predicted by individualised traditional society agencies of socialisation such as the family, friends, religions or neighbourhood, but by the intersection of all the social networks an individual has inherited and built. While this may seem to be the case, it appears that social networking is an institution for communication, and its function in self-construction and individual behaviour can broadly be understood by one of the following:

 Descriptive (that is the denotation of majority approval or disapproval): signifies an individual expressing psychological attachment to an ingroup and the intention to take part in various form of collective socially motivated action. According to Hogg and Reid (2006), high identifiers to the group are more likely to adopt the groups' norms and values, acting according to group goals and interest, and behave in ways that accentuate the group's social position.

- Prescriptive (that is act as a guideline for acceptable behaviour, particularly in the context of sociocultural value): signifies self-identity or self-image and nested in social categories, so individual social environment encompasses a set of prescribed norms. According to Luttmer (2001), individual intention to part take in behaviour is dependent on the characteristics of the individuals around them.
- Predictive (that is the possible transition of social networks an individual might encounter in his or her lifetime): signifies the impact of the change in the social network or change in identity from a network that supports a behaviour to a network or connecting with other social networks that are against such behaviour. Such change is likely to cause a significant impact on individuals partaking in such behaviour. According to Cruwys et al. (2014), the number of social connections, and the quality of those connections as identification with a positive and supportive group is significant to developing and maintaining individual behaviour.

All these suggest that self-identity construction is shaped and maintained by social reinforcement (socialisation), as well as social sanction through individual interaction with the social network. The increase in the rapid proliferation and advancement of communication technology and rapid globalisation in the contemporary social environment also means that the social context in which self-concept is constructed is no longer constrained to the local environment, but also subjected to global reinforcement. Thus, factors acting as prescriptive influencers for the process (that is, experimentation, establishment and maintenance) of tobacco use have both a local and global perspective.

Regarding tobacco use, it appears that both social support and social network function as social relations that play a significant role in the formulation of tobacco use behaviour. In other words, social support is a function of social relations provided by people from the same social network, and social networks generally refer to individual contact with members of an individual cultural group such as family, peer groups, and colleagues. Thus, social relations between the social network and social support form the attitude and belief an individual has of tobacco. Through people's interaction in a social network can form information and social norms about tobacco that are capable of influencing tobacco use behaviour. Various studies of the social relations of both social support and social network on tobacco use behaviour (that is, the impact of traditional agencies such as family, friends and community in a social network on tobacco use behaviour) demonstrate this. However, it appears that the social networks in the context of available resources in a cultural group can also function as social support (also known as structural social support). Going by Bhatterchjee (2012), contemporary society can provide individuals with various networks, all of which they may or may not have a tie. As such, social networks may function as social support regardless of the social tie. It explains why Yun et al. (2010) argued that structural social support concerning tobacco use could influence individual smoking behaviour. Take, for example, the exposure of an individual to an alien network such as the one that projects tobacco smoking as not being a cool lifestyle can impact on attitude and beliefs towards tobacco and can serve as social support that discourages such behaviour.

Indeed, the study of social media has continued to gain popularity when examining the influence of the social network on tobacco use behaviour. The reason being that technology has continued to offer new ways for people to interact, thereby creating new behaviour. According to Clark, Algoe, and Green (2018), people's engagement with social media demonstrate their innate need to network, as they feel happy and fulfilled when they interact with others. The more people interact on a large scale, the higher the tendency that they will influence each other's social and personal lives. Studies have demonstrated that people experience changes in their conscious and unconscious behaviour as a result of interaction with others. Thus, it is helpful to understand how others influence people and how the connection with others will impact on their lives. Wood (2016) argues that although social networks give people richer experiences, such a network can lead to either a positive or negative experience. In recent times, social media are the most predictors of social behaviours, such as the trends in vogue. Going by the United States Department of Health and Human Service (2012), exposure to social behaviour such as tobacco use in the media tends to predetermine tobacco use behaviour, particularly among teenagers and young people. Likewise, Wakefield, Loken, and Hornik (2010) demonstrated that exposure to images or information that challenge unhealthy behaviour such as tobacco use could dissuade such behaviour. Depending on the scale of social influence as a result of individuals interacting in a social network can result in the formation of culture.

# 2.4.1.3 Personality

Early studies conducted to predict personality were in the context of physical appearance. Take, for instance, the phrenologist measure personality by assessing the patterns of bumps on one's skull. The physiognomist, on the other hand, believes that it is possible to assess personality from facial characteristics. The Somatologist believe people's personality can be measured by assessing their body type. However, the failure of these theories to have a scientific validation has resulted in discrediting their propositions in contemporary psychology. According to Ajzen (2005), personality is defined as the patterned body of habits, traits, attitudes and ideas individuals exhibit as they organise these into an external role and status, and as they relate internally to motivation, goals and various aspect of the self-concept. Bhattacherjee (2012) has demonstrated that personality traits are best measured by administering personality tests to people to self-report about their characteristics. The personality dimension and its implication for behaviour as derived from behavioural studies are detailed below.

Table 2. 4: Description of	personality trait
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Trait	Description	Example of behaviour
		exhibited.
Authoritarianism (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950)	A cluster of traits including conventionalism, superstition, toughness, and exaggerated concerns with sexuality	Authoritarians are more likely to be prejudiced, to conform to leaders, and to display rigid behaviours.
Individualism-collectivism (Triandis, 1989)	Individualism is the tendency to focus on	Individualists prefer to engage in behaviours that

	oneself and one's personal goals; collectivism is the tendency to focus on one's relations with others.	make them stand out from others, whereas collectivists prefer to engage in behaviours that emphasise their similarity
Internal versus external locus of control (Rotter, 1966)	In comparison to those with an external locus of control, people with an internal locus of control are more likely to believe that life events are mainly due to their efforts and personal characteristics.	to others. People with a higher internal locus of control are happier, less depressed, and healthier in comparison to those with an external locus of control.
Need for achievement (McClelland, 1958)	The desire to make significant accomplishments by mastering skills or meeting high standards	Those high in need select achievement tasks that are not too difficult to be sure they will succeed in them.
Need for cognition (Cacioppo & Petty, 1982)	The extent to which people engage in and enjoy effortful cognitive activities	People high in the need for cognition pay more attention to arguments in ads.
Regulatory focus (Shah, Higgins, & Friedman, 1998)	Refers to differences in the motivations that energise behaviour, varying from a promotion orientation (seeking out new opportunities) to a prevention orientation (avoiding adverse outcomes)	People with a promotion orientation are more motivated by goals of gaining money, whereas those with prevention orientation are more concerned about losing money.
Self-consciousness (Fenigstein, Sheier, & Buss, 1975)	The tendency to introspect and examine one's inner self and feelings	People high in self- consciousness spend more time preparing their hair and makeup before they leave the house.

	High self-esteem means	High self-esteem is
Self-esteem (Rosenberg,	having a positive attitude	associated with a variety
1965)	toward oneself and one's	of positive psychological
	capabilities.	and health outcomes.
Sensation seeking (Zuckerman, 2007)	The motivation to engage in extreme and risky behaviours	Sensation seekers are more likely to engage in risky behaviours such as extreme and risky sports, substance abuse, unsafe sex, and crime.

**Sources:** Adorno, 1950; Cacioppo, 1982; Fenigstein, 1975; McClelland, 1958; Rosenberg, 1965; Rotter, 1966; Shah, 1998; Triandis, 1989; Zuckerman, 2007

While studies of personality and tobacco use behaviour have adopted different models of personality, it appears that the theoretical model proposed by Eysenck (1967) is highly influential and widely used to understand the relationship between tobacco use and personality characteristics. The model posits that there are three predominant dimensions of characters that relate to smoking. They include extroversion, neuroticism and psychoticism.

## Extroversion:

The extroversion dimension comprises factors such sociability, as assertiveness, positive emotions, vivacity and activity level. It is measured on the scale of stimulation (Ghaderi and Ghasemi, 2012). It posits that people who are high in extroversion have the propensity to seek out social stimulation and opportunities to engage with others. These groups of people are known as extroverts and believed to be full of life, energy and positivity. Equally, it posits that people who are low in extroversion have the propensity to be quiet, reserved and less involved in social situations. It proposed that there is a relationship between extroversion and tobacco smoking. There is a general hypothesis that extroverts may try to change their external environment by increasing their activities or try to change their internal environment by ingesting substances such as tobacco when low in extroversion. In contrast, introverts may try to reduce the stimulation input when high in extroversion.

There has been an increase in studies to understand why individuals tend to be extrovert or introvert, and it is generally agreed to be that nature and nurture are key contributors. Going by Twin studies, it appears that genetics contributes 40% to 50% to the level of variance in extroversion. In line with this, Ghaderi and Ghasemi (2012), Rasmussen and Lawyer (2008) believe extroversion is composed clearly of a strong genetic component. Rasmussen and Lawyer (2008) believe the environment plays a role in the variance of extroversion. This claim is in agreement with sibling studies that suggest that individual experience carries greater weight when compared to shared experiences in the family. Lastly, there a link between variability in personality traits and differences in cortical arousal (Eysenck, 1967). It appears that extroverts tend to need more external stimulation, while introverts can become easily stimulated.

#### Neuroticism:

The neuroticism dimension comprises factors such as sadness, moodiness and emotional instability. Similar to extroversion, neuroticism is measured on the scale of stimulation. It posits that individuals high on neuroticism tend to experience unstable moods, anxiety, irritability and sadness. Equally, those low on neuroticism tend to be more stable and emotionally resilient. There is a general hypothesis that people high in neuroticism tend to use substances such as tobacco to help them reduce their negative effects. Various factors have been identified in studies to cause variance in the level of neuroticism in individuals. One of such factors is age. Age contributes to the variance in the level of neuroticism. According to Scollon and Diener (2007), the neuroticism score of individuals tends to gradually reduce as a person grow old because they tend to become more comfortable with their life circumstances. It appears that individuals' gender further influences these scores. Going by the publication from Horwitz, Luong, Charles, (2008), neuroticism levels tend to be generally higher in women than in men. Weisberg et al. (2011) have, however, argued that the disparity in gender decreases as people grow old.

#### Psychoticism:

According to Eysenck (1967), the psychoticism dimension describes the tendency of individuals to be prone to risk-taking, engaging in anti-social behaviour, impulsiveness and non-conformist behaviour. Eysenck (1967) expresses that people possessing psychotic conditions tend to be characterised by behaviours deemed as detached from reality. They may experience delusion or hallucination, which might be risky to them or the people around them. It appears that the psychoticism scale correlates significantly with other hostility and tough-mindedness scales such as non-acceptance of cultural norms, immaturity, and anti-authoritarian attitudes. Going by Eysenck (1967), the level of psychoticism occurs on a continuum. Thus, there is a varying degree to how individuals might exhibit the characteristics of psychoticism in them. Only people that score very highly on the scale are said to possess some degree of psychosis. The lack of testosterone appears to relate to the scale of psychosis. According to Ciarrochi and Heaven (2007), the higher the testosterone level in individuals, the higher the level of psychoticism and vice versa.

A personality trait is an enduring disposition and significant determinant of behaviour applicable to tobacco use behaviour (McCrae and Costa, 2003 and Paunonen, 2003). As identified in the literature, the tendency that an individual will smoke or not, and what conditions they are likely to smoke can be predicted by their trait. Take, for instance, following Eysenck argument that extroverts are highly interactive and sociable when compared to introverts, might explain why tobacco users tend to score higher in extroversion when compared to non-tobacco users. This claim may explain why there are reports of gradual decreases in tobacco use among extroverts as tobacco increasingly become undesirable.

Regarding tobacco use and neuroticism, Gilbert et al., (1997) demonstrate that individuals that score high in neuroticism are most likely not to be inclined to quit tobacco use, even when confronted with pressure from their social environment to do so. In this case, the dependence on reinforcing factors has been identified as a significant contributor, as individuals that have a high score of neuroticism tend to feel the reinforcing effect such as nicotine more than individuals with stable feelings. However, it appears that there are inconsistencies in studies on extroversion and neuroticism and their relationship to tobacco use. Rondina, Gorayeh and Botelho (2007) suggest the controversies may be as a result of tobacco users not being a homogenous group, as individual groups use tobacco differently for various reasons. Nevertheless, studies of the relationship between tobacco use and psychoticism appear to be consistent and have been associated with genetic factors.

#### 2.4.1.4 Symbolic meaning

The basic concept of symbolic interaction was discussed in section 2.2.1.2 and is said to explain how people in a society use symbol to ascertain the meaning of each other's actions and how the interpreted symbols impacts on their behaviour (Margulies, 2003). This section builds on that concept to further understand tobacco use behaviour. Going by Reitzes et al., (2010), symbolic interactionism defines shared meaning, orientations, and assumptions that form the motivation for people's actions. In other words, it forms the motive that makes people behave the way they do, and tobacco use falls into this category as people use tobacco for different reasons. People smoke for different reasons and give a different meaning to smoking behaviour. Take, for instance, the cultural use of tobacco. The literature demonstrates that people use tobacco for cultural purposes such as celebration or ritual. Likewise, studies reveal that people also smoke because of perception towards tobacco as cool, and a way to socialise with family or friends. Elsewhere, it appears that people smoke to feel accepted as part of society. Since it appears that there is no clear-cut reason to define why people indulge in tobacco use, various assumptions have emerged from studies to explain the possible reasons why people use tobacco. In this case, this study, adopted Goffman's school of thought as it helps to understand the basic tenets of social interaction and how it influences tobacco use behaviour. It appears that individuals' tobacco use behaviour is influenced by both micro-level social setting and the macro-level social structure as the definition of meaning is negotiated.

Going by Goffman (1990), people negotiate with others actively and within the broader context of the shared social meaning and expectations of roles and behaviour in a social setting. In other words, people act towards ideas, concepts, and values based on the meaning attributed to behaviour (expectations exchanged by people). This claim explains the influence of social setting that supports or does not support tobacco use in shaping the tobacco use behaviour of others, as social setting tends to influence both the opportunity to smoke or to what extent smoking will be perceived as undesirable. The reason for this is because individuals attribute importance to their social setting, and therefore interact with the social network in a way seen as acceptable. Although the literature shows that social settings play a significant role in influencing individual behaviour, it appears that other aspects of social structure within which the social setting exists can influence behaviour.

According to Goffman (1990), individuals are also influenced by the scope of the social network. The more the social networks an individual is exposed to, the more their behaviour is likely to be influenced. Social media plays a significant role in this process as it provides the avenue that exposes individuals to multiple networks that can lead to the production of symbolic meaning. However, Gofman (1990) proposes that individuals can selectively engage in self-presentation to preserve and protect their self-esteem and the positive regard of social setting. The process is an important interactional strategy individuals use to indulge in unhealthy behaviour. Reitzes et al., (2010) describe self-presentation as individuals acting openly to project an image to the society and hiding away the parts of their characteristics that would give away their performance. In this case, self-presentation may be hiding tobacco use behaviour from significant others that oppose tobacco use behaviour.

While it is known that tobacco use behaviour is influenced by a host of unconscious, biological, psychological, social and economic sources, the study of symbolic interaction on tobacco use has revealed that individuals are influenced by the meaning they assign to tobacco use. It is for this reason that Zerubavel (1997) propose that tobacco use is influenced by the cognitive and affective meanings that define and shape the way people understand what it means to engage in tobacco use. Margulies (2003) identify impression management as a predictor for engaging in tobacco use. Accordingly, people

act to give others a particular clue (impression) of their hidden self. Take, for instance; an individual can smoke to show that he or she is 'cool'. Margulies (2003) has also expressed that to understand impression management; conscious attempts must be made to understand the general attitude of others in society. The reason is that society has a way of putting pressure on people to take up traits others deem as valuable and in social demand. In the context of tobacco use, whatever tobacco use symbolises amongst general others can propel people to act in a certain way to show others (a sign of impression) that they possess the qualities. In other words, people might act in a certain way not because they are acting for themselves, but because of the reaction from society.

There are instances individuals continue to act in a certain way even when there is a change in the general attitude of others towards a behaviour. Take, for instance, the general attitude towards tobacco used in many countries around the world has changed, mainly due to awareness of the health issues caused by tobacco. However, it appears that some continued to smoke regardless of social pressure to stop or awareness of the health issues. Oakes et al., (2004) identified four sets of self-exempting beliefs tobacco users use as a rationale to justify their continuous tobacco use behaviour. These include: that smokers believe they are immune to the health effects of tobacco use; that they do not believe medical evidence about tobacco use and disease; that life is all about risk as smoking is; and that the joy and satisfaction derived from tobacco use is worth the risk. Consequently, these can result in the formation of meaning and beliefs that provide the interpretative context and cognitive frame of reference for defining tobacco use as a positive behaviour (Reitzes et al., 2010). This claim may explain why people attach emotions such as stress, happiness or sadness to tobacco because of the belief that tobacco use acts as an incentive to the body.

Mead (1999) and Cooley (1902) argue that no individual was born with a selfconcept. People develop a self-concept over time by interacting with others, and the self-concept they form inevitably impacts on their intrinsic, independent, and self-derived motivation that they utilise when making decisions. In the same school of thought, Reitzes et al., (2010) argue that no one is born a tobacco user and that the symbolic interaction can be applied to understand how tobacco use behaviour is formed. It appears that self-esteem and self-efficacy are widely used to understand the relationship between selfconcept and tobacco use in the context of symbolic interaction. Accordingly, self-esteem explains self-concept in the context of individual sense of selfworth. It serves as a strong motive that propels people to strive to achieve the approval of others. Self-efficacy, on the other hand, is the self-conception that defines the desire to view oneself as a causal agent. It provides a selfderived desire that propels people to succeed in a role or situation. According to a study conducted by Hale et al. (2015), individuals with high self-esteem are likely to quit tobacco use in the case where tobacco is perceived as unfavourable, and the symbolic meaning is not consistent with individual selfworth and vice versa. Likewise, self-efficacy might discourage tobacco use when there is a desire to quit or serve as an actor that encourages tobacco use when there is a desire to increase self-efficacy (Lawn, 2002).

### 2.4.1.5 Social environment

As already established in this chapter, the environment plays a significant role in the formation of tobacco use behaviour. Evidence from the works of the US Department of Health and Human Services (2012) has shown that marketing activities such as advertising and promotion of tobacco by the tobacco industry contribute to tobacco initiation and continuous use particularly among teenagers and young adults. Likewise, media (such as newspapers, television, radio and social networks) can also act as agents that expose people to tobacco products. Such exposure can influence the attitude and perception of people about smoking as well as their intention to smoke (Wakefield, Loken and Hornik, 2010). While this is the case, environmental factors also play a significant role in discouraging tobacco use. Various environmental factors act as cues for tobacco use, whether in support of tobacco use or against tobacco use and can be broadly categorised into physical environmental factors and socio-environmental factors. The socio-environmental factors such as family, peer group and community appear to be more influential in determining people's attitude and perception of tobacco.

The study of socio-environment and tobacco is generally conducted in terms of norms and cultural groups in the context of appropriate or inappropriate ways to behave. They subsequently dictate whether, when and for whom tobacco use is acceptable. Extensive studies of the social environment such as family, peer pressure, work colleagues, religious beliefs, socioeconomic status, and immediate community (to mention a few) appear to be consistent across cultures. It appears that the prevalence of tobacco use is likely to be higher in a society that supports its use and vice versa (See: Christakis and Fowler, 2008). Likewise, it has become apparent in the literature that exposure to tobacco has a strong link with tobacco use behaviour. It suggests that the more people are exposed to tobacco, the more the propensity that they will smoke, thereby resulting in the society experiencing a high prevalence of tobacco use, particularly among teenagers and young adults.

Another area of studies that appear to be consistent is the awareness of the risk associated with tobacco use and its impact on people's attitude and perception. According to Cummng (2005), the numbers of tobacco users in the United States dropped by 50% as a result of the released report linking tobacco to cancer. The change in societal attitude has been identified to contribute to the decline of tobacco use. A change in social norms is more likely to result in less tobacco use, especially among better educated and more affluent people (Morgan et al., 2007 and Stuber et al., 2008).

While the majority of these studies are conducted at micro-level, it appears that macro-level socio-environmental factors (such as the global culture) that are outside the micro-environmental factors (such as family, peer group, and community) also influence tobacco use. Today's local social environment is encompassed by a broader environment, characterised by globalisation, media and technology, and global consumer culture, as further discussed in the following section (Dixon, 2009). The impact of this on tobacco use can be expressed in a broader social environment in the context of local and global environments, as demonstrated in figure 1.1. Following Ekistics (2006) definition of a social environment, it implies that the impact of the environment on behaviour can be understood as the organisation of space, time, meaning and communication. In other words, it can be understood by a system of

settings within which a system of activities occurs, in space and time, and the linkages, proximities and separations among them, rules that apply in the settings, and whether the cues communicated are appropriate or inappropriate.

Generally, studies of the social environment are conducted in the context of social class and social circle. However, it appears that the concept can be used to understand behaviour in a broader social context as the contemporary social environment is characterised by globalisation and technology that allow for interaction on a larger scale.

## 2.4.2 The global environment

The local society is said to be encompassed by the broader society, in this case, the global environment or macro-environment. Factors from the global environment or macro-environment include globalisation, media and technology, and global consumer culture. By building on the points made in the previous section, this section further examines the factors of the global environment and their relationship with tobacco use.

## 2.4.2.1 Globalisation

The concepts of globalisation explain the process by which people and communities integrate. It allows for a globalised world that is characterised by people and communities that experience increased similarities in the economic, social and cultural environment. The aspect of globalisation can be broadly categorised into two: the social dimension that includes factors such as trade, technology, the flow of information and communication, and the political dimension that includes factors such as policy making and trade liberalisation (Bellinger et al., 2017). Both aspects of globalisation go a long way in impacting on people's life. While this is so, this section is more interested in the impact of the social dimension of globalisation on people, particularly in terms of tobacco use.

As discussed in the previous chapter, globalisation comes with its benefits. Take, for instance, the attribution of globalisation for the increase in life expectancy currently enjoyed in the world. The advancement of media and technology and information shared on a global level play a vital role in the process of globalisation (Dixon, 2009). It helps mitigate the inequality in the diffusion of information and shared experiences that support a healthy lifestyle among the rich and the poor. Access to other people's way of life has become easy, and do not require travelling miles to for this to happen.

In the same fashion, there are arguments that the process comes with its disadvantages, as unhealthy behaviour such as tobacco use, particularly in developing countries, has been blamed on globalisation (Raikhan et al., 2014; and Rozkwitalska, 2014; and Westin Bastos, and Dahinden, 2010). While this may be the case, the long-term implications of behavioural change towards tobacco on the global level, on tobacco use, particularly in developing countries, has received very little attention. Globalisation brings a potential dimension to understanding tobacco use behaviour. It encompasses culture and identity, inclusion and exclusion, and the cohesiveness of family, peer groups and communities that form tobacco use behaviour.

Held and McGrew (2000) have identified three schools of thought relating to globalisation as Hyperglobalites, Skeptics and Transformationalists. These schools of thought are said to dominate discourses on globalisation.

- According to the Hyper-globalist, globalisation is happening, and local cultures are diminishing mainly because of the expansion of international capitalism and the emergence of a homogeneous global culture. This school of thought focuses on economics and believes that globalisation is a positive process characterised by economic growth, increasing prosperity and the spread of democracy.
- To the Skeptics, globalisation is a myth and belief that it is exaggerated. They believe that the world is witnessing regionalisation (that is organising a country on a regional basis) rather than globalisation.
- The transformationalist believes that the hyper-globalist exaggerates the impact of globalisation. They believe that globalisation exists but should be understood as a complex set of interconnecting relationships through which power is generally exercised indirectly. They also believe that globalisation can be reversed or at the very least controlled, especially where it is negative.

The transformationalist school of thought can be related to the overall argument laid out for this study. The transformationalist sees globalisation as a positive phenomenon because it creates a new class of global consumers, in both developed and developing countries, allowing for a greater range of choice for people to form a hybridised global identity. Going by the transformationalist, culture is not one way (that is, culture flows between developed and developing countries) as suggested by several studies. Culture is believed to flow in a two-way exchange - cultures influence one another. The local culture of a country is not simply engulfed by the other, but rather people select aspects of cultures and adapt them to their need (Held and McGrew, 2000).

An interesting example is the contemporary hip hop music that has a flavour of afrobeat infused into it and has become a familiar genre of music to households globally. The transformationalist believes the social media plays a significant role in the process of globalisation as it is seen as the primary source for the diffusion of different cultural styles around the globe, creating a new global hybrid of culture as seen in the style of music, food, and fashion. The transformationalist believes that the global communications system and social network can assist local cultures to reverse the repressive political systems (Held and McGrew, 2000). The change of the Zimbabwe government serves as a typical example as social media was used to supply information that was used to bypass government suppression.

## 2.4.2.2 Media and technology

The importance of media and technology and how they drive social change is widely recognised and has studies exclusively devoted to it. While some argue that media and technology are two different entities, others believe that they are interrelated and cannot exist independently. According to Little et al., (2012), media refers to all means ranging from print to digital and electronics used for communication. Technology, on the other hand, is said to influence how and where media and information are shared. It is for this reason that Neuman (2010) argue that media can only exist through technology. The complexity of the contemporary environment, for the most part, is attributed to media and technology as they allow for societies to communicate at a fast-moving pace. Going by the transformationalist argument that implies that

ideas, information, technology and media spread in a two-way exchange, it appears that the spread of all of these is imbalanced (Held and McGrew, 2000). The theory of media imperialism proposes that some countries are dominated by exported media and the values and ideologies they contain, and globalisation is often criticised for it (Wang, 2008). The reason being that media companies have expanded into multinational conglomerates, providing them with powers that individual nations are almost unable to control. Take, for instance; Facebook is one of the biggest media companies in the world that provide information capable of shaping people's behaviour.

Media has also been linked to cultural imperialism as imported cultural images, and values can change the cultural identity (whether in part or in total) of the countries where the foreign media is prevalent (Wang, 2008). Typically, cultural values flow from developed countries to developing countries via the media, making developing countries vulnerable and subject to external control. Lack of the available resources and knowledge required to produce and transmit local media content has been attributed to developed countries' dominance over developing countries. Also, developing countries are thought to lack the infrastructure, technical know-how, and technology required to produce local content, thereby relying on content from developed countries, subsequently stimulating the desire of people in developing countries to have access to international media. Similar to the law of economics, the more developing countries use the resources they have to transmit Western content, the more it prevents them from investing in local content, thereby creating more demand for more Western content (Wang, 2008). Studies reveal that the quality of Western content exported to is usually not the true representation of Western identity and values, as contents exaggerate in order to obtain more traffic. It explains why many tobacco product adverts will have models smoking to posit that tobacco use is Western and cool.

However, like every other thing that has advantages and disadvantages, the media appears to be beneficial. An emerging product of the media is the notion of cultural hybridity, where cultures adopt foreign culture into their existing cultural beliefs (Magu, 2015). Take, for instance, many Asian countries like Saudi Arabia have seen a change in cultural beliefs and practices such as the new law that allows women to travel without male approval. The media partly

fuel the change in the law. In the case of this study, the study posits the influence of media (as illustrated above) to provide alternative ways to tackle the issue of tobacco in many affected countries, including Nigeria. The rationale behind this that, unlike the traditional media, the social media brings more people from various cultures together in more self-determined ways, and the evidence from a study of this nature can inform the projection of tobacco use and possible intervention to curb its use and the associated disadvantages.

## 2.4.2.3 Global culture

Wang (2008) express global culture as the transmission of ideas, meaning and values around the world to extend and intensify social relations. The process is marked by the consumption of cultures that have been diffused by the media and international travel. The process allows for the circulation of cultures that allow people to take part in the extended social relations that cut across national and regional borders. Global culture also involves the formation of shared norms and knowledge that people associate with their individual and collective cultural identities. It brings about increasing interconnectedness among different culture. It is for these reasons sociologists have continued to posit that the world is moving towards a global culture that void cultural diversity.

The fundamental means by which the world become a global village (that is cultures becoming similar to each other) is by cultural diffusion. Section 2.4.1.1 shows that cultures influence one another through interpersonal contact or interaction through the media. Social factors such as technology, mass media and increasing globalisation have been posited to create a global culture (Little et al., 2012). Although studies may have suggested that many aspects of culture have been globalised, it appears that the local culture in some societies remains stable. It appears that space (in terms of moving to another location) is not an automatic determinant of culture change. While several studies have been conducted to understand this phenomenon, it appears that the homogenising effect of globalisation on national culture does produce reactions among indigenous people who feel threatened and want to reaffirm their local culture.

### 2.5 Research Model and Hypothesis

This section details the research justification, research model and research questions and hypothesis for this study.

#### 2.5.1 Research justification

The tobacco usage intention defines the thoughts individuals develop before using tobacco. Research suggests that having a positive attitude towards tobacco use is associated with a higher likelihood of engaging in tobacco usage. Perceiving tobacco use to have benefits such as enhancing social bonding, mood enhancement, or associating tobacco use to myths such as the use of tobacco smoke to drive away ghosts increases the likelihood a person taking up smoking or continuing to smoke (Burgess et al., 1998). Conversely, having a negative perception towards tobacco use -such as the belief that it offers negative social consequences and is associated with health and fitness issueslowers the likelihood of taking up tobacco use or discouraging continuous tobacco use behaviour (Burgess et al., 1998). The literature shows the function of intention on tobacco usage in predicting the present and future of tobacco usage. It posits that tobacco usage intention is a powerful predictor of present and future tobacco use behaviour, particularly among teenagers and young adults (United States Department of Health and Human Service, 2012).

Various plausible theories and models have been used to explore factors relating to tobacco use intention and tobacco use behaviour. Such theories include the theories of reasoned actions and planned behaviour (TPA), the health belief model (HBM), the transtheoretical model (TTM), social cognitive theory (SCT) and the social-ecological model (SEM). The social learning theories have helped to explain how behaviour is learnt from immediate society or members of a group (Ajzen, 2005; and Unger et al., 2003). All of which have established that both personal and external factors are responsible for tobacco use behaviour. Accordingly, psychosocial, psychological and behavioural factors have been identified to be responsible for tobacco use behaviour (Chido-Amajuoyi et al., 2017, and Unger et al., 2003). The psychosocial explains the impacts such as family, peer groups, communities, and the tobacco industry (such as tobacco marketing and exposure to tobacco

messages) has on tobacco use behaviour. The psychological, as well as behavioural factors, explain the impacts such as perceived instrumental values towards tobacco use; perceived behavioural control over tobacco use and selfefficacy; the perceived normative beliefs about tobacco use; and personal experience to mention a few, on tobacco usage (Chido-Amajuoyi et al., 2017, (Ajzen, 2005 and Unger et al., 2003).

All these theories have helped explain the dynamic process by which social relationships affect individuals' health behaviour and provide a clear understanding of the part social forces play in changing behaviour. However, the increasing importance of the global environment on behaviour intention such as the one proposed in this study means that theories such as the ones mentioned above have limitations in addressing tobacco usage intention on a broader environmental level (Cai et al., 2015). Because the applications of these theories are mostly individually based and found to be limited in producing community-wide intervention. They do not usually consider other external influences such as imitation of trends or behaviour from external groups or culture that lead to community-wide acceptance. Researchers have emphasised the importance of adopting intervention that is targeted at altering social behaviour against risky behaviour (Van Koperen et al., 2013). The reason is that it places less effort and resources on individual-based intervention and encourages effective and cost-free interventions that gradually shift social norms to achieve the desired result (Cumming, 2009).

A recent trending topic in developing human discourse is 'the utilisation of cultural and social norms in changing behaviour. According to psychologists, understanding how human behavioural norms are established in a group and how they evolve can help identify how to exert more influence when promoting healthy behaviour (Barth, Jugert, and Fritsche, 2016). Social norms are thought to influence group-level rather than individual-level, and it does not only shape behaviour but also attitudes. It goes as far as influencing even preferences considered private matters such as the choice of clothing, type of songs to dance to, the brands of phones to use, and even the lifestyle to live (Bicchieri, 2014). An intervention that takes advantage of already existing social pressure and targets it at changing cultural and social norms is capable of shifting and causing a change in risky behaviour at less cost of effort and

resources (Dohmen, 2008). As mentioned earlier, the continuous advancement in communication technology can no longer be ignored when discussing behavioural change or diffusion process in a societal context. Information from the mass media is a source of demand for foreign cultures such as the imitation of the trend. Thus, cultural flows can no longer be discussed solely within the confine of national boundaries. Social practices are no longer only being widely diffused within societies. Ideas, values and styles of living are being modelled worldwide, and electronic media is coming to play an increasingly influential role in cross-cultural change (Altehenger et al., 2011).

The rate at which behavioural changes occur within different social settings differs and these changes are sometimes determined by the exposure to external forces (World Health Organisation, 2019). The culture within a social system is inherently predisposed to change and at the same time to resist change, and whether or not a culture will change or resist change depends predominantly on the tightness or looseness of the culture. This also determines how much influence external forces can have on society (Gelfand et al., 2011). The theory of cultural tightness and looseness explains the role of the strength of social norm and the degree of sanctioning within a society. A society with a tight culture usually has many rules that are vigorously enforced and have little tolerance for deviance. In contrast, a society with a loose culture has few rules that are vigorously enforced and have a higher tolerance to deviance (Gelfand et al., 2011). Understanding cultural variation and the degree of deviance across societies can help inform the impact exposure to external forces will have on modelling cultural change within societies considering increasing global interdependence (Roth and Jornet, 2014).

A social cognitive theory of mass communication explains that the media does not affect people by simply modelling behaviour to copy. It also serves as a medium for people to learn about behaviour and its consequences vicariously (Bandura, 2001). According to this theory, humans are not simply the product of their environment but have the power to produce their world by controlling their actions based on what they perceive of these actions. Most learning occurs by observing others since people are not able to learn everything or capable of trying everything from mass media by themselves (Bandura, 2001). In the situation where social rules clash with self-imposed rules, individuals are forced to either employ moral justification, make use of euphemisms, compare the situation with others, indulge in more reprehensible behaviour, displace responsibility, distort consequences or dehumanise the victim (Matei, 2006).

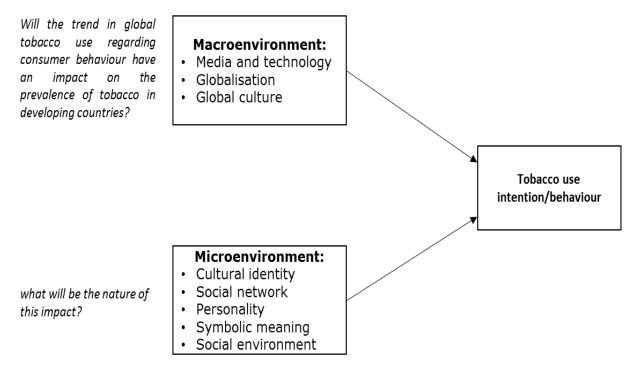
Thus, this study aims to address the issue of tobacco usage intention as it relates to broader environmental factors by answering the following research question:

- Since it appears the government of most developing countries lack the political will to enforce strict tobacco control policies (Stebbins, 1990), will the trend in global tobacco use regarding consumer behaviour have an impact on the prevalence of tobacco in developing countries?
- Moreover, if it does, what will be the nature of this impact? Ordinarily, the literature suggests that tobacco consumption in these regions will dramatically increase because they are vulnerable new target markets for multinational tobacco companies (Cummings et al., 2014; Lawrence and Williams, 2015). However, the emerging argument suggests that the change in global attitude and behaviour towards tobacco will rub off on tobacco use behaviour in developing countries, thereby leading to a worldwide decline in its use.
- Lastly, how can the evidence from this research be utilised in developing more decisive measures to curb the use of tobacco in developing countries, given the detrimental impact tobacco use have on society?

## 2.5.2 Research Model

The model for this study include factors that are relevant to describe contemporary tobacco use and the role the contemporary global environment plays on tobacco use behaviour and usage intention. As illuminated in figure 2.7, these factors were further categorised into the system of the environment consisting of macro-environment and micro-environment. This chapter covered the relationship between the categories of environment and tobacco use behaviour, particularly as it relates to individual identity. Figure 2.8 illuminated the research model for this study.

## Figure 2. 8: The abridged conceptual model developed for this study



#### Source: Author

#### 2.5.3 The research questions and hypotheses

Creswell (2005) describe research questions as a significant step in research that involves narrowing the research aim and objectives down to specific areas the study will address. Lipowski (2008) also states that research questions are vital as they guide the choice of methodology, methods, samples, sample size, data collection instrument and data analysis techniques. Johnson and Christensen (2004, p77) added that research questions are interrogative statements that represent an extension of statement because it specifies precisely which questions the research aims to answer. However, selecting and constructing a good research question is not as easy as it may sound, as the ability to pose a good research question is thought to come with years of practice. Thabane et al. (2009) have identified that a good practice when developing a research question is by seeking direction and collaboration with colleagues and supervisors. Therefore, research questions for this study where constructed from literature, and were refined utilising feedback from the supervisory team and collaboration with colleagues.

As outlined in section 1.4, the objectives of this study are:

- To review literature and documents on tobacco consumption in developing countries, particularly in Nigeria to determine existing knowledge gaps
- To examine the level of awareness of consumers on the harm caused by tobacco use and the impact on tobacco consumption.
- To investigate the impact global consumer culture has on the behaviour of tobacco use.
- To conclude from the empirical evidence that will further inform the debate and contribute to the discussion on tobacco control in developing countries.
- Furthermore, to recommend more effective tobacco control in these regions and suggest a relevant area for further research.

As indicated in section 1.8, the research for this study is grounded on findings from studies on the dynamics of establishing a new tobacco use behavioural trend in the context of consumer behaviour. Based on the findings, two stages of research were carried out for the study. The first phase is in the form of preliminary research to unveil people' views, experience, belief and motivation on the subject matter in the form of qualitative research using the focus group. The second stage builds on the findings from the first stage to investigate the subject matter further on a more substantial research sample size in the form of a survey. The importance of the combination of data collection include:

- This process allows for flexibility during the exercise that allows for follow-up of unexpected themes that emerged.
- It helps to overcome the weakness of the focus group, such as the complexity of establishing validity and reliability.
- It gives a broad data foundation and a more reliable base for interpretation.

Chapter three provides a detailed description of the methodology used for this study.

The study tends to test the proposition for the following research questions:

• Since it appears the government of most developing countries lack the political will to enforce strict tobacco control policies (Stebbins, 1990),

will the trend in global tobacco use regarding consumer behaviour have an impact on the prevalence of tobacco in developing countries?

- Moreover, if it does, what will be the nature of this impact? Ordinarily, the literature suggests that tobacco consumption in these regions will dramatically increase because they are vulnerable new target markets for multinational tobacco companies (Cummings et al., 2014; Lawrence and Williams, 2015). However, the emerging argument suggests that the change in global attitude and behaviour towards tobacco will rub off on tobacco use behaviour in developing countries, thereby leading to a worldwide decline in its use.
- Lastly, how can the evidence from this research be utilised in developing more decisive measures to curb the use of tobacco in developing countries, given the detrimental impact tobacco use have on society?

Going by Creswell's (2005) hypothesis is a tentative statement about the relationship between two or more variables. It is a specific, testable prediction of what is expected to happen. Dopazo (2009) states that a hypothesis is a powerful tool of the advancement of knowledge, consistent with knowledge and conducive to further enquiry. According to Little (2018), a working hypothesis should satisfy the following:

- Predictable: that is, predicts the anticipated outcome of the experiment.
- Testable: that is, the statement can be testable once data is collected and evaluated.

Going by the above conditions, the following hypotheses were formulated for this research:

Hypothesis 1: The social network will affect tobacco use behaviour intention.

*Hypothesis 2:* The symbolic meaning will affect tobacco use behaviour intention.

Hypothesis 3: The personal trait will affect tobacco use behaviour.

Hypothesis 4: The tobacco use deterrent will affect tobacco use intention

Hypothesis 5: The cultural dimension will affect tobacco use intention

Hypothesis 6: The globalisation will affect tobacco use intention.

#### 2.6 Summary

As indicated at the beginning of this chapter, an attempt was made to conduct a comprehensive literature review pertinent to the subject matter of this study, detailing the ideas, theories and findings from previous studies relating to current tobacco use behaviour. The theoretical foundation for the study was discussed in detail. Current tobacco use was also discussed in relation to both local and global environments. The main focus of the study is on the impact the broader social environment will have on tobacco use behaviour and based on a literature review on tobacco use and the social environment, the research model and questions were conceptualised.

The general goal of the research is to translate the global culture theories in literature into practical control of tobacco use behaviour. It is interested in exploring the impact that the change in the global tobacco environment will have on tobacco use behaviour. Tobacco is identified as a cultural identity commodity and predict that understanding the impact the global environment will play in influencing it can, in turn, inform effective control of tobacco use in developing countries, particularly in Nigeria. The following hypotheses were proposed for the study:

Hypothesis 1: The social network will affect tobacco use behaviour intention.

*Hypothesis 2:* The symbolic meaning will affect tobacco use behaviour intention.

Hypothesis 3: The personal trait will affect tobacco use behaviour.

Hypothesis 4: The tobacco use deterrent will affect tobacco use intention

Hypothesis 5: The cultural dimension will affect tobacco use intention

Hypothesis 6: The globalisation will affect tobacco use intention.

The subsequent chapter details the research design and methodology used for the study. As highlighted in chapter one, the research method for this study is both qualitative and quantitative in the form of focus group and questionnaire. The research method, the sample design, ethical considerations, and limitations of the study, are also discussed in the subsequent chapter.

#### **CHAPTER THREE**

#### Methodology

#### 3.0 Introduction

In the preceding chapter, relevant literature was reviewed and analysed, and the study further developed a framework from evidence gathered and proposed hypothesis for the research. This chapter demonstrates the operationalisation of the conceptual framework and also informs the data collection as part of the research process. According to Kothari (2004, p 4), research methodology does not set out to provide a solution. Instead, it gives the theoretical underpinning for understanding the set of methods and best practice that applies to a study. Given this, this chapter includes discussion on alternative methodological approaches, the justification for the chosen methods, and the process and participants for this study.

Research has been defined in several ways. Creswell (2005) defined research as the process of steps used to collect and analyse information to increase ones' knowledge of a topic or issue. According to his definition, the research consists of three steps: pose question(s), collect data to answer the question(s) and present an answer to the question(s). A similar definition is the one by Godwin Colibao who defines research in the broadest sense of the word as the process of gathering data, information, and facts for the advancement of knowledge (Kaur et al., 2016). Other definitions include but are not limited to, the following:

> Research is a systematic, formal, rigorous and precise process employed to gain solutions to problems or to discover and interpret new facts and relationships. (Waltz and Bausell, 1981).

> Research is the search for knowledge. It is the process of finding a solution to a problem after a thorough study and analysis of the situational factor (Bodla and Turan, 2004).

*Research is the process of looking for a specific answer to a specific question in an organised, objective, and reliable way (Payton, 1994).* 

Research is the pursuit of truth with the help of study, observation, comparison and experiment. It is the search for knowledge through the objective and systematic method of finding solutions to a problem (Kothari, 2006).

Research is a systematic, controlled, empirical and critical investigation of hypothetical propositions about the presumed relations among natural phenomena (Kerlinger, 1973).

Research is a set of systematic actions directed towards objectively investigating the specific problem to discover the relationship between and among variables (Gostin, Levit, and Nass, 2009).

All these definitions, when consolidated illuminate research as a process to seek answers to specific questions. It implies that research involves a systematic process with a clear purpose in the pursuit of knowledge. According to Saunders et al. (2015), scientific research is characterised by a systematic collection of data, systematic interpretation of data, and a clear purpose for the research. Going by these, this chapter provides a detailed explanation of the methods used in data collection, clear interpretation of results and justification to why the results are meaningful. It also gives an account of the limitations associated with the results. Other essential aspects accounted for include issues and guidelines for successful completion of this research within a timeframe and within a reasonable budget.

There are several reasons for conducting research. However, forms of research can be loosely categorised in two: Applied research and Basic research, otherwise known as Academic research (Bentley Gulbrandson, and Kyyik, 2015). Depending on the purpose of conducting the research can determine the form of the research. The form of research is commonly discerned by answering the question 'what will the research be used for?', 'is it to acquire

knowledge or to solve a problem?'. Traditional basic research, otherwise known as Academic research, is employed to fill knowledge gaps, usually not prompted by a specific problem. It is driven purely by curiosity and the desire to expand knowledge. While applied research, on the other hand, is employed for answering a specific question that has direct applications to the world. These two types of research have been vastly utilised in business and management research. The purpose and setting of a study and type of investigation play an essential part in selecting the research design to be adopted (Keyton, Bisel, and Ozley, 2009).

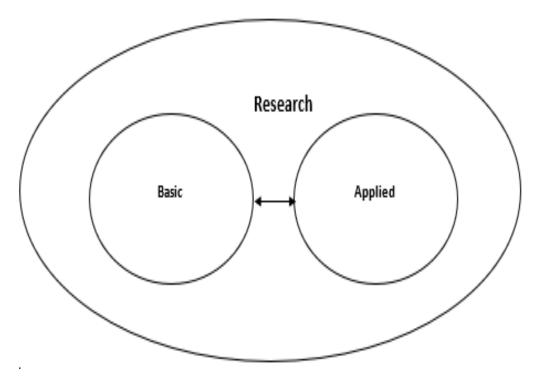


Figure 3. 1: Dialectical tension view of basic and applied research

Source: Communication theory, Keyton, Bisel, and Ozley, 2009

While there are marked differences between them, the differences work in various ways to increase the power of research. Critics have argued that it will be wrong to assume that one type of research is more vital than the other. They are of the school of thought that studies aimed at both applied and basic goals have a higher tendency to produce an innovative output (Keyton, Bisel, and Ozley, 2009).

Although this study is interested in filling the knowledge gap, it comprises of a combination of both basic and applied research to have a robust finding. The chapter consists of six major sections, as presented below.

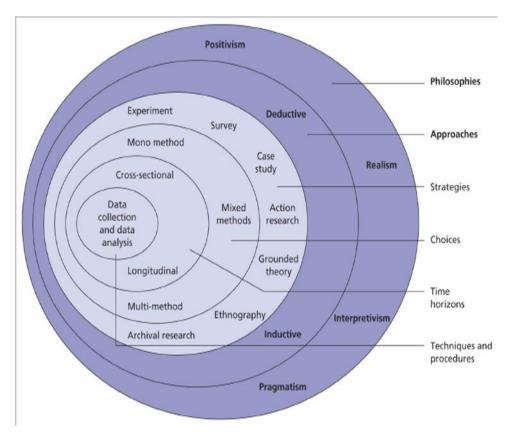
- Section 3.1 presents a brief overview of the research process, research design and the justification for the research approach adopted for this study.
- Section 3.2 presents the procedure for the research.
- Section 3.3 presents a discussion on ethical consideration.
- Section 3.4 presents the limitations to the methodology adopted.
- Section 3.5 presents the delimitation of the research.
- Section 3.6 presents the chapter summary.

#### 3.1 Research design

Easterby- Smith et al., (2015, p.86) describe research design as a statement written, often before any data is collected, that details and justifies what, how and where data will be collected. It details how the data will be analysed and how it will provide answers to the central question of the research. The purpose of a research design is to provide a plan action of study that permits an accurate assessment of the cause and effect relationships between independent and dependent variables. A good research design helps the researcher avoid making wrong conclusions and provide adequate control of the various threats of validity, both internal and external (Easterby- Smith et al., 2015). Research design includes research methodology such as strategy, survey sample, survey object, tools, and procedures used to collect and analyse empirical data (Punch, 2000).

This chapter highlights the stages covered when developing the research strategy and its purpose before the selection of the research design appropriate for this study. The justification for this is to have a clear definition of the research design and to determine what design fits the entire research process. Thus, following the research onions developed by Saunders et al., (2007), the stages cover for developing the research strategy is discussed as follows.





Source: Creswell, 2009

## 3.1.1 Research philosophy

Research philosophy is a system of belief and assumption about the development of knowledge (Lyon et al., 2015). It determines the way research should be conducted as it reflects the researcher's critical assumptions that serve as a base for research strategy. Creswell (2009) has emphasised the importance of identifying the philosophical position as this influences the practice of research and most times is hidden in many pieces of research. At every stage in research, numbers of assumptions are made consciously or unconsciously, and these assumptions without doubt form how research questions are understood, what methods to adopt, and how to interpret findings. Therefore, a well thought out and consistent set of assumptions allow the designing of a coherent research project consisting of well-fitted elements of research. Ontology, epistemology and methodology represent the top-level perspectives when discussing a chosen research philosophy as they respectively represent the nature of reality and existence (Jankowicz, 2005 and

Easterby- Smith et al., 2015), the theory of knowledge and method (Corbetta, 2003).

Table 3.1 provides insight into features of the three most popular adopted research philosophies in management along with their associated methods and is discussed accordingly. According to Creswell (2005), the motivation for any research can be linked to its philosophical framework. A research philosophy paradigm refers to 'the set of shared beliefs and agreement shared between scientists about how problems should be understood and addressed (Kuhn, 1962). It refers to the theoretical design that underpins a research process. It acts as a guide for researchers to assist them to reflect with importance, reasonableness and legitimacy when conducting research. Some paradigms that have emerged in research, particularly in management and social science include positivism, critical theory, interpretative/constructivism, and pragmatism. However, Easterby-Smith et al. (2015), have expressed that they emerged from variations of the two most common paradigms: positivism and constructivism. They believe that specific approaches, strategies and data collection techniques may apply to a particular philosophy rather than another. These are discussed in detail below.

Paradigm	Interpretive	Positivism	Critical theory
Qualities	Interpretive, also	Positivism is by the	This is the
	known as	empiricist view	combination of
	interpretivism,	that knowledge	both interpretative
	involves researchers	stems from human	and positivism
	to interpret elements	experience.	
	of the study. It	Researchers are	
	integrates human	detached from the	
	interest in the study.	participants of the	
		research to remain	
		emotionally	
		neutral to make a	
		clear distinction	

		between feelings	
		and reason.	
Ontology	Socially construct	ed Universal truths	Combination of
	realities	and laws	socially
			constructed
			realities and
			universal truths
Epistemology	Subjective	Objective	Combination of
Epistemology	Subjective	Objective	
			subjective and
			objective
Methodology	Qualitative	Quantitative	Mixed method
			approach

*Source:* Adopted from Saunders, and Thornhill, 2009; Easterby-Smith et al. 2008; Creswell et al., 2005

## 3.1.1.1 Positivism

The positivist ontology is of the school of thought that the world is external (Carson et al., 1988) and that only one objective reality exists in any research phenomenon or situation, regardless of the researcher's perspective or belief. The researcher takes a controlled and structural approach when researching by identifying a precise research topic. It is similar to a one-way mirror (Guba and Lincoln, 1994), where the researcher detaches from the observed entity, by playing the passive role of the observer. It is done to ensure that the researcher remains emotionally free to be able to make a clear distinction between reason and feeling (Carson et al., 1988). The positivist method begins with a theory derived from previous findings or personal observation. The researcher then formulates a hypothesis to be tested, and collects data to confirm or disconfirm the hypothesis, or poses several hypotheses, and collects data that will allow for the selection of the correct hypothesis. The data collected within this type of paradigm follows the quantitative method that involves the representation of holistic phenomena in a measurable, observable reductive variable. It centres on statistical and mathematical technique, which adheres to a specifically structured research technique to reveal the single and objective reality (Carson et al., 2001).

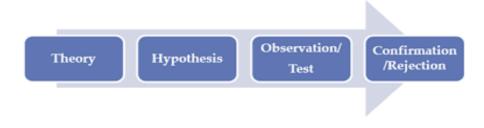
Although positivism has proven to be popular within social science and management research, its purist derivative has been criticised for not giving way to research robustness due to its narrow and straightforward definition of 'the concept of science'. While the positivist promotes the idea of seeking objectivity and using a consistently rational and logical approach to research, the position disregards the fact that much human decision is subjective. It is particularly true for this current research that is centred on the subjective nature of culture and the complex nature of human social behaviour in a dynamic global environment and how it relates to tobacco use. Thus, working under the assumption of a single objective reality is improbable. Given that cultural studies are subjective, conducting such research in a controlled environment would most likely produce a result that is not relevant to the real world (Guba and Lincoln, 1994).

In management and social science research, post-positivism is increasingly replacing positivism (Guber and Lincoln, 1994). The difference is that unlike the positivist researcher, the post-positive researcher recognises that all observations are fallible and have errors, and that theory is revisable. In other words, the post-positivist is critical of the ability to know the reality with certainty. Where the positivist believes that the goal of science is to uncover the truth, the post-positivist believes that the goal of science is to hold unwaveringly to the goal of getting it right about reality, even when it is apparent that such a goal cannot be achieved. The post-positivist understands that all measures are fallible, thus emphasises the importance of multiple measures and observations. These types of measures and observation may have different types of error and may require the use of triangulation across the multiple errors to attempt to derive a better view of what is happening in reality.

The main assumptions of the post-positivist are that there is no singular shared reality, nor is there a distinct separation of the knower from the known. The post-positivist intend to reconcile criticism from the positivist philosophy. While the positivist advocates the use of theory-free observed data to formulate a theory, the post-positivist advocates that theory can be formulated before data collection and then tested or confirmed using scientific data. In the postpositivist perspective, the researcher starts by understanding what needs to be studied and how the study will be conducted, by clearly stating the hypothesis, defining the methods, and obtaining knowledge from the research which can then be transferred to practice.

Positivist and post-positivist rely on a deductive epistemology. Figure 3.3 shows the deductive process, starting with the formation of theory and specification of hypotheses to be tested, then the data collection. The data collected are used to test the hypotheses on whether to accept it or reject it. The deductive approach usually utilises the quantitative and traditional scientific method in the form of survey and experiment.

#### Figure 3. 3: The Deductive research process



Source: Saunders et al., 2003

# 3.1.1.1.1 Experiment

Experimental research designs are the primary approach used to investigate the causal (cause/effect) relationships and to study the relationship between one variable and another. It is useful for examining the effect of one variable (the independent or explanatory variable) on another (dependent variable) (McGivern, 2006). In this design, one variable is manipulated to see if it affects the other variable. This way, experimental research designs can be used to test hypotheses. While the experimental research design has been vastly utilised in medical and pharmaceutical research, it is beginning to gain popularity in management and social science research, to investigate decision making, advertisement effectiveness, as well as consumer behaviour. It is thought to be best for small-group research. Easterby-Smith et al., (2015), have maintained that the main advantage of experimental research design lies in the ability to encourage clarity about what is being investigated, and eliminating other alternative explanations. This is because of the random assignment that ensures that experimental and control groups are identical in all regards, barring the focal variable. It is easier for another researcher to replicate the study, and hence any claims arising from the research can be subjected to public scrutiny. Conversely, the disadvantages can be practical and ethical. Practical and ethical in the sense that volunteers are vulnerable to harm. Thus, the researcher has to adhere to stringent ethical guidelines. Also, when dealing with people and business situations, it is improbable to conduct true experiments with randomisation. In this case, one of the categories of the experimental design will be employed to circumvent the problem of random assignment. The experimental design can be grouped into three: the true experimental design, quasi-experimental design and the action research (See: Easterby-Smith et al., 2015). In these designs, the actual experiment can either be a field experiment where the research is conducted in a natural environment, or laboratory where the research is conducted in an artificial setting.

As noted by McGiven (2013), the experimental design can prove challenging to use in the real world of marketing because of the inability to account for the complexity of variables, and cautionary interpretation of the results is advised. Also, in conditions where the respondents become aware of the research objectives, may pose an issue. The respondent may remember the answers they gave in the pretest and offer to match post-test answers. In a situation like this, McGiven (2006) recommended that buffer activity can be used between experiments.

#### 3.1.1.1.2 Survey

According to Easterby-Smith et al., (2015), the dominant epistemology underlying survey research method is positivism. A survey is conducted based on the assumption that there are regular, verifiable patterns in human and organisational behaviour. However, they are often difficult to detect and extremely difficult to explain due to the number of factors and variables that might produce the observed result (Easterby-Smith et al., 2015. p75). Consequently, the survey tends to use cross-sectional design with large samples, which enable multiple factors to be measured simultaneously and hence, potential underlying relationships to be examined. There are three types of survey, namely factual, inferential and exploratory study, and based on the objective and intention of a study will determine the content and the forms of the survey to be used. The factual survey is concerned with actual behaviour and attributes, used engagingly in the form of opinion polls to collect and collate data from a different group of people. Inferential survey dominates in academic management research, particularly in the fields of strategy, marketing and organisational psychology. The inferential survey is concerned with establishing relationships between variables and concepts, whether there are prior assumptions and hypotheses regarding the nature of these relationships. In contrast, the exploratory survey is considered to be analytical, factual, and opinion surveys that are generally classed as descriptive (Easterby-Smith et al., 2015).

The survey is a popular technique that is predominantly utilised within the quantitative methodology because of the outstanding advantage in producing a basis for gathering factual, attitudinal and behavioural data, as well as its ability to provide the research with a great scope regarding cost, sample size and reach (Hart, 1987; Baker and Foy, 2003). However, a poorly designed survey may cause respondents to provide misleading information or in some cases resulting in respondents not responding. This could lead to non-response error and could make the research invalid. Another disadvantage of a survey is that it is weak in internal validity because it relies profoundly on the use of statistical measures to control for extraneous variables. As a result, it is difficult to prove causation in the relationships between variables reliably. In order to manage these disadvantages, Kelly et al., (2003) recommend that careful attention must be given to the design and execution of the test instrument while data analysis must also allow for error.

#### 3.1.1.2 Constructivism

Going by Easterby- Smith et al., (2015, p.84), the constructive research designs are linked to the relativist and nominalist ontologies. They start from the assumption that verifiable observation is potentially subject to very

different interpretations, and that the job of the researcher should be to illuminate the different truths and to establish how various claims for truth and reality become constructed in everyday life. Here, there is a wide range of methodologies that fit into the constructionist paradigm (details in the data collection section). Constructivism is represented at the opposite end of the spectrum by qualitative purism, which in its basic form rejects the positivist ideology and globally encompasses several forms of qualitative research. According to Neuman (2000), constructivist research intends to understand and interpret the meaning of human behaviour rather than generalise and predict causes and effects. In other words, the constructivist paradigm aims to view research from the perspective of seeking to explore and understand people's perceptions, attitudes, and behaviour by constructing a social reality through collecting, analysing and interpreting largely qualitative data. From the constructivist point of view, the logic flows from specific to general through the inductive process of explaining phenomena, with the subjective knower as the only source of reality (Johnson and Onwuegbuzie, 2004).





Source: Saunders et al., 2003

The constructivist paradigm is relevant in the context of a study that involves understanding human cognitive psychological activity in the process of knowing the reality (Elkind, 2009). It is primarily useful in understanding the contemporary consumption behaviour in contemporary society, such as the one characterised by globalisation that is transforming the global culture, which results in a global environment that is consisting of a plurality of culture and unique identities. The constructivist theory of the infinite complexity explains how multiple reality exists for different people in a society, given that factors in the environment shape how individuals perceive reality. The qualitative purists argue that as there are individual realities, so are group-shared realities. They argue that culture is a symbolic system that individuals use to construct and make sense of group-shared realities. Identity is the medium by which individuals translate these similarities and differences to an ontological statement about culture relationship (Elkind, 2009).

The hermeneutic aspect of the constructivist paradigm pursues two broad questions that are fundamental to any effort to explain the underlying values that govern these realities. The first question focuses on the individuals' culture within a society and how a person interprets the world around them. The second question focuses on how the world around them affects how they think and act. These put into proper situational context can be used to gain a deeper understanding of tobacco use based on world reality. It emphasises humans as the primary research instrument and the need to present multiple interpretations of different groups involved. The inductive approach usually utilises the qualitative method in the form of interviews and ethnography.

#### 3.1.1.2.1 Interview

A qualitative interview is an adaptable and usually non-standard means of gathering data. It is distinct from a quantitative interview that is generally more structured and formatted. It comes in the form of a one-on-one interview, or a focus group interview involving more than two and up to twelve people. It involves a focused conversation or discussions between one or more individuals to acquire knowledge and insight into a particular phenomenon (Thornhill et al., 2009). Thus, if the purpose of the study is explorative or descriptive, and the objective can be predefined, qualitative interviews may be utilised. However, interviews do not necessarily have to be face-to-face interaction. The Interview can be conducted over the phone or even over the internet. The crucial only fact is, it has to involve person-to-person interaction (Creswell, 2005). Interviews come in various but focused approaches such as structured Interview, where questions for the interview have been listed out prior to the session and followed strictly. The semi-structured interview consists of open-end questions. The unstructured interview, on the other hand, is usually casual.

It is not rehearsed or listed out before the interview., but borders on a theme (Creswell, 2005; Thornhill et al., 2009; Silverman, 2010).

#### 3.1.1.2.2 Ethnography

Scott et al., (2008) defined ethnography as the study of social interaction, behaviour and perception that occur within groups, organisation and communities. People's practices and interactions tend to become immersed in their everyday routine to the extent that they become unconsciously aware of it. In this case, the ethnographic approach provides the opportunity of combining data collected from on-site observation and semi-structured interviews to understand these practices and interactions. In other words, interviews can serve as a tool to help participants reflect on their activities, and can inform observation, that helps the researcher understand the ways people interact in a space. Anthropologists and sociologists have widely used this type of methodological approach to comprehend human behaviour. As demonstrated in the previous chapter, the pervasiveness of globalisation in the contemporary social environment has motivated a shift in a series of behaviour; thus, has inspired the evaluation of behaviour from several perspectives. The use of qualitative methodologies such as ethnography for a long-term and in-depth investigation can be instrumental in understanding the contemporary consumer behaviour. Going by Hammersley and Atkinson (2007), the ethnographic methodological approach consists of the following characteristics:

- It emphasis strongly exploring the nature of a particular social phenomenon, rather than aiming to test a hypothesis on the social phenomenon.
- Ethnographic research is mostly conducted on the field.
- While data can be collected from a range of sources, it appears that participants observation and informal conversation are the primary sources for gathering data.
- It tends to work primarily with unstructured data and does not follow a fixed, inferred research design.
- It intends to investigate small numbers of cases.

 The data analysis process involves explicit interpretation of the meaning and functions of human actions, by verbal descriptions and explanations. Less attention is given to data quantification and statistical analysis.

The principal aim of ethnography is to provide rich, holistic insight into people's views and actions, as well as the nature of their local habitat, through the collection of detailed observations and interviews. It aims to produce a detailed and concrete description of a situation, rather than an abstract and general one. Going by Hammersley and Atkinson (2007), ethnography aims to get inside the way different groups of people see the world.

# 3.1.1.3 Critical theory

The critical theory involves investigating people's actions and practices that are based on critique (Easterby-Smith et al., 2015). According to critical theory, human actions are limited by the dynamic social and cultural structures, rather than certain discernable variables. In other words, critical theory is concerned with studies on social change as it occurs in social struggle. Going by Scherer (2008), critical theory is with practical intent. Horkheimer (1972), outlines that critical theory is adequate only if it meets three criteria that include:

- It must be exploratory.
- It must be practical.
- It must be normative.

In this regard, the critical theory must explain what is wrong with current social reality, identify the actors to change it, and provide explicit norms for criticism and achievable, practical goals for social transformation. The central position of exploring the process of why things happen means that the critical realist put theory first (Easterby-Smith et al., 2015). Thus, critical realist research designs aim to produce explanations about the properties and exercise of transfactual hidden and often universal process. It takes any potential generalisation from theoretical to empirical. This is in contrast with the positivist approach, where generalisations are mainly concerned with an empirical population. The theoretical generalisations are more enduring and can be applied through time and space.

Realists have argued that emergent stratified nature of social reality means that a wide range of methodological approaches is necessary for a richer conceptualisation of mechanisms at work in the social world. While the casestudy approach is conventional to realists when conducting studies, other approaches such as action research, comparative case-study, intensive realist literature evaluation, barefoot research, surveys and extensive realist evaluation are used by realists. Subsequently, prompted the creation of critical realist research designs, as shown in table 3.2.

	Intensive ↔ Extensive				
	What is the	How do	How do context &	What is	
	mechanism?	context &	mechanism	the	
		mechanism	historically interact?	context?	
		typically			
		interact?			
Detached	Case-study	Comparative	Institutional/historical	Surveys	
		case-study	analysis		
Engaged	Action	Intensive	Barefoot research	Extensive	
	research	realist		realist	
		literature		evaluation	
		evaluations			

Table 3. 2: Critical Realist Research Designs.

Source: Ackroyd and Karlsson (2014)

According to Ackroyd and Karlsson (2014), the choice of approach for critical realists depends on the position of the research on two dimensions. First, the focus of the research and the intensiveness and extensiveness of the research. Secondly, the extent of the detachment of the researcher from the context under study.

Research Design	Explanation
Case-study	The most common, and arguably most useful, form of
	Critical Realist research. An in-depth exploration of a
	case to abduct causal mechanisms from their empirical
	manifestations. Cases may range from people to
	companies to whole economies.
Action research	Intervention by researchers to explore the workings of
	a mechanism by triggering it or changing its context.
Comparativo caso	Evalaring how cimilar machanisms aparata in different
Comparative case-	Exploring how similar mechanisms operate in different contexts.
study	
Intensive realist	Builds theories to explain what mechanisms work in
literature evaluations.	different contexts by reviewing the extant literature.
Institutional/historical	Examining causal sequences over time to explore how
analysis	mechanisms and contexts interact over time and the
	conditions for such interaction.
Barefoot research	Training / encouraging participants/employees to do
Bareloot research	their own research.
	their own research.
Surveys	Primarily focuses on descriptive statistics (e.g. sampling
	or population data) to illustrate the empirical
	consequences or conditions of mechanisms.
	Occasionally used to prompt explanatory investigations
	but in conjunction with other methods.

# Table 3. 3: Explanations and examples of critical realist strategies

Extensive	realist	Mixed methods: stage one uses qualitative work to
evaluation		identify causal mechanisms. Stage 2 uses statistical
		techniques to examine how different contexts affect a
		mechanism.

Source: Vincent and O'Mahoney (2018)

Critical theory has a highly ecumenical approach to data collection. Thus, methodological choices depend on the nature of the aim and objectives of the study. It includes observation, focus groups, literature reviews and surveys.

## 3.1.2 Selection of research philosophy

Going by the discussion of the research philosophy as reviewed above demonstrates that the research objectives for this study mainly followed the critical realist paradigm, based on the information obtained from the preliminary theoretical framework from the review of the literature. The study followed the line of thought that understanding consumer behaviour requires the combination of socially constructed realities and universal truths. In order to satisfy the condition for the critical theory paradigm as laid out in section 3.1.1.3, require a suitable research method that demonstrates the exploratory, practicality, and the normative of the study. The research method is generally seen as the procedure used to investigate reality and is broadly grouped into three methodology approaches, namely qualitative, quantitative and mixedmethod (Creswell, 2009). These sets of methodology form different approaches to social inquiry and hold important epistemological and ontological considerations. The qualitative studies place great emphasis on understanding social reality through examining peoples words, actions and records (Creswell, 2009 and Morse, 2003). Quantitative studies, on the other hand, tend to identify key attributes and measure their frequency and extent (Huberman and Miles, 2002). In the case of mixed methods, it bridges both quantitative and qualitative methodology. The summary of the features of quantitative and qualitative research is shown in table 3.4 below.

Table 3. 4: The comparison between	qualitative and quantitative
------------------------------------	------------------------------

Qualitative research method	Quantitative research method
<ul> <li>The methods include focus group, in- depth interview, and review of documents for types of theme</li> </ul>	<ul> <li>Surveys, structured Interview and observations, and reviews of records or documents for numeric information</li> </ul>
The primarily inductive process used to formulate theory or hypotheses	<ul> <li>The primarily deductive process used to test pre-specified concepts, constructs, and hypotheses that make up a theory.</li> </ul>
<ul> <li>More subjective: describes a problem or condition from the perspective of those experiencing it.</li> </ul>	<ul> <li>More objective: provides observed effects (interpreted by researchers) of a programme on a problem or condition</li> </ul>
<ul> <li>It is text-based</li> <li>More in-depth information on a few cases</li> </ul>	<ul> <li>It is number based</li> <li>Less in-depth but more breadth of information across a large number of cases</li> </ul>
Unstructured or semi-structured response option	Fixed response options
<ul> <li>No statistical tests</li> <li>Can be valid and reliable: largely</li> </ul>	<ul> <li>Statistical tests are used for analysis.</li> <li>Can be valid and reliable: largely</li> </ul>
depends on the measurement device or instrument used.	depends on the skill and detail of the researcher.
<ul> <li>Time expenditure is intensive on the planning phase and less time during the analysis phase.</li> </ul>	<ul> <li>Less time and expenditure on the planning phase and intensive during the analysis phase.</li> </ul>
<ul><li>More generalised.</li><li>Human behaviour model</li></ul>	<ul><li>Less generalised.</li><li>Natural science model</li></ul>

Source: Huberman and Miles 2002

Although adopting the right research methodology is a vital part of any research, there has been a widespread debate regarding the relative merits of qualitative and quantitative strategies for research. While some view the two strategies as an entirely separate entity, indicating different world views, others have argued the importance of the combination of the two for a better understanding of a research problem. Bryman et al. (1988) argue for the

combination of the two strategies to have the best of both worlds approach. However, Sogunro (2002) has an opposite view, explaining that some researchers usually find it challenging to pull off hybrid research, this usually leads to producing a piece of research below the standard for good work in either approach. Table 3.5 illuminates the summary of the strengths and weakness of the mixed method.

#### Table 3. 5: the strengths and weakness of the mixed method

•	Qualitative and quantitative research	
	used together to produce complete	
	knowledge necessary to inform theory	
	and practice.	

Source: Johnson & Onwuegbuzie, 2004

## **3.1.2.1** Justification for the choice of research method

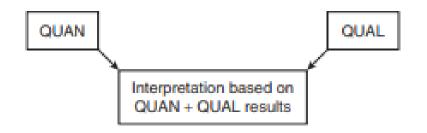
The research method approach adopted in investigating the issue of tobacco use in many developing countries has either been exclusively qualitative or quantitative. Although the quantitative approach is vital in quantifying smoking prevalence, smoking pattern, and even health cost and smoke-related illness, there is the need to identify other socio-environmental factors as it associates with the issue of tobacco use. Such factors include social, cultural, political and economic dynamics and the environment (micro-environment and macroenvironment) as discussed in the previous chapter. The application of either the quantitative or qualitative method by itself can restrict the quality of findings on the subject matter. According to Creswell (2009), a qualitative method that combines with a quantitative method can help to interpret and better understand the complex reality of any given research problem. Hurmerinta-Peltomaki and Nummela (2006) made an attempt to review the value of mixed methods in the field of business. They found that mixed-method adds value by increasing validity to the findings, informing the collection of data and assisting with knowledge creation. O'Cathain et al., (2010), believe that the integration components of the mixed method give the reader more confidence in the results and conclusions drawn from a study.

However, despite the weighty strength, a potential challenge of the mixed method is the selection of an appropriate sequence of usage by which the outcome of a method can be improved by combining the other method. In order to address this, Creswell (2005) identified the four major types of mixed-method designs as the Triangulation design, the Embedded design, the Explanatory design, and the Exploratory design.

## The Triangulation Design

The triangulation design is the most common and well-known approach to mixed methods. It is designed to obtain different but complementary data on the same topic to understand a research problem. The purpose of this is to bring together the different strength and non-overlapping weakness of qualitative methods with those of quantitative methods. Figure 3.5 illustrates the procedure of triangulation design.

## Figure 3. 5: The Triangulation design



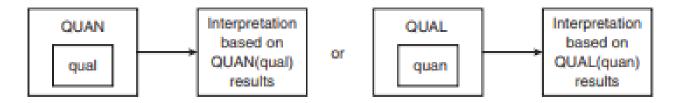
#### Source: Creswell, 2005

It usually involves the concurrent but separate collection and analysis of quantitative and qualitative data for the best understanding of the research problem.

## The Embedded design

In the case of the embedded design, it builds on the idea that a single set of data is not sufficient, that different questions need to be answered within the study, and that each type of question requires a different type of data. The embedded design is particularly important when there is a need to embed a qualitative component within a quantitative design, as in the case of experimental or correlational design.

## Figure 3. 6: The Embedded design

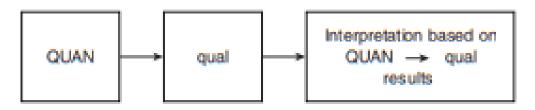


Source: Creswell, 2005

# The Explanatory design

The explanatory design, unlike the previously explained designs, is a twophase mixed method design where a method helps explain or build upon initial finding from the other method. It can also be utilised to form groups based on the result of a research method and follow up with the groups through the subsequent research method. Alternatively, it uses groups or participants of a research method as a purposeful sampling guide for the other research method.

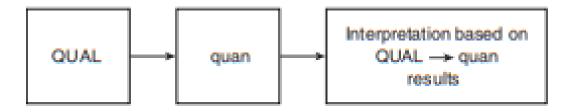




Source: Creswell, 2005

# The Exploratory Design

The exploratory design is a two-phase design where the result of the first method can help develop or inform the second method. It builds on the premise that exploration is needed for one of the various reasons, including measures or instrument where they are not available; the variables are unknown, or there is no guiding framework or theory. Likewise, it is useful for study intent for generalisation of result across different groups, to test the aspect of an emergent theory or classification. Figure 3. 8: The Exploratory design



Source: Creswell, 2005

Having reviewed the various research methods as reported above, the mixedmethod approach in the form of exploratory design is the most appropriate method to tackle the objectives set out for the research. The scarcity of resources on the dynamics of the global environment and local society on contemporary consumption, particularly in the context of tobacco use behaviour necessitated the need for this study. It builds on the premise that the link between people's perception and their socio-cultural situation is vital to decision-making since most people derive their notions, mental constructions and interpretations from their immediate surroundings and develop these from experiential knowledge (Berkes, 2004). An exhaustive exploratory study based on secondary data sources was conducted to contribute to the literature review. The information gathered from the secondary research served as the input for the second stage (a focus group interview with few groups participants). The qualitative findings from the focus group exercise were then used as a guide to developing items and scales for a quantitative survey instrument. The process is further discussed in section 3.1.3.9 that explained the Strategies employed in this study.

As stated in the previous section, although a mixed-method research approach is characterised by weighty strength, it also comes with its criticism. Besides the challenges already highlighted above, the two research methods are usually viewed as a separate and incompatible paradigm. Thus, combining them is sometimes seen as inappropriate. Going by the Thomas (2010) paradigm defines the set of beliefs held by communities of academics at a given point in time. It describes the worldview or sets of assumptions about how things should be done. In this regard, Rossman and Rollis (2011), highlight that the shared understandings of reality in quantitative and qualitative research are very different. It involves different assumptions of how research should be done, how information is to be collected and the role of the researcher. Consequently, researchers that subscribe to this view believe that it is neither possible nor desirable to combine qualitative and quantitative methods in a study. Researchers with a pragmatic view believe that the concern of incommensurability of the worldview can be overlooked if the combination of the two methods addresses the research question effectively.

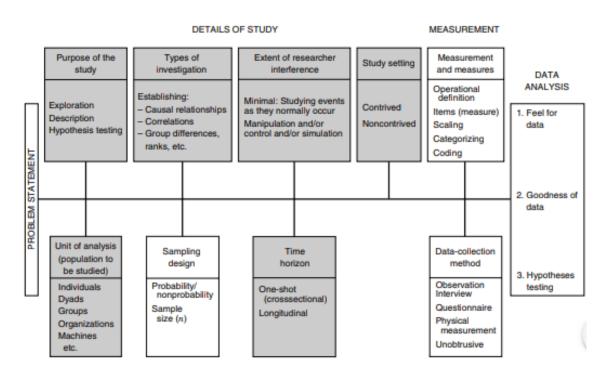
Another issue identified from combining qualitative and quantitative methods is that it can be time-consuming and requires the researcher to have experience and skills in both research methods. It is usually suggested that a mixed-methods project requires a team of researchers, rather than a single researcher, to be able to conduct a rigorous study that will be completed within a specific time frame. However, this may result in a team comprising different disciplines to become compartmentalised, rather than working hand in hand. Studies have suggested that having a project leader with experience and skills in both research methods present in the team can act as the critical bridge that brings together the mixed method team members (Salahi and Golafshani, 2010).

Furthermore, it appears that achieving true integration of different types of data from the combination of mixed research can be difficult. Section 3.1.2.1 demonstrates some of the analytic strategies. While it may seem straight forward, it appears that it can be difficult to achieve true integration and may require innovative thinking to be able to move between different types of data, in order to make meaningful links between them. Going by Tariq and Woodman (2013), it is crucial to reflect on the result of a study to access if the aim of the study has been enriched by combining different types of data. In the case where a study is not enriched by the combination of different types of data, it means the integration may not be enough.

Lastly, the presentation of results from a mixed-method study has also been identified as a challenge when conducting mixed-method research. Usually, it is required that the researcher present both the quantitative and qualitative data separately. This may result in an additional publication of work that focuses on interpretation and conclusion that comes from comparing findings from the different data collected (Tariq and Woodman, 2013).

#### **3.1.3** Research design framework

After the appropriate paradigm underpinning this study and the research method approach has been established, the next step is to develop an appropriate research design framework that served as a guide for the collection of necessary data required to tackle the research questions. While a great deal of research design framework has been developed (See: Creswell, 2005; McGivern, 2006; Sekaran, 1992; Saunders et al., 2015), this research adopted the research design framework developed by Sekaran (2003). The reason behind this is because the framework consists of all significant elements of good research design through a logical sequence of rational decision-making choice. Figure 3.9 illuminates the major sequential element of the research design and is discussed in detail in the rest of this chapter.



#### Figure 3. 9: The research design

Source: Sekaran 2003

## 3.1.3.1 The purpose of research

As mentioned earlier, the primary purpose of conducting research is to either seek knowledge or contribute to solving a problem. Either way, the nature of the study depends primarily on the stage the knowledge in the research area has advanced. Sekaran (2003) has identified the purpose of a study as exploratory, descriptive, and hypothesis testing. The design decision becomes more rigorous as it progresses from exploratory (attempt aim at exploring new areas or perspective of a research area), to descriptive (attempt to describe specific characteristics of a phenomenon of a research area), and hypothesis testing (attempt to examine whether or not conjectured relationships) have been substantiated, and an answer to the research question has been obtained. All these are discussed in the subsequent sub-sections.

## 3.1.3.1.1 Exploratory study

An exploratory study is usually carried out when the research area is relatively unexplored, and not much is known about the phenomenon (Sekaran, 1992; Morse, 2003; and Creswell, 1994). In such a case, it is required that extensive preliminary work is undertaken to have a better understanding of the situation and to develop a viable model that can be used for a complete and comprehensive investigation of the subject matter. Theories can then be developed, and hypotheses can be formulated from data (usually when they reveal some pattern) for subsequent testing.

## 3.1.3.1.2 Descriptive study

A descriptive study is usually carried out to ascertain and describe the characteristics of variables in a situation. Descriptive studies focus on giving a detailed account of the relevant aspects of a phenomenon that is of interest to the researcher. It seeks to discover the answer to whom, what, when, where and how questions. It has its foundation grounded on previous findings of the nature of the research problem (Sekaran, 1992).

# 3.1.3.1.3 Hypotheses testing

Hypotheses testing is required for studies that are interested in describing the nature of certain relationships or in determining the difference among groups or the independence of two or more factors in a given setting (Sekaran, 1992).

# 3.1.3.1.4 Strategies employed in this study

As indicated in the previous section, this study adopted a mixed-method approach, and both qualitative and quantitative research were linked and used for the research. Table 3.6 highlights the difference in theory construction in quantitative and qualitative research and how it relates to this research.

Construct	Quantitative research	Qualitative research	Relationship to this study
Theory focus	To test theories	To develop theories	The research adapted theories to be tested, and theory was conceived from the reality
The logic of theory and causality	Largely causal and deductive	Can be causal or non- causal and is often inductive	This research is the combination of both deductive and inductive.
The direction of theory building	Begins from theory	Begins from reality	The theory was first conceived from reality.
Verification	Take place after theory building is completed	Data generation, analysis and theory verification take place concurrently	Data generation, analysis and theory verification take place concurrently. Theory verification took place after theory building is complete.
Concepts	Firmly defined before research begins	Begins with orienting sensitising or flexible concepts	Combines the both methods
Generalisation	Sample-to-population generalisation	Analytic or exemplary generations	The qualitatively explores the research topic with a few participants. The qualitative findings then guide

Table 3. 6: Theory construction in quantitative and qualitative research

the	developme	ent of
item	ns and scale	s for a
qua	ntitative	survey
inst	rument.	

**Adapted from:** Sarantakos, 1998, p.15; Neuman, 2003, p.145; and Taylor and Trumbull, 2000, p.173

As the mixed-method approaches have continued to gain popularity, researchers have become more willing to acknowledge the unique strengths and weaknesses of both the qualitative and quantitative methods. Thus, they have also become creative in their adoption. A major consideration when using a mixed-method is the timing of the qualitative and quantitative components. According to Easterby-Smith et al., (2015), research can be conducted either sequentially or concurrently, depending on the purpose of each component of mixed-method. The sequencing refers to whether a method goes before the other and which goes first. While the concurrent refers to the combination of both components at the same time. Another concern with the mixed method is the weight given to each phase of research. Although each of the phases may have equal weight, it is quite usual that a phase is more heavily emphasised based on the primary logic that governs the mixed-method study. In other words, a deductive study will tend to emphasise the quantitative portion more heavily and seek to explain a phenomenon. On the other hand, an inductive study will tend to emphasise the qualitative portion more heavily.

The logic for this research was based on both inductive (that is an exploratory study) and deductive (that is survey research), and going by the description above its emphasis is relatively equal on the logic that governs the mixed-method study. The study corresponds with the sequential exploratory strategy that places greater emphasis on an initial qualitative phase intended to gain insight into an understudied phenomenon, hence the reason for the exploratory nature. The quantitative phase was used to examine the phenomenon in a more replicable way. A literature study was conducted on the subject matter, followed by qualitative data collection in the form of focus group interviews. Since qualitative research was first adopted, the theory was devised from reality (that is how tobacco is used). Then the information derived from these was used to develop an appropriate survey instrument to collect quantitative

data for generalisation and hypotheses testing. The details are presented in the procedure section of this chapter.

## 3.1.3.2 Types of investigation

According to Sekaran (2003), to find an answer to a research problem, the researcher needs to determine which approach of investigation to adopt. Broadly, the types of investigation can be divided into two, namely causal and correlational investigation. The formal is concerned with establishing a definitive cause-and-effect relationship; the latter is concerned with identifying essential factors associated with a research problem (Sekaran 2003). In the case where multiple factors influence one another, a correlational investigation might be the appropriate type of investigation to utilise to identify the crucial factors associated with the problem, rather than establishing a cause-and-effect relationship. To this end, the research adopted the correlational investigation. This is in recognition that multiple factors can impact on tobacco consumer behaviour rather than conclude that the contemporary global environment and contemporary consumption of tobacco has a cause and effect relationship.

## 3.1.3.3 Extent of research interference

The extent of researcher interference extends from the type of investigation that is being undertaken in the study. Going by Sekaran (1992), the extent of researcher interference has a bearing on whether the study being carried out is causal or correlational. A correlational study is conducted in a natural environment and stresses the importance of the 'natural' setting, where the researcher is expected to play the passive observer of events (Sekaran, 1992). Conversely, causal studies require the researcher to manipulate the dependent variables of interest to study the cause-and-effect relationship. This study leans towards a correlational study, as it is more intended in observing the probability of change in behavioural trends.

# 3.1.3.4 Study settings

Qualitative research places a high value on retaining the naturalness of the setting (non-contrived setting) and typically avoid imposing controls on the

situation such as in an experiment (contrived setting) (Denscombe, 2002). Subsequently, correlational studies fall into the non-contrived setting category. In contrast, causal studies fall into the contrived settings category, where the researcher manipulates the extraneous settings to establish a cause-and-effect relationship (Sekaran, 1992). Thus, the current study leans towards a noncontrived setting, as the focus of the study is to examine the relationship between factors identified in the environment (that is macro-environment and micro-environment) and tobacco use, and not to determine the cause and effect.

#### 3.1.3.5 Measurement

Specific research data in management that is gualitative in nature such as attitude, opinion and consumer behaviour require measurement scales for them to be measurable. Measurements of this nature cannot be measured simply by using any particular instrument (Price et al., 2015). It requires some systematic procedure for assigning scores to individuals or objects to have a true reflection of the characteristics of interest. Accordingly, measurement is the assignment of scores to individuals so that the scores represent some of the characteristics of the individual (Price et al., 2015, p.123). The variables in this type of research are called construct because they are not so straightforward or simple to measure. They often represent the tendencies of a subject to think, feel, or act in a certain way. The major issues concerned with measurement are: understanding the fundamental ideas involved in measuring and understanding the different types of measures that are used in management research (Zikmond, 2000). Accordingly, the level of measurement is a classification system that describes the nature of the information contained within the number given to the attribute of a variable (Steven, 1946). It suggests that aside from the possibility of level measurement to communicate information, such information can be quantified. Scaling refers to the branch of measurement that involves the construction of an instrument that associates qualitative constructs with qualitative metric units. The major levels of measurement are 'nominal', 'ordinal', 'interval', and 'ratio'.

In the case of nominal measurement, the numerical value is used primarily to name attributes uniquely. Ordinal measurement, on the other hand, rankorders the attributes. Here, the distance between attributes does not have any meaning, and the interval between values is not interpretable (Statistics, 2015). In interval measurement, the distance between attributes has meaning, and the interval between values is interpretable (Statistics, 2015). In the ratio measurement, there is always an absolute zero that is meaningful. Thus a researcher can construct a meaningful ratio with a ratio variable.

In applied research, most 'count' variables are in ratio (Statistics, 2015). However, it is important to note that there is a hierarchy implied in the level of measurement idea (Trochim and Donnelly, 2001). The assumption tends to be less restrictive, and data analyses tend to be less sensitive at the lower levels of measurement. At each level up the hierarchy, the current level includes all the qualities of the one below it and adds something new. In general, it is desirable to have a higher level of measurement (for instance, interval or ratio) rather than a lower one (nominal or ordinal). The concept of 'level measurement' helps the research on how to interpret the data from the variable. It helps the researcher to identify the levels of measurement to know the statistical analysis appropriate for the values assigned.

Table 3.7 shows the way to distinguish between the different types of level measurements as proposed by Blumberg et al., (2005).

Type of	Characteristics of	Basic empirical	Example
scale	data	operation	
Nominal	Classified, but no	Determination	Gender (male, or
	order, distance or	of equality.	female.)
	origin.		
Ordinal	<ul> <li>Classified, and</li> </ul>	Determination	Of lesser value (for
	order, but no	of greater.	instance, the
	distance or unique		doneness of meat:
	origin.		well, medium, or
			rare)

 Table 3. 7: Types of data and their measurement characteristics

-			
Interval	<ul> <li>Classified, order,</li> </ul>	<ul> <li>Determination</li> </ul>	The temperature in
	and distance, but	of equality of	degrees.
	no unique origin.	intervals or	
		differences.	
Ratio	Classified, order,	Determination	Ages in years.
	distance and	of equality of	
	unique origin	ratios.	

Source: Blumberg et al., 2005, p.400

There are two types of measurement scales commonly used by researchers. They differ according to the number of the distinction between alternative points on the measurement scale. The category scales consist of few distinctions, while the continuous scales consist of many distinctions. The category scales can either be unordered (nominal scales) or ordered (ordinal scales) (Blumberg, 2005). The difference between the two types of scales lies in whether shuffling the assignment of numbers to categories will make a difference to the meaning of the variables. In studies that are interested in people's opinion, the Rensis Likert allow for people to express themselves on the scale. The scale runs from one pole to another (that is from 'strongly disagree' to 'strongly agree'). Respondents indicate how strongly they agree with a carefully constructed statement, that ranges from the very positive to very negative, towards the attitudinal objective. It measures the attitude of the respondents. In the middle of the pole is the neutral mid-point that allows the possibility of respondents to record a 'no' opinion on an issue. The most common response scale in research is the ordinal scales of five to seven categories with verbal labels to anchor the endpoint. Below are some of the things that need to be considered when determining the number of scales to use.

- In the situation where there is a large number of scale points, it is advisable to make use of general linear techniques such as regression.
- A scale of 5 points or greater gives a reasonably reliable indication because it consistently measures the object of the question.
- A sale below 5 points is too small and tends to make the use of the general linear model technique very questionable.

 The respondents need to have a clear understanding of the issue or subject matter to avoid them providing a misleading scale. This may reduce the reliability or make the response task difficult.

#### 3.1.3.5.1 Evaluating measuring instruments

Recalling the definition of measurement, it involves allocating scores to individuals, so they represent some characteristics of the individual. However, how does a researcher know if the scores represent the characteristic, especially when it has to do with an intangible thing like measuring consumer opinion? According to Price et al., (2015), the answer lies in the researcher conducting research using measures to confirm that the scores make sense based on their understanding of the construct being measured. The measuring instrument can be evaluated in the areas of reliability and validity.

Reliability measurement is concerned with the quality of the measurement. In this sense, reliability is the "consistency" or "repeatability" of a measure. According to Price et al., (2015, p.123), the three types of consistency include overtime (that is test-retest reliability), across items (internal consistency), and cross different researchers (inter-rater reliability). The test-retest reliability is the extent to which the researcher's measurement of a construct is consistent across time. It involves using a measure on a group of people more than once to look for a retest correlation between the number sets of scores. While in high test-retest, it is expected that a certain construct should be consistent over time for it to make sense, there is the presence of other constructs that are not expected to be stable over time.

In the case of internal consistency, it is expected that there is consistency in people's response across the items on multiple measures. In the sense of it, all the items on sure measures are supposed to reflect the same underlying constructs, so that people's score on those items correlate with each other (Price et al., 2015). Take, for instance, the Rosenberg self-esteem scale; people who agree that they are a person of worth should tend to agree that they have some good qualities. In the situation where there is a contradiction, and people respond to different items which are not correlated with each other, then it will no longer make sense to claim that they are all measuring the same

underlying construct. Several behavioural measures involve significant judgment on the part of the observer. The inter-rater reliability is the extent to which different observers are consistent in their judgements. The inter-rater reliability is often assessed by using Cronbach's  $\alpha$  when the judgments are quantitative, or an analogous statistics called Cohen's  $\kappa$  (the Greek letter kappa) when they are categorical (Garson, 2008; and Blumberg et al., 2008).

The validity, on the other hand, implies the extent to which the scores from a measure represent the variable they intend to represent. Cohen et al., (2007), identify main research validity as face validity, content validity, construct validity and criterion-related validity. Face-validity defines the degree to which a measure appears related to specific constructs, in the verdict of non-experts such as test-takers. A test is believed to have face validity if its contents appear relevant to the researcher undertaking the test. Content validity refers to the degree to which items in an instrument reflect the content universe to which the instrument will be generalised (Straub et al., 2004). Generally, content validity involves the evaluation of a new survey instrument to ensure that it includes all the items that are important and rejects unwanted items to a particular construct domain (Taherdoost, 2016). Construct validity is thought to have two components: the convergent and discriminant validity. In the case of convergent validity, it is a parameter often used to denote the degree to which measures of constructs that are meant to be related are actually related. Discriminant validity, on the other hand, is the extent to which a latent variable, say A discriminates from other latent variables (for instance B, C, D). In general, construct validity involves how well concepts, ideas, or behaviour can be translated or transformed as functioning and operating reality; the operationalisation. Lastly, criterion validity describes the extent to which a measure is related to an outcome. It is usually useful for a type of test that involves predicting performance or behaviour in another situation (say: past, present, or future).

#### 3.1.3.6 Unit of analysis

The unit of analysis is the entity that frames what is being analysed in a study (Sekaran, 2003). It is primarily concerned with the number of samples in a unit per data collected. Take, for instance, the problem statement that focuses

on husband-wife interaction in families. The husband-wife can be described as the unit of analysis per family. Going by Sekaran (2003), selecting the unit analysis based on previously determined research question is one of the most crucial aspects of research design. Accordingly, researchers need to decide the unit of analysis at the beginning of the study, because, the data collection methods, sample size and the variables included in the framework are sometimes influenced or guided by the level of data aggregated for analysis.

Going by this, unit analysis varies for the three phases of the research. The unit of analysis for the first phase is the 'country'. In the second phase of the study, the unit analysis is the focus group. The last phase of the research is individuals asked to fill out a questionnaire.

## 3.1.3.7 Sampling design

Social science research mostly involves the study of an event concerning a particular group of people or participants, usually in large numbers that the researcher intends to answer a general question about them. Since in most cases it is not possible to collect data from all participants, the researcher needs to make use of a selection model that can be adequately utilised to generalise a result that is valid and can be extended beyond those who participated (Runeson and Host, 2009). Sampling design generally refers to the technique used to select the sample unit either from a population, or study area for measurement. A prerequisite for considering the sample design to be adopted is to have thoroughly defined the population, study area, sampling unit, and sampling objective. All these will have an impact on which sample design methods are suitable. Selection of a suitable sample design method ensures that the samples collected can support the extrapolations drawn from the sample. Using a sample design method that is not appropriate can lead to samples that are biased concerning the assessment and monitoring of laid out objectives.

A critical aspect of sample design in management research is precision in sampling. According to Easterby-Smith et al. (2015), precision is about the credibility of a sample and obtaining the sample that mirrors the population from which it is obtained. Most times, determining the right sample size can

be a difficult task. A researcher does not want to have a sample that is too large or too insignificant than needed because both have limitations that can compromise the extrapolation drawn from the study. A small sample may prevent the findings from being extrapolated, while too large a sample may amplify the detection of differences, emphasising statistical differences that are not scientifically relevant. Moreover, this can be a waste of time and resources. Although, the wide belief that the bigger the sample, the better the precision may sound logical, it is proven not to be necessarily true. Going by Hardon et al., (1996); and Hudelson, (1994), it is better to increase the accuracy of data collection mostly by pretesting the data collection tools than to increase the sample size after a certain point.

In qualitative studies, there are no set aside rules for sample size. It generally depends on the purpose of the research and practical factors. In many cases, researchers depend on what is called 'redundancy criteria' (Sekaran, 2003). In this case, the researcher stops to collect data when there is no new information coming from the new sample unit. Another way to determine the sample size is the use of pragmatic criteria in defining sample size, putting into consideration the amount of time it will cost to do an interview and transcribe it, and the number of sub-groups from which the researcher will select respondents. Griffin and Hauser (1993) found that 20-30 in-depth interviews are sufficient to uncover 90-95% consumer needs for product categories studied. Saiful (2010) in corroboration with this by states that a sample size larger than 30 and less than 500 are appropriate for most research. The validity, meaningfulness and insights generated from gualitative studies have more to do with the information richness of the subject matter, and the analytical advancement of the researcher than the quantity of sample size taken (Sekaran, 2003).

In quantitative studies, a more general rule is that the expected variation in the data determines the desired sample size. In other words, the more the data varies, the larger the sample size needed to attain the same level of accuracy. This is usually determined by using a statistical model or software. It helps to calculate the precision to determine the desired sample size. For a descriptive study, the sample size needs to be large enough to reflect the important variables in the population, and at the same time small enough to allow for intensive study methods (Sekaran, 2003). Generally, it is advised to aim for at least 30 respondents in each group of interest. Table 3.8 shows a preliminary estimate of a desirable sample size base on the estimated proportion from the desirable population.

Population	Margin of error			
	5%	3%	2%	1%
50	44	48	49	50
1,000	278	516	706	906
10,000	370	964	1936	4899
100,000	383	1056	2345	8762
1,000,000	384	1066	2395	9513
10,000,000	384	1067	2400	9595

Table 3. 8: The sample size for different population sizes

#### Source: Saunders et al., 2009

As indicated in the course of this research, the research method approach is the combination of both qualitative and quantitative methods for data collection. The primary purpose is to investigate the association between factors of the distal and proximal environment concerning tobacco use consumption. Thus the sample size for this research consists of a small sample size of 50 in the form of a focus group interview among five different groups for the qualitative data, and an additional sample size of 521 for the quantitative data in the form of a questionnaire. This sample is the reflection of the characteristics of the population from which the samples are drawn. Although it can be challenged that the sample size is relatively small, its positive outcome agrees with Saunders et al., (2009) on the feasibility of the sample size base, on the availability of resources which includes time, human resources, transportation, and money. Table 3.9 illustrates a summary of the characteristics of qualitative and quantitative sampling by Sarankos (1998).

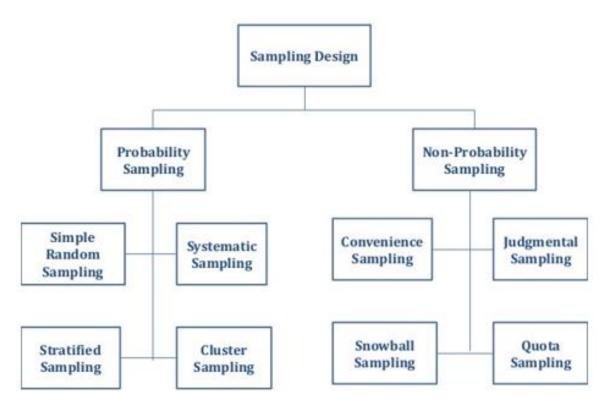
## Table 3. 9: Summary of quantitative and qualitative sampling

Quantitative sampling	Qualitative sampling
Is relatively large	Is relatively small
In most cases, it employs statistics	In most cases, it employs no statistics
Is often based on probability theory	Is often based in saturation
Allows no researcher bias in the selection	Allows researcher influence in the selection
Its size is statistically determined	Its size is not statistically determined
Occurs before data collection	Occurs during data collection, involves simple procedures
Involves complex procedures	Its parameters are flexible
Its parameters are fixed. Involves high costs	Involves very low costs
It is time-consuming	It is not time-consuming
It is representative	It is not representative
It is laborious	It is easy
It treats respondents as units	It treats respondents as persons
Facilitates inductive generalisations	Facilitates analytical generalisations

Source: Sarantakos, 1	1998
-----------------------	------

As illustrated below, there are various sampling methods broadly grouped into two, namely probability sampling and non-probability sampling (Trochim and Donnelly, 2001). These are discussed as follows.

Figure 3. 10: Type of sampling designs



Source: Sarantakos, 1998

As elucidated by Fox and Byat (2007), probability sampling is used when every element of the population has a known and equal chance of being selected in the sample. The technique makes it possible to state the mathematical likelihood of sample characteristics being replicated in the population. It is the only type of sampling that offers a true presentation of the total target population. A major advantage of probability sampling is that it gives room for the sampling error to be calculated. In other words, the researcher can determine the degree to which a sample may differ from the total targeted population from calculating the sampling error (Sekaran, 2003).

On the other hand, unlike probability sampling, where the element of the population has a known and equal chance of being selected in the sample, non-probability sampling happens to be the opposite. The probability that a sample will be selected is unknown, and the selection of a sampling unit is made based on the researcher's judgement or knowledge. It, therefore, follows a subjective approach (Sarantakos, 1998). A clear difference between probability sampling and non-probability sampling is that the latter has a built-

in bias that cannot be taken apart or calculated. Pure quantitative studies usually apply a probability sampling technique, while qualitative studies usually apply a non-probability technique (Tashakkori and Teddlie, 1998).

There is the argument that a variety or mix of sampling techniques can be used to answer research questions. According to Easterby-Smith et al. (2015), mix sampling provides more perspectives on issues being investigated. The types of probability and non-probability sampling are discussed accordingly.

# 3.1.3.7.1 Probability sampling

This section covers the forms of sampling techniques in cases where the element of the population has a known and equal chance of being selected in the sample. There are instances where the probability techniques have the same probability entity in the sample. Whereas in other cases, the sampling has same probability with segments of the design but varying probabilities across segments (Easterby-Smith, 2015). The types of probability sampling include simple random sampling, systematic sampling, stratified sampling, and cluster sampling.

# 3.1.3.7.1.1 Simple random sampling

The simple random sampling is the purest form of probability sampling. According to Sekaran (2003), it is a sampling procedure that ensures that all sample units in the specific population have the same, equal, and known chance for selection. In cases where the population samples are large, it can be very difficult or in some cases, impossible to identify every member of the population. Thus the sample of the available subjects becomes a biased sample (Sekaran 1998). This is why Fox and Bayat (2007) stated that simple random sampling is not the best method to establish a sample, as it lacks the capacity necessary for a true reflection of the whole population, particularly in cases where the population samples are large.

# 3.1.3.7.1.2 Systematic sampling

Systematic sampling is similar to simple random sampling and often used in place of random sampling. According to Tashakkori and Tedlie (1998), systematic sampling uses every *n*th unit from a pool of targeted population

members. The difference between systematic sampling and simple sampling technique is the orderly selection of the sample. In cases where the selection is not made orderly, the method is said to mirror simple random sampling with a clear advantage over random sampling (Sekaran 1998). Systematic sampling is a more popular sampling technique compared to simple random sampling and is more cost-effective and practical when compared to other sampling techniques.

## 3.1.3.7.1.3 Stratified sampling

Stratified sampling is a frequently used sampling technique that has a clear advantage over random sampling because of its ability to reduce sampling error. According to Sekaran (2003), stratified sampling is a probability sampling technique where the target population with similar traits are divided into groups. The researcher then has to identify the relevant stratum and their actual representation in the population, and random samples are used to collect a sufficient number of the subjects from all the groups. The technique helps to eliminate the risk of the samples consisting of members of one group. Stratified sampling has the tendency to be used when one or more of the stratum in the population has a low incidence relative to the other stratum (Zikmund, 2000).

# 3.1.3.7.1.4 Cluster sampling

According to Easterby-Smith (2015, p.81), any method that involves random sampling will lead to practical problems where the population units are spread very widely, such that the cost of approaching them is very high. Cluster sampling can be used to deal with the challenge of collecting samples in such situation by first dividing up the population into 'clusters', and then samples collected in all units within the selected clusters. There are similarities between stratified random sampling and cluster sampling. A distinct difference of cluster sampling is that the sampling units are divided into mutually exclusive and collectively exhaustive subpopulations, and not treated as individuals (Sekaran, 2003).

## 3.1.3.7.2 Non-probability sampling

In non-probability sampling, it is not possible to state the probability that any member of the population will be selected. Thus it is difficult for the researcher to confidently claim that the extrapolation from such study can be generalised to the larger group where the sample is selected. Fox and Bayat (2007) have argued that even though the probability that a member will be selected is unknown, the convenience and inexpensiveness of the sampling technique has caused it to gain popularity in research. The types of non-probability sampling include convenience sampling, judgmental sampling, snowball sampling and quota sampling. These are discussed as follows:

## 3.1.3.7.2.1 Convenience sampling

The word convenience sampling by itself is self-explanatory, as it implies that samples are drawn based on how easily accessible they are (Easterby-Smith et al., 2015 and Tashakkori and Tedlie, 1998). The sampling is common in research because it is convenient. However, it is impossible to guarantee that samples achieved in this way represent a specific population pool. Thus, it is advised to be used if no other sampling technique is effective (Sekaran, 1998). It is usually used during preliminary research where the researcher is interested in gathering an inexpensive approximation of the truth (Sekaran, 1992 and Welman and Kruger, 2001).

## 3.1.3.7.2.2 Judgement sampling

In the case of judgement sampling, participants are selected based on the researcher's conviction that the participants meet the requirements of the study. If the researcher must use this sampling method, the researcher must be confident that the chosen samples are the true representation of the entire targeted population (Fox and Bayat, 2007 and Sekaran, 1992).

## 3.1.3.7.2.3 Quota sampling

In quota sampling, the relevant population are split up into categories (for instance male and female, or country of origin for students). The convenience or judgement sampling is then used for continuous selection until a sample of a specific size is achieved within each category (Easterby-Smith et al., 2015)

and Sekaran, 1992). Quota sampling is used to ensure that each category of a targeted population is represented according to the quota proportions.

## 3.1.3.7.2.4 Snowball sampling

Snowball sampling is a unique non-probability sampling that is used when the desired sample characteristic is a rare occurrence. It starts with selecting one person who meets the criteria for inclusion in a study, which is then asked to recommend or name others who would be eligible for the same study (Easterby-Smith et al., 2015). In other words, snowball sampling relies on referrals from initial respondents to generate additional respondents. While there are suggestions that it is effective in drastically driving down the cost of research, there are also suggestions that it comes at the expense of introducing biasness. The sampling technique itself reduces the likelihood that the sample obtained will be a true representation of the target population (Cooper and Schindler, 2006; Easterby-Smith et al., 2015; and Sekaran 1992).

Regardless of the differences associated with different sampling designs, they come with common problems. These problems and ways to tackle them are summarised in table 3.10.

Table 3. 10: Common problems assoc	iated with sampling design and
strategies to tackle them	

Problems		Strategies
Mismatched frames.	sampling	<ul> <li>The use of selection grid (Kish, 1965)</li> </ul>

Increasing the response rate	<ul> <li>Having legitimating sponsorship for the survey, geared to sponsors who are highly-regarded in the community being surveyed.</li> <li>Having a good, short explanation justifying the survey.</li> </ul>
	<ul> <li>Notifying individuals in advance that a survey is coming.</li> <li>Keeping the survey instrument short and letting prospective subjects know this.</li> </ul>
	<ul> <li>Assure confidentiality and anonymity.</li> <li>Offer to reschedule to time at the subject's convenience.</li> </ul>
	<ul> <li>Make call-backs (four in typical) where needed. In mail surveys, provide a new copy of the instrument each time.</li> </ul>
	<ul> <li>Start the instrument with non-threatening questions which arouse interest.</li> <li>Offer to provide final results later on.</li> <li>Offer token remuneration.</li> </ul>
Analysing non-response	<ul> <li>Population comparison.</li> <li>Intensive post sampling.</li> <li>Wave extrapolation.</li> <li>Imputing responses.</li> </ul>
Missing data	<ul> <li>The use of specialised software to aid in dealing with missing data.</li> </ul>

**Source:** Garson, 2008, p.20

The sampling design for this study is further discussed in the procedure section.

# 3.1.3.8 Time horizon

The time horizon can be viewed from two categories of studies, including a cross-sectional study and a longitudinal study. The cross-sectional studies are

concerned with the one-off collection of data to answer a research question. The longitudinal studies, on the other hand, are concerned with the collection of data at several points in time over a period. The distinction between the two is the effort required to gather data, the time frame, as well as the type of investigation. A longitudinal study requires more time and effort, and a wellorganised longitudinal study is useful in identifying a cause-effect relationship (Sekaran, 2003).

Going by the explanation of time horizon above, a cross-sectional approach was utilised for this study, where secondary sources of data were collected over a period of time for the exploratory phase. Subsequently, it contributed to the theoretical foundation in the literature review. The deduced findings from the literature were used as a guide to conduct a series of focus group interviews. The data gathered from the focus group interview exercise then contributed to the construction of the survey phase of the research where quantitative data was collected one-off using a structured questionnaire.

## 3.1.3.9 Data collection

Data collected by a researcher to address or solve a research problem can be categorized into two, namely primary and secondary data (Malhotra and Birks, 2006). The distinction between the two types of data collection is that the former is concerned with data that is collected first hand by the researcher for a specific study. At the same time, the latter is data collected by the researcher from data that has been collected for another purpose (Leedy and Ormrod, 2005). A summary of the comparison of both primary and secondary approaches to data collection is illustrated in table 3.11 below.

Table 3. 11: summary of the	comparison	of primary	and secondary
approach to data collection			

	Primary Research Secondary Research
Data callestica	Data collected first     Data is collected from a pool of
Data collection	hand by the relevant sources. It may be a
	researcher. Data can statistical publication from
	be collected using companies or government or
	surveys, focus group

	interviews, observation or experiments.	information from scholarly articles published in journals
Qualitative or Quantitative? Benefits	<ul> <li>Can comprise either or both qualitative and quantitative.</li> <li>It is specific to the need for the research and allows for control of quality.</li> </ul>	<ul> <li>Can comprise either or both qualitative and quantitative.</li> <li>Information can be available for different times and places that can be applied to address varieties of research purpose.</li> </ul>
Disadvantages	<ul> <li>It is usually costly and takes a longer time to accomplish.</li> </ul>	<ul> <li>Although it can be a cheaper and quick source for information, data can be too old, or not specific enough for the need of the research.</li> </ul>

#### Source: Sekaran, 1992

The combination of both primary and secondary data was utilised for this research. As indicated in section 3.1.2.1, the exploratory research method approach was adopted for this study. The exploratory research method helped to determine the best research design, data collection method and selection of subject. As implied by Serakan (1992), exploratory research often relies on techniques such as secondary research (the review of available literature) and primary research through in-depth interview, focus groups, or pilot studies. The exploratory study can be useful, insofar the primary aim of the research is to gain an understanding of an event by acquiring new insight into the phenomenon to formulate a more precise problem or develop a hypothesis. However, the findings from the exploratory study by itself are not able to provide answers to questions or be useful for decision making. The exploratory study can provide significant insight into a given event. Typically, the findings from the exploratory research are not generalisable to the population at large.

The preliminary exploratory research was conducted to develop initial insights into the study and provided direction for further research (Malhotra, 2015; Parasuraman, 1991). Exploratory research is essential to define the problem precisely and identify any specific objectives or data requirements for further research. Indeed, the study of contemporary tobacco consumption in the context of developing countries is relatively insufficient. Although the number of studies of tobacco use in developing countries such as Nigeria is increasing, there is little empirical evidence as to the impact of the contemporary broader environment (global world) on the phenomenon. Therefore the imperative of exploratory study was to gain much-needed background information relating to the set-out aim, to establish the extent to which the current anti-tobacco regime in major developed countries is affecting the usage of tobacco products in Nigeria.

According to Churchill and Lacobucci (2004), exploratory research is the foundation of good study, normally flexible, unstructured and qualitative, and usually serves as an input for further research. Saunders et al. (2009) also define research strategies as a roadmap by way of reaching the goal of research and how the goal can be achieved by answering the research questions. They have identified different research strategy as an experiment, survey, case study, action study, grounded theory, ethnography, and archival research. Typically, the case study and ground theory are the two types of research strategies used for exploratory research. However, considering the extensive nature of the aim and objectives of this study, a survey in the form of mixed-method was deemed appropriate to achieve the research questions set out for this study.

## 3.1.3.9.1 Survey research

The most significant area of measurement in applied social science is survey research, as it encompasses any measurement procedures that involve asking respondents questions. In a broad sense, the term survey is often used to mean the collection of information. It comprises anything from short paperand-pencil feedback forms to an intensive one-on-one in-depth interview. These, according to Kelly et al., (2003), can be roughly divided into two broad areas: Interviews and questionnaires.

#### 3.1.3.9.1.1 In-depth interview

Kvale (1996) highlight that a qualitative research interview helps to understand the world from the subjects' point of view, unfold the meaning of peoples' experiences, uncover their lived world. King (2004), explains that qualitative research interviews help the researcher to see the topic from the perspective of the interviewee. Mainly, it is significant for collecting data when the research design involves analysing people's motivation and opinion (Keats, 2009). Going by the above and the research question, an in-depth interview in the form of a series of focus groups was utilised as the preliminary survey. This section provides the guidelines that were followed to assist the researcher in conducting a proper focus group exercise and overcoming the challenges presented when conducting an in-depth interview in developing countries like Nigeria comprising social stratification.

Conducting a focus group interview in this type of setting requires intensive planning and negotiation at all stages of the research to solve problems in the meaning of terms, the applicability of the method, consistency of strategies, and comparability of data (Billson, 2008). The application of the focus group interview in this research provided invaluable insights into the complexities of the subject matter. It helped the researcher broaden the collective understanding of the dynamics of consumer behaviour in the context of tobacco use by factoring the role of the rapidly growing global village in the phenomenon. This helped uncover information that was not easily obtainable through other methods of data collection.

In traditional term, a focus group is a way of collecting qualitative data, primarily by engaging a small number of people in an informal discussion(s), focused around a topic or set of issues (Redmond et al., 2009). It involves the use of the direct probing technique to collect information from several individuals in a group setting (McLafferty, 2004). This form of data collection was first used in the 1920s by researchers to assist them in formulating survey questions (Billson, 2008). A notable example was research conducted by Robert K. Merton (1946). He conducted a government-sponsored study to examine the media effects on the attitude towards the involvement of the United States in the Second World War The information gathered from the

focus group discussion was used to conduct further quantitative tests. Robert K. Merton was credited for formalising the method of the focus group (Carey and Asbury, 2016).

Long after this, the focus group has continued to gain popularity among researchers, particularly among social scientists. Researchers often use a focus group to gather information, especially when there is a scarcity of information on a subject (Kruenger and Casey, 2002). The application of a focus group provides a potential exploratory approach that lays the groundwork or determines a broader range of perspectives for a study (Billson, 2008). However, like every other model of data collection, the focus group interview has its advantages as well as limitations (See details in Figure 3.12).

than the results obtained in the	<ul> <li>It requires the interviewers to be</li> </ul>
individual interview.	carefully trained
	• It takes effort to assemble the groups
	• The discussion should be conducted in
	an atmosphere that facilitates the
	dialogue.

## Source: based on Krueger and Casey, 2002 and Morgan, 1996

Irrespective of the advantages and disadvantages, one known fact about the application of a focus group is that it facilitates the collection of interesting data that contributes to a strong conviction on the part of the researcher (McLafferty, 2004). The focus group is ideal for generating ideas for investigation. It is also ideal for evaluating different research situations. Other uses of focus group include: generating hypotheses, evaluating different research situations, developing drafts for interviews and questionnaires; and for generating additional information for a study on a broad scale, to mention a few (Cameron et al., 2005). The ability of a focus group to generate accurate results consist in its right planning, organisation and execution. Thus, the researcher was guided by an ethical principle for social enquiries by Krueger and Casey (2002) when constructing the focus group, the purpose of the research, the research design, recruitment of participants, moderation, data analysis and report preparation.

## 3.1.3.9.1.2 Questionnaire

Once the focus group interview was conducted and analysed, it was possible to design a suitable questionnaire to address the research questions and issues that were identified from the literature review as well as the ones raised during the qualitative data collection. Questionnaires are a set of written questions, usually with a choice of answers developed primarily for a survey or statistical study (Silverman, 2010). It is a tool used to collect and record data about a specific area of interest, usually to achieve the aims and objectives of the research (Kirklees Council 2008). While the questionnaire is synonymous with the quantitative study, it can also be used to collect qualitative data depending on the nature of the questions. Good questionnaire design is essential to generate data beneficial to the goal of the research. According to Bird (2009, p.1310), the questionnaire format, sequence and wording, the inclusion of classification, behavioural, knowledge and perception questions, and questionnaire length and output need to be considered to ensure the reliability, validity and sustained engagement of the participants. They are discussed in detail below. They act as the guide for the formation and distribution of the questionnaire for this research.

Table 3. 13: Examples of various methods used to measure the degreeof difference in closed questions

Measurement	Properties	Nature	Nature	of	Examples	Typical
			underlying			answers
			construct			
Nominal	Naming	Categorial	Discrete		Marital status,	Male,
					gender, race,	female,
					residency.	single,
						married.
Ordinal	Naming and	Ranking	Discrete	or	Income	Very high,
	ranking		continuous		status,	high,
					achievement,	moderate,
					social class,	low, very
					size	low.
Interval	Naming,	Scoring	Continuous		Temperature	Scores,
	ranking, and				calendar time,	Likert
	equal interval.				IQ scores,	scales,
					attitude scales	degree.
Ratio	Naming,	Scoring	Continuous		Length,	Years,
	ranking, equal				weight,	kilograms,
	intervals and				distance, age,	kilometres.
	zero points.				number of	
					children	

**Source:** Bird, 2009, p.1311

A principal prerequisite for the questionnaire format is the sequence in a logical order. It needs to allow for a smooth transition from one topic to another to

allow participants to understand the purpose of the research and keep their interest high (Serantakos, 2005). There are two responding formats for a questionnaire that includes the open (usually qualitative) and closed (usually quantitative) question. The distinction between the two formats of the response is that the former allows for easy construction of questions but are challenging to analyse, while in the latter the construction of questions is typically tricky but easy to analyse. The combination of both formats has been proven to produce more quantifiable and in-depth results. There are five basic types of questions. They include classification, behavioural, knowledge, perception and feelings (Bird, 2009).

The researcher must make sure the wording of each question is precise and unambiguous. This is to ensure that participants easily and accurately interpret the questions to produce a reliable and valid result. Oppenheims (1992) advise that questions should be short and straightforward and should be in line with the targeted population's lingo and avoid double-barrelled questions. The length of the questionnaire should also be given a degree of consideration. According to Sarantakos (2005), a good questionnaire should contain as many questions as necessary and as few as possible. McGuirk and O'Neil (2005) buttress that every question should have a role and purpose and the entire questionnaire should not take longer to complete than participants are willing to spend taking part in the exercise. All these were given appropriate attention during the questionnaire formation for this research.

Once the questionnaire has been designed and formatted, the next thing considered was the mode of delivery. According to de Vaus (2002), factors including sample size and distribution, types of question, nature of the population, survey topic, availability of resources and time constraints need to be taken into consideration when selecting the appropriate mode of delivery. Table 3.14 illustrates the types of questionnaire distribution below.

# Table 3. 14: The types of questionnaire distribution showing theadvantages and disadvantages

Mode of	Description	Advantages	Disadvantages
distribution			
Computer questionnaire	This type of exercise requires respondents to answer questions over the computer. This may be in the form of email or pre- programmed application.	<ul> <li>Cost-effective</li> <li>Great coverage area.</li> <li>Anonymity</li> <li>Time to consider responses</li> <li>The interviewer cannot shape questions</li> </ul>	<ul> <li>Limited length</li> <li>Limited complexity (that is questions must be brief and self- explanatory).</li> <li>No control over who completes the survey.</li> <li>The interviewer cannot shape questions</li> <li>Response rates can be poor.</li> <li>It is challenging to check non- response biases.</li> </ul>
Telephone questionnaire	This type of exercise requires the respondent to answer questions over the phone.	<ul> <li>It is cost- effective when compared with face-to- face.</li> <li>More anonymity compared with face-to- face.</li> <li>Encourage participants</li> <li>Less threatening than face-to- face participants.</li> <li>Questions can be clarified.</li> </ul>	<ul> <li>It is time consuming thereby leading to the questionnaire length being constrained.</li> <li>Question format must be kept simple.</li> <li>Number of response categories in closed questions limited</li> <li>May create class or gender bias amongst participants.</li> <li>Telephone surveys are becoming very</li> </ul>

		Question     sequenced     controlled.	unpopular in society.
In-house survey	This type of exercise	<ul> <li>Longer verbal responses compared to written.</li> <li>The vague response can be probed.</li> <li>Complex</li> </ul>	• Costly
	requires the researcher visiting respondents in their habitat or workplace.	<ul> <li>questions can be asked.</li> <li>Can motivate participants</li> <li>Longer verbal responses compared to written.</li> <li>Questions can be clarified.</li> <li>Question sequenced controlled</li> <li>Vague responses can be probed</li> <li>Visual prompts can be used</li> <li>Long questionnaire sustained</li> <li>High response rate.</li> </ul>	<ul> <li>Time-consuming</li> <li>Spatially restricted</li> <li>Answers may be filtered or censored</li> <li>Interviewer's presence may affect the response.</li> </ul>
Mail	This type of exercise	Cost-	Distribution
questionnaire	requires the researcher sending a questionnaire to a list of respondents through the post, often attaching pre-paid envelopes.	effective, especially for the use of colour graphics.	shaped by age, class and gender bias that shape computer use and email patronage.

Time to      The interviewer
consider the cannot shape
responses. questions.
More complex
questions,
therefore,
more
complex
qualitative
data.
Strong
response
rate.

Source: Bird, 2009

As illustrated in the table above, each mode of questionnaire distribution has its advantages and disadvantages. Depending on each suitability and available resources can determine the selection for research (Oppenheim, 1992). Bird (2009) explained the significance of creating initial contacts with participants for any mode of distribution. This is to build rapport and motivate participants. Initial contact can be in the form of a cover letter, telephone call or direct approach, with researchers introducing themselves and their credentials, and explaining the study and why it is conducted, including why the participant is selected for the study. This should also include the estimated time to complete the questionnaire and the intended use of the result (Dunn, 2005). Oppenhein (1992), advised the need to take into consideration the ethical issue by prompting researchers to assure participants of their right to participation. This includes assuring the participants that no harm will come to them as a result of participating in the exercise and informing them of their right to anonymity, the right to refuse to answer certain questions and the right to take part in the interview.

## 3.1.3.9.1.3 Challenge of data collection

While extensive research has been conducted on tobacco use in developing countries, not much attention has been given to the challenges of data collection and how it can be tackled. The challenges vary from weaker infrastructure and less-well-organised living situations that exist in many societies, to the low level of literacy, and language differences to mention a few. According to Elahi (2008), these challenges can be classified into endogenous and exogenous. The endogenous challenges arise as a result of poor infrastructure or operational inadequacies. In contrast, exogenous challenges arise as a result of the inability of civil society to part with reliable and timely data. Table 3.15 highlights some of the relevant issues researchers face regarding data collection in developing countries.

Endogenous	Exogenous
<ul> <li>The infrastructure deficiencies, including insufficient postal service, inadequate transport, road networks, telephone and internet facilities, can cause challenges for data collection.</li> <li>Allocation of sufficient financial resources is mostly inadequate.</li> <li>Infrastructure for internal information and communication in many countries is poor. The mainframe application, for example, is still the prevailing form of data processing. Microcomputers and client-server systems have in some countries just started to intrude into the performance of work. Decentralised data entry is not yet the norm. Access to the internet as well as internal networks often has still to be developed.</li> <li>Inadequate administrative density limits the option of using the secondary source in developing countries.</li> </ul>	<ul> <li>The level of literacy and lack of appreciation of the importance of data collection as a national activity mixed with the general cultural ethos of not sharing personal information.</li> <li>The law and order situation in some areas renders some areas inaccessible for data collection.</li> <li>The cultural constraints in the rural and tribal areas do not support giving information about gender-related issues or sharing information with an outsider.</li> <li>The multiple languages within a society can cause a problem for data collection materials may need to be produced in more than one language.</li> </ul>

Table 3. 15: The endogenous and exogenous challenges of datacollection in developing countries

#### Source: Elahi, 2008

Although the data collection phase is a critical part of any research, the already mentioned challenges with other challenges can make the data collection process complex, frustrating and overwhelming. Other challenges include gaining access to study sites, geographical constraints such as long-distance travel to access participants, incomplete questionnaires, or non-response rate. An aspect that usually gets overlooked in research is the safety level of the study area. Cook and Pfleeger (2010) recommend that an appropriate hazard and risk assessment has to be carried out before embarking on any fieldwork. Schulte et al. (1998) also recommend that field workers need to be comprehensively trained to be able to assess and manage potentially dangerous situations.

Reliable data on tobacco use can be challenging to collect because of its subjection to social, cultural and moral norms. Measurement error may arise if participants are biased, recall, or unwilling to disclose true levels of consumption. The interview effect plays a critical role in survey data and is more likely to happen when interviewer ask sensitive topics. Blom and Korbmacher (2013), identify four dimensions of interviewer characteristics that impact on the participant and their response rate as interviewer attitudes; the field worker's behaviour; the field workers experience with measurement; and field worker's expectation. In addition to this, Holbrook et al., (2006) recommend the selection of a fieldworker who is not indigenous to the study area as participants are more likely to open up to a member of another community and more likely to answer questions relating to sensitive issues honestly.

#### 3.1.3.9.2 Choice of survey strategy

According to Easterby-Smith et al. (2015), a well-designed research procedure results in rigorous, high-quality studies. Thus, it is recommended that a mixed-method researcher select a single design that is specific and best matches the research problem rather than attempt to use more than one of the four major designs or a blend of different aspects of design within a study. The reason for this is that the selection of a single design in a study allows for easy management, and more straightforward implementation and description of the study. It also provides the researcher with a framework and logic to guide the

implementation of the research methods. This is further discussed in the following section. As mentioned in section 3.1.2.1, the mixed-method approach in the form of exploratory design was deemed suitable for this research to tackle the set-out objectives. Based on this, the application of both interviews in the form of focus group and questionnaire was the most appropriate data collection method for this research for exploratory and precision. Figure 3.11 illustrates the graphical representation of the survey strategy for this research. The details of the research procedure are present in the following section.

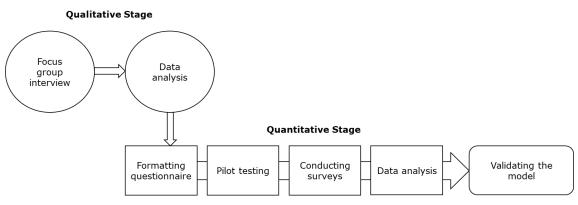


Figure 3. 11: The graphical representation of the research design

Source: Adapted from Creswell, 2005

The step above was taken to satisfy the research questions identified for the research. It goes by Kerlinger and Lee's (2000) recommendation that the survey strategy adopted by the researcher to satisfy research questions and control variance must enable the researcher to answer the questions as to the validity, objectively, accurately and economically as possible. It serves as the guide for the research process.

# 3.2 Procedure

Several factors have been identified to influence the choice of researchers when considering the mixed methods design for studies. Among these include, the research problem; the researcher's level of expertise; the availability of resources; and the expectation of the audience. In addition to these, Creswell (2005) further highlight three factors that influence the choice of a mixed-method design for a study as the timing of the use of the collection, relative weight of the quantitative and qualitative approach, and approach to mixing

the duo datasets. The section builds on section 3.1, where the selection of research philosophy and method for this study was discussed. The factors identified by Creswell serve as the guide for choosing the mixed methods for this study.

Recapping the explanation of mixed-method as introduced in section 3.1.3.1.4, the timing decision is concerned with the temporal relationship between qualitative and quantitative components in a study. It is sometimes referred to as the sequence that describes the order the researchers used the data obtained in a study. This, according to Creswell (2006), has to do with the time the data sets are collected, analysed and interpreted. It provides the answer to the question 'what will the timing of the quantitative and qualitative methods be? Morse (2003) has identified that the timing of a mixed-method can be classified into concurrent or sequential. In the former, both quantitative and qualitative methods are implemented during a single phase of the research study. In other words, both qualitative and quantitative data are collected, analysed and interpreted at the same time in a study. Whereas in the latter, the data is implemented in two distinct phases. A method is first used to collect and analyse data before using the second method. This can be in any sequence, either qualitative before quantitative or vice versa.

Next to the timing of datasets is the weighting decision. This is concerned with the priority of the datasets when attempting to answer research objectives in a study. In this case, the researcher has to decide whether both methods are of equal priority or one method has a higher priority than the other. A way to determine the weight within a dataset is to consider the theoretical or worldview of the researcher. Morse (2003) has suggested the theoretical drive or the worldview used to guide a study determines the weighting of the datasets. In other words, a positivist is likely to put more emphasis on quantitative methods. Critical realist, on the other, is likely to place emphasis equally between qualitative and quantitative methods. In some case, particularly studies relating to causal power, less weight is put on quantitative methods and more on qualitative methods (Sayer, 1992). The weighting decision for this study is lean more towards the qualitative method.

The last factor has to do with the approach of mixing the duo datasets. This is concerned with how the quantitative and qualitative method is mixed. According to Creswell (2005), a study that includes both quantitative and qualitative methods without explicitly mixing the data derived from each is simply a collection of multiple methods. Thus, a rigorous and robust mixedmethod design tackles the issues of how the data is mixed in addition to timing and weighting. The strategies for mixing the duo datasets is conceptualised by Creswell (2005) as merged, embedded and connected. Data sets can be merged by explicitly bringing them together either during interpretation by analysing the data separately and merging the results during interpretation, or during the analysis of data by consolidating the data into new variables. Embedding data involves the researcher to embed data of one type within a design of the other type. This can be done concurrently or sequentially. Lastly, two data sets can be connected for specifying research questions, selecting participants or developing other instrument materials. It involves collecting data and obtaining results from one kind of data that subsequently leads to collection and analysis of another kind of data. Table 3.16 shows a summary of the four major designs and mixed-method designs relating to timing, weighting, and mixing choice.

Design Type	Variants	Timing	Weighting	Mixing	Notation
Triangulation	Convergence	Concurrent	Usually equal	Merge the	QUAN+QUAL
	• Data			data during	
	transformati			interpretation	
	on			or analysis	
	<ul> <li>Validating</li> </ul>				
	quantitative				
	data				
	<ul> <li>Multilevel</li> </ul>				
Embedded	Embedded	Concurrent	Unequal	Embed one	QUAN(qual)
	experimental	or		type of data	or
	Embedded	sequential		within a larger	QUAL(quan)
	correlational			design using	

 Table 3. 16: The major mixed methods design types

				the other type of data	
Explanatory	<ul> <li>Follow-up</li> </ul>	Sequential	Usually	Connect the	QUAN→qual
	explanations		quantitative	data between	
	<ul> <li>Participant</li> </ul>			the two	
	selection			phases	
Exploratory	<ul> <li>Instrument</li> </ul>	Sequential	Usually	Connect the	QUAL→quan
	development		qualitative	data between	
	<ul> <li>Taxonomy</li> </ul>			the two	
	development			phases	

Source: Creswell, 2005, p.85

By putting all of the above together, this research consists of mixed methods in the form of a sequential exploratory design conducted in two distinct phases. The qualitative data was first collected and analysed, followed by collection and analysis of quantitative data (Creswell et al., 2005). The preliminary exploratory study allowed for the collection of information from various secondary sources relevant to the subject matter. Next step was the collection and analysis of primary data derived from samples from the area of study through the use of a series of focus group interviews. It allowed the establishment of the research context and broad-based theories, as well as informed samples selection that were later analysed. An inductive theoretical drive characterised this phase to logically guide critical components that include hypotheses, operating in the construction, and analysis of the subsequent quantitative study.

The second phase involved converging the qualitative data within the instrument development for the collection of quantitative data. The quantitative data was then collected and analysed in sequence to help elaborate on the qualitative results obtained in the first phase. The use of quantitative data agreed with the sequential exploratory design. It built on the qualitative phase and was connected to the intermediate stage in the study. The outcome of connecting the result from qualitative study and survey enabled the researcher to comprehend better participants' opinions during the

data collection process, underlining the benefits of qualitative inquiry to fathom the interaction between the consumers and their environment and to gain a holistic view of the subject matter. In brief, the mixed-method approach was chosen based on logical reasons and was best suited to answer the research questions, showing how qualitative and quantitative methods can be adopted at different phases of the study to explore tobacco use behaviour practically.

Quality assessment of research is generally perceived as valuable as when conducting a study. Table 3.17 highlights the quality assessment strategy for this study.

Criterion and	Measures	The phase of	The measurement used in
definition		research a	the study.
		strategy was	
		utilised	
Reliability refers to	This was achieved	The data collection	This was achieved by
the consistency of a	by using multiple	phase	pretesting and revising the
measure.	sources of data.		data collection instruments.
Dependability is a	This was achieved	The data collection	An external audit by external
concern with the	by using multiple	and research design	independent researcher and
evaluation of the	sources of evidence	phase	supervisors was conducted
quality of the	and triangulation of		to examine the processes of
integrated processes	research methods.		the data collection, data
of data collection,			analysis and result of the
data analysis, and			study.
theory generation.			
Credibility is	This was achieved	The data collection	The credibility of the study
concerned with the	using triangulation.	phase	was gauged by triangulation
extent to which a			of multiple methods of data
research account is			collection including
believable and			literature, focus group and
appropriate, with			survey.
reference to the level			
of agreement			
between the			

 Table 3. 17: The quality assessment strategy for the study

researcher and the			
participants.			
Construct validity is	This was achieved	The data collection	This was measured using
concerned with how	by using multiple	phase	multiple methods of data
well a test measures	sources of evidence		collection. Research design
what it is set out to	and triangulation of		and data analysis were
measure.	research methods.		reviewed by the researcher's
			supervisory team
Objectivity is based	This was achieved	The data collection	This was measured using
on the researcher's	by using multiple	and research design	multiple methods of data
neutrality in data	sources of evidence	phase	collection. The procedure for
collection.	and triangulation of		data collection was detailed.
	research methods.		

Source: Developed for the study

As indicated in table 3.17, the quality assessment for this study include reliability, dependability, credibility, construct validity, and objectives. The reliability for this study was gauged by the use of multiple sources of data that include both primary (in the form of focus group and questionnaire) and secondary (in the form of literature review and a contextual study) sources of data that allowed for adequate and useful data collection. The reliability gauge for this study also includes pretesting and revising the data collection instruments to ensure that data collected is consistent with what the study set out to accomplish. In the case of the dependability gauge, an external audit was conducted by the independent researcher and supervisory team to ensure that the processes of the data collection, data analysis and result of the study were adequate. The credibility of the study was gauged through triangulation of multiple methods of data collection that includes literature, contextual study, focus group and questionnaire. Construct validity was gauged by the use of multiple methods of data collection. The researcher's supervisory team reviewed research design and data analysis to ensure it was adequate. Lastly, the objectivity for the study was gauged using multiple methods of data collection. The procedure for data collection was detailed and reviewed by the supervisory team.

#### 3.2.1 Exploratory phase

The purpose of this research is to investigate the extent to which the current anti-tobacco regime in many developed countries will affect the attitude and usage of tobacco product in developing countries. It is focused on exploring the current consumer culture caused by globalisation and its effect on consumer behaviour in developing countries. Understanding elements that contribute to a phenomenon allow for a straightforward interpretation of data (Gilmore and Carson, 1996). Likewise, research of this nature is capable of bringing out a previously unknown relationship that can lead ultimately to change in the thinking of the subject matter. It is interesting to note that tobacco use has been proven to be a learnt behaviour for many of its users, and awareness of the harm caused by its use is a primary catalyst for the reduction of its use (Ding et al., 2017). Thus, research of this nature is important for tobacco control in developing countries. Sufficient studies have suggested that tobacco use is a behaviour imposed directly or indirectly for many tobacco users in developing countries through westernisation (Cruz, 2009). Consequently, a change in tobacco use behaviour in the Western world is expected to impact on its consumption for many users in developing countries. The argument followed Hofstede (1980) cultural dimension theory.

The literature review has demonstrated how the current anti-tobacco regime can influence tobacco consumption in developing countries as economic globalisation by way of global trade and transitional sharing of cultural, political, and social values usually through electronic communication and the media. This study went further to seek answers to the following questions:

- Will the current consumer culture in major developed countries have an impact on the behaviour of tobacco use in developing countries?
- If yes, what will be the nature of the impact?
- Can the evidence from the study inform a more positive way to curb tobacco use in developing countries?

In order to achieve this, the study began by exploring the subject matter by reviewing relevant literature and case studies that can help build an argument for the study. It consisted of both descriptive and qualitative research. The exploratory phase provided the means to adequately describe the characteristics of the phenomenon that is being studied. It focused on the 'what' of the research subject, by exploring issues raised in the existing literature and identify the gap in knowledge as it relates to the phenomenon being studied. It further informed the data collection tools by providing direction for suitable questions for the quantitative data collection tools from findings derived from the qualitative element of the study. It also provided the direction for hypotheses formation for the study.

#### Nigeria as the basis for the research

As mentioned earlier, the subject matter for this study is investigated in the context of Nigeria. According to Michailova (2011), it will be impossible to investigate an occurrence or a subject without taking into consideration the situation and settings in which such occurrence arise and occurs. Nigeria was selected as the context for the study because of the dynamic characteristics it possesses. It enabled the researcher to gain an insight into the subject matter. It helped reveal some of the relevant characteristics of tobacco use behaviour while investigating the impact of the broader environmental factors on tobacco use. While the contextual study provides means to describe a phenomenon in either individual or collective settings, this study is more interested in the social-environmental impact (macroenvironment and microenvironment). It is interested in understanding how it impacts tobacco use behaviour.

The prevalence of tobacco use in Nigeria provides useful insight into the impact of environmental factors on tobacco use behaviour. Following globalisation, industrialisation, and the global marketing of tobacco products, it appears that tobacco consumption and its associated disadvantages have continued to increase in Nigeria. The population of the country have been identified to be a contributing factor in this phenomenon, as it is considered the most populous country in Africa with almost 60% of its population made up of teenagers and young adults (Adeniji et al., 2016). This attracts multinational tobacco companies to want to penetrate such a country in search of a new market. It appears that similar products marketed globally by the multinational tobacco industry to increase their competition for a new market are prevalent in the Nigeria tobacco market. In return, factors such as product choice, product taste and product preference of tobacco appear to be similar to that of the global level (Egba et al., 2013).

Similarly, the lack of adequate governmental intervention, as suggested in literature has also contributed to the tobacco use in Nigeria, as it appears to be a conducive environment for the tobacco industry to thrive. In addition, Nigeria shares similar cultural traits as that of developed countries in terms of the cultural symbols attached to tobacco. For instance, the association of tobacco to modern lifestyle and its association to being 'cool' (Adeniji et al., 2016). Within society, cultures are being created, and cultural norms and values are being modified, mainly due to pressure from external forces facilitated by globalisation. Thus, Nigeria possesses the potential to provide insight into the macro-environmental and micro-environmental factors influence on tobacco use behaviour.

#### 3.2.2 Survey phase

The research survey is a good way of gathering consumer voices as well as opinions on a subject matter. It allows the researcher to obtain qualitative and quantitative data that can mould the shape of the research. According to Creswell (2005), a good survey rests in sound instrument design. It begins with a critical review of existing relevant literature on the subject matter to develop the appropriate measures for the key constructs then followed by the research design or design of the survey instrument. As mentioned in the early part of this chapter, the mixed-method research design by Creswell (2005) served as the inspiration for the survey planning. The rationale for this as it relates to the present research is discussed as follows.

In light of the literature review, a theoretical framework was identified to provide direction for the present study. It consisted of a priori component that was based on the review of existing relevant literature and a posteriori components that was informed by a qualitative study. The posterior component was based on the assumption that it is improbable to form a complete theoretical framework preceding all data collection for several reasons. Although the study of tobacco use in developing countries is not a new thing, the study in the context proposed for this research is yet to gain much attention. Thus, there is insufficient information to develop the design from the literature. Going by Creswell (2008), it is recommended that any exploratory or inductive research should not be restricted or directed by the literature. Instead, the literature should serve as a guide once patterns or themes have emerged from data. The present study was designed following Creswell's recommendation, to address the complexity of design problems and issues by combining qualitative and quantitative research in parts, as discussed in section 3.1.

The research aims to investigate the impact of the global environment and local community on tobacco use behaviour and how it can inform tobacco control intervention. This type of research requires qualitative information to be collected to identify the appropriate constructs. According to Creswell (2007), the mixed method is the most appropriate research approach for the research problem requiring qualitative exploration at the initial stage of the research. Likewise, Nastasi et al. (2007), proposed that the most appropriate research procedure for research in this context should involve qualitative evaluation preceding quantitative research. What this means is that qualitative research guides the subject matter to generate formative data, followed by a quantitative evaluation to test the generalisation of the results. In light of this, the collection and analysis of data of quantitative data may uncover the cultural and environmental factors that support tobacco use.

The next step was to attempt to generate and test design by combining qualitative and quantitative approaches. The rationale behind this was the inadequacy of one method to satisfactory cover the research problem sufficiently. Consequently, necessitated the need to combine qualitative and quantitative research methods. It allowed the researcher to gain clarity on the subtleties of the data, cross-validate the finding, justify the findings and implement and assess the design strategies. In other words, the combination of both qualitative and quantitative enabled the researcher to present the findings effectively. It allowed for consolidation and synthesis of data to provide a convincing result for the study.

Lastly, the weakness of a qualitative and quantitative study was offset by utilising the mixed-method research design. While the design criteria for the subject matter were generated using the qualitative approach, the researcher recognised that it would be difficult to replicate the qualitative findings to a larger population with the limited number of focus group interviews in a single case as done in this study. Thus, the quantitative approach was utilised to overcome the weakness of applying a single research method in a study. The qualitative data was collected to clarify information derived from relevant literature. The quantitative approach was utilised to assess whether the findings are replicable and test the hypotheses generated for the study. The examining of respondents' perspectives allowed the researcher to better understand and interpret the findings from the secondary study. This is in agreement with Pintrich and Schunk (2002) who warned against the overdependence on one method of data collection and advocated the use of mixed quantitative and qualitative methods.

The conceptualisation of the mixed method data analysis process for this study follows the mixed methods process model, as demonstrated in section 3.1.3.9.2, as proposed by Creswell (2005). It demonstrates the integration of the qualitative and quantitative data collection process and results. According to Guetterman et al., (2015), the integration at the analytic and interpretation level can be done primarily in two ways. That is, either writing about the data in a discussion wherein the separate results of qualitative and quantitative analysis are discussed, or presenting the data in the form of a table, wherein the arrays of qualitative and quantitative results are jointly displayed simultaneously. The joint display (that is, integrating the data by bringing them together through visual means) allows new insight beyond the information gained from the separate qualitative and quantitative to be drawn out. This study followed the guideline for conducting mixed method as proposed by Venkatesh et al., (2013) as highlighted below.

Guidelines (Venkatesh et al.	Properties	of	mixed-	Dimension for the research
2013)	methods res	earch		

Decide on the appropriateness of a mixed- methods approach.	Foundations of design decisions: • Research questions • Purposes of mixed- methods research • Epistemological perspectives • Paradigmatic assumptions	A mixed-method was deemed appropriate for this study because it allows for holistic explanation of the phenomenon, due to its fragmented, inconclusive and equivocal nature.
Develop strategies for mixed-methods research designs.	<ul> <li>Primary design strategies:</li> <li>Design investigation strategies</li> <li>Strands/phases of research</li> <li>Mixing strategies</li> <li>Time orientation</li> <li>The priority of the methodological approach</li> </ul>	A sequential mixed method was adopted for data collection and analysis in the sequence of Qual $\rightarrow$ Quan.
Develop strategies for collecting and analysing mixed-methods data.	<ul> <li>Sampling design strategies</li> <li>Data-collection strategies</li> <li>Data-analysis strategies</li> </ul>	A sequential mixed method was adopted for data collection and analysis in the sequence of Qual $\rightarrow$ Quan, whereby data collected and analysed in one phase contribute to the data collection of the next.
Draw meta-inferences from mixed-methods results.	Inference decisions: • Types of reasoning	Both inductive and deductive theoretical reasoning drove the design.
Assess the quality of meta- inferences.	Inference quality	Weakness minimisation.
Discuss potential threats and remedies.	Inference quality	The issue addressed by adopting a mixed-method for this research is to minimise the weakness of single data collection tools.

Adopted from: Venkatesh et al., 2013

# Focus group

The application of a focus group in this study was targeted at both adults and youths (male and female), that use or have used tobacco products. The objective of the focus group discussion was to elicit their views on:

- General knowledge of the pattern of tobacco use.
- The attitude and perception of tobacco use.
- Awareness of tobacco control.
- The impact of distal environmental factors on tobacco use behaviour.
- The impact of proximal environmental factors on tobacco use behaviour.
- The influence of the socio-economic impact on tobacco use behaviour.

Before the focus group exercise, the researcher had conducted a critical literature review and other related sources for information available on the subject matter. It was necessary for clarifying the essential ideas and for avoiding duplication. According to Kumar (1987), launching into group interviews without sufficient knowledge of the local conditions and the problem to be investigated is a waste of time. In addition to these, the researcher meets regularly with the supervisory team to discuss the subject. Once the key concept was defined, the following questions were used as a guide to achieving the set-out objective for the focus group exercise.

Purpose	Questions
<ol> <li>General knowledge on the pattern of tobacco use.</li> </ol>	<ul> <li>Q: What type of tobacco product(s) do you use</li> <li>Q: When did you start using the tobacco product(s)?</li> <li>Q: Can you tell us how you started using the tobacco product(s)?</li> </ul>
2. The attitude and perception of tobacco use?	<ul> <li>Q: What does the use of tobacco mean to you?</li> <li>Q: Think back to whenever you started using tobacco products, do you think anything has changed in term of the way you perceive tobacco use?</li> <li>Q: If I tell you are told tobacco kills more people in the world than malaria and HIV put together, will it stop you from using it?</li> </ul>
3. Awareness of tobacco control	<ul> <li>Q: Are you aware of any existing law related to control of tobacco use?</li> <li>Q: What is your opinion on the government's effort to control tobacco use?</li> <li>Q: What was the last anti-tobacco advert or campaign you saw and where did you see it?</li> </ul>
4. Influence of local community factors	<b>Q:</b> How comfortable are you using tobacco products around your family or your immediate environment?

Table 3. 19:Focus group discussion question guide

on the behaviour of tobacco use.	<ul><li>Q: Do you think that your environment has an impact on your attitude towards tobacco use?</li><li>Q: Have you ever noticed any changes in the attitude towards tobacco use in your environment?</li></ul>
5. The influence of global environmental factors on the behaviour of tobacco use.	<ul> <li>Q: Are you aware of the decline in tobacco in other countries?</li> <li>Q: Do you feel this has impacted on the current attitude toward tobacco use in your environment?</li> <li>Q: How will you react if you notice tobacco use is no longer in vogue?</li> </ul>
6. Closing question	<b>Q:</b> Please tell us your age, your occupation, your income level, your level of education, your marital status, the number of occupants in your household (Including anyone below the age of 11), where you live and how long you have lived there.

# Source: Generated from the study

# Justification for choice of sample for the focus group

The target population for this research consisted of both smokers and exsmokers with different socio-economic status from low income to high-income with ages ranging from 18-65. Following the institutional review board, ethics approval was obtained before administering the survey. The participants for the research were selected based on satisfying criteria that express the characteristics of the subject matter. The participants in the stratified society were chosen because the research focused on understanding the dynamics of tobacco use behaviour and the role the rapid growing global village plays in it. It predicted that tobacco use is a learnt behaviour capable of being influenced by the consumer's environment.

As stated in section 3.1.3.7, the thorough definition of the population size and sample unit is a prerequisite for selecting an adequate sample design for a study. Although random sampling is the most favoured sample design in research because it ensures that all sample units in a specific population have the same, equal, and known chances for selection, it appears that true random

sampling can be challenging to achieve. This is particularly true in the context of this study. It is almost improbable to randomly sample the entire population of both current and ex tobacco users in Nigeria, mainly due to inadequate national records of tobacco users. Other constraints have been discussed in section 3.1.3.9.1.3. Thus, it was necessary to employ an alternative sampling technique; the non-probability sampling technique. In the case of sampling for the focus group exercise, a convenience sampling was adopted, involving the selection of participants based on their availability, as long as they met the predetermined criteria for the research. Key informants who are knowledgeable about the local conditions were consulted to help to identify participants. Several informants were consulted to help minimise the bias of individual preference.

The focus group exercise allowed the researcher to engage with people in informal discussion on the topic area. The exercise involved the use of ice breaking questions and direct probing technique to collect information from participants. As covered in this chapter, the focus group interview is a popular qualitative method of measurement, particularly among social scientists, because it allows for easy gathering of information, especially when there is a scarcity of information on a subject. Likewise, it is a potential exploratory approach that lays the groundwork to determine a wider variety of perspectives for a study (Billson, 2008).

The primary aim of the preliminary exploratory research was to gain an understanding of the event being studied and formulate a more precise problem and hypothesis. Although the focus group served as one of the data collecting tools for the study, it served two important purposes. Firstly, it served as part of the preliminary exploratory research to gain insight into the study and provided direction for further research. Secondly, it served as the guide for the development of the questionnaire as it helped clarify the basic concepts in the survey.

The focus group comments were transcribed and rearranged so that responses to each of the interview protocol questions were together. The main ideas that occurred in the questions were then distinguished, and quotations that illustrate each theme were identified. The 'findings' in an engaging narrative to describe the themes and quotations were written down. The themes were then compared to related studies, and the literature was used to discover the reason behind the theme.

#### Questionnaire

As stated in section 3.1.3.7.2.3, a quota sampling was deemed fit for the quantitative research to be able to gather information from targeted participants in a convenient, cost-effective and straightforward manner, due to the complexity of data collection in Nigeria. As already covered in this chapter, a questionnaire can be used to gather three basic types of information, which includes facts, opinion and motive (Crouch and Housden, 1998). Factual information is generally easy to obtain, as far as the participants know and are willing to provide. They include questions such as the ones to gather demographic information (age, sex, and educational status, to mention a few). They also include questions to gather the information that may be relevant to research such as 'have you ever smoked?'. It covers questions to understand specific behavioural patterns by asking questions such as 'how often do you smoke?'. Typically, factual information is referred to as 'hard data' because of its reliability.

The opinion information, on the other hand, is concerned with participants' beliefs and perception. It includes information such as beliefs, attitudes, feelings, and knowledge of the participants (Crouch and Housden, 1998). Due to its complexity because of the presence of multiple dimensions, multidimensional scaling techniques are usually deemed appropriate for measuring opinion information in research. It is often described as 'soft data' because they are less reliable as compared to factual information. Lastly, the motive information describes why participants or in this case tobacco users have a certain opinion (Crouch and Housden, 1998). However, it appears that it is usually difficult to fully explain why people act and think the way they do. In motive, information is likely to be so diverse that it can be challenging to compare and analyse, making the analysis inevitably subjective. It is suggested that a qualitative research setting, such as the focus group be used to gather motive information. Subsequently, information gathering can be

constructed into questions designed to measure how many people share the same motive. It can then be turned into quantifiable data.

The questionnaire for this study consists of three basic types of information, as demonstrated above and broken into sections, as demonstrated below.

# Table 3. 20: Questionnaire questions

## Section 1: General knowledge of the pattern of tobacco use.

Section 1: General knowledge of the pattern of tob	acco use.
1. Do you smoke cigarettes now?	yes, no, Go to Occasionally, go to 3 to 2.
2. On average, how many cigarettes do you smoke a day?	
3. On how many days a week do you smoke cigarettes?	usually on usually almost every one day or on 2 to 4 day days
4. Did you ever smoke cigarettes regularly in the past?	yes Go to 5 no, Go to 8.
5. When did you stop smoking cigarettes regularly?	lessthan11-66-12 monthsmonth agomonthsagoago
6. What is the highest average daily number of cigarettes you have ever smoked for as long as a year?	
7. How old were you when you began to smoke cigarettes regularly?	
8. How many serious attempts have you made to quit smoking?	

#### Adopted from the Global Adult Tobacco Survey (GATS) Core Questionnaire (2010).

#### Section 2: Tobacco use behavioural intention

Section 2: Tobacco use behavioural intention (1-Not important at all, 2-slightly important, 3-Neutral, 4-somewhat important and 5-extremely important)	1	2	3	4	5
Your parents smoke/smoked.					
Your parents or other close relatives encouraged you to try it.					
Many of your friend's smoke/smoked.					
Many of your friends encouraged you to try it.					
You knew someone that smoked that you looked up to and respected (i.e. teacher, sports star, neighbour, someone at church, etc.).					
Television/Movie advertising.					
Advertising in stores, windows, sidewalk signs, etc.					
The rebellious side of you.					
You believe smoking is a sign of maturity.					

You have/had many problems in your life, and at the time you started smoking, you didn't care if it might hurt or kill you.			
You were able to buy or obtain cigarettes easily as a minor.			
It was cheap to purchase cigarettes.			
You see people around smoke to calm their nerves whenever they are stressed.			
You see people smoke because of the belief held of the benefit of smoking (e.g. The smoke from tobacco drives away evil spirits or as a sign of strength).			

#### Adopted from the Global Adult Tobacco Survey (GATS) Core Questionnaire (2010).

#### Section 3: Social network

Section 3: Social network (1- Strongly disagree, 2- Disagree, 3- Neutral, 4-	1	2	3	4	5
Agree, 5- Strongly agree)					
I always consider others around me when smoking and don't smoke in front					
of children or non-smokers, unless they say it's okay.					
I abide by the law of the land, if it's legal to smoke, I do. If it's illegal to smoke,					
I don't.					
It's my right to smoke most anywhere I want, if others don't like it, they have					
the right to leave					
I have kids (or if I have kids), although they know I smoke, I try not to smoke					
in front of them.					
I am conscious not to let some people know that I smoke (i.e. parents,					
teachers, boss, spouse, doctor, etc.).					
I do not hide the fact that I smoke from anyone.					
I do not believe second-hand smoke hurts anyone in any way.					
I have supported the motion regarding the smoking ban					
I have objected the motion regarding the smoking ban					
Adapted from the Clebel Adult Tebeses Survey (CATE) Core		•	•		

Adopted from the Global Adult Tobacco Survey (GATS) Core Questionnaire (2010).

# Section 4: Symbolic meaning of tobacco use

Section 4: Symbolic meaning of tobacco use (1- Strongly disagree, 2-	1	2	3	4	5
Disagree, 3- Neutral, 4- Agree, 5- Strongly agree)					
Tobacco smoking helps me to relate with the different roles I play in life					
(employer/employee/parent /colleague etc).					
Smoking gives me life fulfilment.					
I smoke tobacco but I don't like it.					
I know tobacco smoking is bad and harmful to my body, but I still smoke.					
Smoking tobacco is the best way for me to relax.					
I always make sure I have tobacco with me.					
Tobacco smoking is a positive and necessary part of my everyday life.					
I feel like I am part of a group when I'm around smokers					

*Generated by the author from the literature review and the preliminary study.* 

Section 5: Self-esteem Scale					
Section 5: Self-esteem Scale (1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree)	1	2	3	4	5
On the whole, I am satisfied with myself.					
At times I think I am no good at all.					
I feel that I have a number of good qualities.					
I am able to do things as well as most other people.					
I feel I do not have much to be proud of.					

I certainly feel useless at times.			
I feel that I'm a person of worth, at least on an equal plane with			
others.			
I wish I could have more respect for myself.			
All in all, I am inclined to feel that I am a failure.			
I take a positive attitude toward myself.			

# Adopted from Mullen et al., (2013) self-esteem scale.

## Section 6: self-concept (positive dimension)

Section 6: self-concept (positive dimension) (1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree)	1	2	3	4	5
What happens in life is largely a matter of chance					
I sometimes feel I have little control over the direction my life is					
taking					
For me, one day is no different from another					
The world is too complicated for me to understand					
The future is too unsure for a person to plan ahead.					
	-				
I find it difficult to be optimistic about anything nowadays					
I have little influence over things that happen to me	<u> </u>				L

Adopted from Reitzes (2010) Doubt about self-determination scale.

#### Section 7: self-concept (negative dimension)

1	2	3	4	5
	1	1 2 	1 2 3 	1     2     3     4       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -

Adopted from Reitzes (2010) Doubt about self-determination scale.

#### Section 8: Section 8: Tobacco use deterrent

Section 8: Tobacco use deterrent (1- Strongly disagree, 2- Disagree, 3-	1	2	3	4	5
Neutral, 4- Agree, 5- Strongly agree)					
The high price of cigarette					
Disapproval of friends/relative					
Health reasons					
Concern over the health of others in the household					
Concern about future health risks					
Restricted smoking law					
It is nothing to do anymore					

Adopted from the Global Adult Tobacco Survey (GATS) Core Questionnaire (2010).

#### Section 9: Globalisation

Section 9: Globalisation (1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree)	1	2	3	4	5
Seeing people smoke in a public place does not bother me.					
Seeing people smoke in prohibited places does not bother me.					

I have received advice from friends and family to quit smoking.		
Seeing tobacco use warning messages have impacted positively on my smoking habit.		
Tobacco smoking is a lifestyle for me.		
Human interaction and interconnectivity play a critical role in my smoking behaviour		
I watch/observe how others use tobacco and this impact on my smoking behaviour		
I don't feel comfortable smoking tobacco because it has lost its social acceptance.		

# *Generated by the author from the literature review and the preliminary study.*

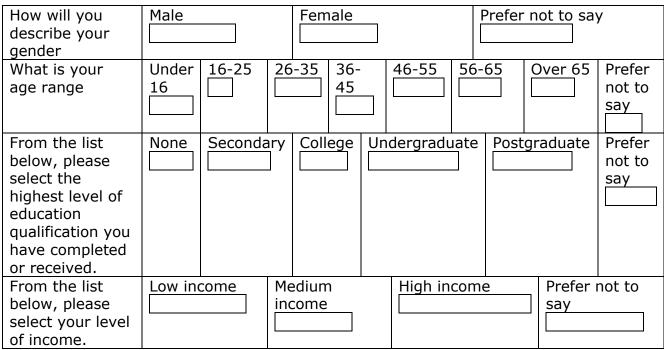
#### Section 10: Dimension of culture

Section 10: Dimension of culture (1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree)	1	2	З	4	5
	<u> </u>				
I live in a society where orderliness and consistency are stressed, even at the					
expense of experimentation and innovation.	<u> </u>				
I live in a society where societal requirements and instructions are spelt out in					
detail to citizens what they are expected to do	<u> </u>				<u> </u>
I live in a society where followers are expected to obey their leaders without					
question	┝──				
I live in a society where power is concentrated at the top					
I live in a society where leaders encourage group loyalty even if individual					
goals suffer					
The economic system in the society I live is designed to maximize individual					
interest					
In my society, children take pride in the individual accomplishment of their					
parents					
In my society, parents take pride in the individual accomplishment of their					
children					
In my society, boys are encouraged more than girls to attain a higher					
education					
In my society, men are likely to serve in a position of high office					
In this society, people are generally nonassertive					
In this society, people are generally tough					
In this society, the accepted norm is to plan for the future					
In this society, people place more emphasis on solving current problems					
In this society, students are encouraged to strive for continuously improved					
performance					
In this society, people are rewarded for excellent performance					
In this society, people are generally very concerned about others					
In this society, people are generally not at all sensitive to others					

Adopted from Northouse (2016) Leadership theory and practice.

## Section 11: Demographics and categories

Section 11: Demographics and categories.							
How will you	Hausa	Yoruba	Igbo				
describe your							
ethnic							
background?							



Adopted from the Global Adult Tobacco Survey (GATS) Core Questionnaire (2010).

### Justification for choice of sample for the questionnaire

The quantitative research utilised in this study to achieve the set-out aim comprised of a questionnaire. Although, there are usually two levels of sampling in a national context (that is, sampling of countries, and sampling of the individual), the quantitative study focus on the second level, sampling of individual respondents. Since there exists no national documentation of the entire population of tobacco users in Nigeria, it was impossible to specify a population frame for all tobacco users. Likewise, as already mentioned, tobacco use is not cultural accepted in many parts of the country, thereby making it difficult to locate tobacco users. A site-based survey was utilised to make up for the lack of a sampling frame. Samples were drawn from sites where tobacco users visit frequently. They included popular bars and restaurants across the six geopolitical zones of Nigeria.

The samples for the questionnaire comprised Nigeria youths and adults with the age range of 15-65. Adequate measures were taken to get appropriate consent for every participant. In the case where participants were younger than 18 years, relevant parents and guardians were consulted, and adequate steps were taken to get consents from them. It, however, came with some challenges and limitations to the study, as discussed in the limitation section. The justification for drawing population from this age bracket lied in the nature of tobacco use in developing countries, including Nigeria. According to Bhattacherjee (2012), sampling is the statistical process of selecting a subset of a population of interest for the purpose of making observation and statistical inferences about that population.

Since the research is aimed at understanding contemporary smoking behaviour, the respondents of interest were persons that have used or are using tobacco. As indicated in the previous chapter, tobacco use initiation and establishment of tobacco use behaviour is understood to begin at a very young age (Egbe et al., 2014). This is mostly due to easy access to tobacco products and non-adequate tobacco control measures to protect people, particularly children and young adults, from exposure to tobacco products. Likewise, adolescents and young adults are understood to be the most exposed to tobacco marking activities. Evidence from studies shows that tobacco marketing activities are deliberately targeted at non-tobacco users, particularly children and young adults. Lastly, children and young adults are prone to influence from the media to imitate behaviour (Egbe et al., 2014).

The researcher employed a quota sampling to select samples of tobacco users invited to take part in the research. It was not possible to use a stratified random sampling that would have been the preferred choice because of the challenges involved in surveying the entire population of tobacco users in the country. It was not financially viable to survey the entire population. Likewise, there were challenges accessing tobacco users as many of them try to hide the behaviour or are not willing to share information about the behaviour. The quota sampling method provided an opportunity to access tobacco users n their natural habitat and to encourage active participation from the participants.

A conscious attempt was made to select a relatively close ratio of tobacco users between male and female participants, with the weightage targeted at 50:50 ration of male and female tobacco users. The rationale behind this was to strike a balance in the weightage between the male and the female counterparts. To be able to investigate the difference between their behaviours and to look for emerging themes. Out of the 587 samples approached, 521 (excluding 45 respondent with missing data >20%) met the criteria for the study and agreed to participate in the study. At the end of the exercise, the ratio of male to female participants was 58.1 to 40.2, and 1.2 preferred not to disclose their age. The details of this can be found in the next chapter.

A common criticism concerning this form of sampling is that it does not allow sampling error to be estimated (Lohr,1999). Likewise, critiques believe that sampled result from quota sampling can be unreliable. This is because quota sampling relies on the researcher's judgement in choosing subgroups and giving them the right weightage. This means that the researcher's bias can skew the sample, thereby making it non-representative of the entire population. However, in the instance where random sampling is not viable, quota sampling is generally deemed as more reliable sampling when compared to other non-probability sampling methods like convenience sampling and snowball sampling.

A series of pilot tests were carried out on the questionnaire before sending it out to participants. First, the questionnaire was audited by an independent external researcher and the researcher's supervisory team for errors and adequacy. Then, a simulated situation was conducted, where a group of people were asked to complete the questionnaire electronically to test for clarity, bias, the ambiguity of questions and the relevance of the questions. Another thing tested was the amount of time required to complete the questionnaire, to check it was not unnecessarily lengthy. Once the questionnaire was checked and was free of errors, it was dispensed to the sample population.

# 3.3 Ethical consideration

Going by Creswell (2005), ethical consideration is concerned with the correct rules of conduct that are necessary when conducting research. Accordingly, it is expected that the researcher takes moral responsibility for protecting participants of a study from harm. Even though it appears that it can be difficult to adhere strictly to sets of standards due to unplanned constraints, ethical principles must be followed to protect the dignity, rights and welfare of research samples. While several ethical guidelines have been issued, this study followed the British Psychological Society (BPS) and American Psychological Associations (APA) code of conduct as described below.

## 3.3.1 Information Consents

The research obtained the consent of the participants before embarking on the data collection exercise. Obtaining the consent of participants went beyond asking them 'Yes' or 'No' whether they agree to participate in the research. The researcher made sure all participants were aware of what the research entails before obtaining their consent. In the case where the participant was below the age of 18, the parents/legal guardians were asked to provide consent that will allow the minor to participate in the study.

### 3.3.2 Exercise debrief

At the end of the research, participants were allowed to discuss the procedure and finding with the researcher. They were given general information on the researcher's aim in investigating them and why, and the role they play in the research. Although there were no deceiving questions during the research, the researcher is aware that if in any case participants were deceived to obtain information, they have the right to know the reason for it. The researcher provided time for questions from participants, and a conscious attempt was made to answer all questions asked.

#### 3.3.3 Participants protection

A conscious attempt was taken to ensure that participants were not caused any form of distress during the exercise. Careful steps were taken to make sure the exercise did not cause participants physical or mental harm such as embarrassing, frightening, offending, or harming the participants.

# 3.3.4 Accuracy

Going by Creswell (2005), deception can be divided into two. That is deliberate deception (such as using confederates, staged manipulation in field settings, and deception instruction) and deception by omission (such as failure to disclose full information about the study). As mentioned in the debriefing section, no deceptive questions were used during the course of the data collection exercise, and a cautious attempt was taken to mitigate deception by omission.

# 3.3.5 Confidentiality

All the information gained from the participants was kept anonymous, and no name was taken during the data collection.

# 3.3.6 Voluntary participation

While the researcher encouraged the participants to participate in the exercise, they were informed of their right to leave the study at any time they feel uncomfortable. They were aware of their right to withdraw their data at any time, even at the end of the study. No pressure was exerted on participants to participate or continue with the study if they did not want to.

# 3.4 Limitation

This section highlights the limitation of the study. Going by James and Murnan (2004), limitations of a study are characteristics of the methodology that impact the interpretation of findings from the study. They are the constraints on generalisability, applications to practice and utility of findings. They are as the results of how the research initially chose to design the study or the method used to establish the internal and external validity of the result. Limitation can also be as a result of unforeseen challenges that emerged during the study. The researcher is aware that, as with several studies with limitations, the current study has its limitations, and are discussed in the subsection below. The limitation covered include limitation from the research design, limitation on the research approach and limitation of the survey.

# 3.4.1 Limitation from the research design

The limitation of the design of the study is illustrated as follows:

**The formulation of the research aims and objectives:** aims and objectives of a study determine the scope, depth and overall direction of the research. The research questions are the central questions a study intends to answer based on the findings from the study. Considering that the aim and objectives for this study are subjective because it deals with people's beliefs, attitudes, perceptions and opinions, the researcher is aware of the importance of gathering information from a number of stakeholders that includes community leaders, government agencies, the tobacco industry, tobacco users (both

current and past users) and non-tobacco users to reinforce robust findings for the study. However, it was not logically possible because of the cost involved, time constraints and the issue of handling copious data. Thus, the reason for focusing on tobacco consumers (both current and past users) for these studies. While this may not produce an encompassing finding for the study, it can serve as a reference for future study.

**The implementation of the data collection method:** As indicated in section 3.1.2.1, a sequential exploratory strategy was adopted to gather information for this research. It began with the qualitative method to explore the research problem inductively, and the resultant data were analysed. The quantitative data collection then followed, and the results were also analysed. As the name implies, the data for both methods were analysed and interpreted separately and integrated in a way that the qualitative information informed the quantitative information. The most significant limitation of the mixed method was that it took more time to implement as protocols were developed for each method. Another limitation for this was the ability to conduct true probability sampling research because as with most qualitative research, convenient sampling was adopted for the qualitative data collection and quota sampling was used for the quantitative data collection because of the complexity of data collection in Nigeria. All these limited the ability to make broader generalisations from the research findings.

**Sample size:** While the significance of sample size is greater in quantitative studies when compared to qualitative studies, its impact on the accuracy of a study can not be overemphasised. This is because, the smaller the sample size of a study, the more the impossibility the statistical test will identify significant relationship within data sets. Conversely, the bigger the sample size of a study, the greater the tendency of it generating more accurate results. However, the complexity of data collection in Nigeria limited the sample size for this study. The time required and the cost involved in the data collection and analysis contributed to the relatively small sample size employed for this study.

**The scope of the study:** Taking into consideration the scope of this study, having a thorough definition of the population size and sample unit is a unique prerequisite for selecting adequate sample design for the study (Creswell,

2005),. However, the lack of national records of tobacco users in Nigeria makes it challenging to have an encompassing idea of the subject matter, mainly due to not being able to perform a random sample that produces the validity of the hypothesis and conclusion from the study.

# 3.4.2 Limitations on the research approach

As stated in section 3.1.2, the mixed method in the form of exploratory design was deemed appropriate to tackle the set-out aims and objectives for this research. Firstly, it allowed the researcher to tackle the issue of scarcity of resources on the dynamics of macro-environment and micro-environment on the contemporary consumption of tobacco use behaviour. Secondly, it allowed the researcher to tackle the weakness in research as the majority of the investigation of tobacco use behaviour has either been exclusively quantitative or qualitative. Lastly, it allowed the researcher to approach the matter being investigated from the real worldview.

While this is so, it also came with its challenges. One of which is the voluminous amount of data that required creativity in the interpreting, integrating and reforming of results. As stated in the previous section, the use of mixed-method is time-consuming and labour intensive because it involves collecting and analysing information in multiple phases. Likewise, while the critical theory paradigm was deemed appropriate, due to the dynamic nature of the subject matter of this research, there was the challenge of reconciling the conflicting conceptualisation and practices of the two methods of approach.

# 3.4.3 Limitation of surveys

By reiterating the purpose of this research, the researcher is aware that a longitudinal approach rather than a cross-sectional approach could have produced a more reliable outcome giving the dynamic nature of the subject matter. However, due to time constraints, the cost of data collection and analysis, and the nature of the contextual study, the researcher adopted a cross-sectional approach. The implication of this was that it was difficult to measure a change in the behaviour over a period of time. Because the survey attempts to collect data on tobacco use behaviour and environmental factors

at the same time, it makes it difficult to measure, which goes first, the tobacco use behaviour or the environmental factors.

Without the sequential association, it will be difficult to prove that environmental factors contribute to tobacco use behaviour. Likewise, it would have been interesting to see how demographic factors such as age, gender, and socio-economic factors respond to these changes. However, the significant number of missing demographic data from the survey meant that it was difficult to investigate the subject matter empirically as it relates to demographics. Other constraints as a result of using surveys for data collection for this study include insecurity and limiting access to the population of concern.

### 3.5 Delimitations

The delimitations of a study are concerned with characteristics arising from limitations in the scope of the study that involves the conscious exclusionary and inclusionary decision, made in the course of the research plans (Creswell, 2005). The researcher acknowledges the importance of gathering information from various stakeholders that include community leaders, government agencies, the tobacco industry, tobacco users (both current and past users) and non-tobacco users to reinforce robust findings for the study. However, it was not logically possible because of the cost involved, time constraints and the issue of handling big data. Thus, the reason for focusing on tobacco consumers (both current and past users) for this study.

# 3.6 Summary

This chapter covered the operationalisation of the conceptual framework and the data needed to be collected as part of the research process, by discussing alternative methodological approaches, justification of chosen methods, and a description of the process and participants in this study. The study adopted the research design framework proposed by Sekanran (2003) and discussed in detail its application to this study. Also covered in this chapter is the ethical consideration for the researcher-respondents relationship. Lastly, the limitation to the methodology and delimitation inherent for this research was elucidated. The succeeding chapter covers the result from the analysis of the qualitative and quantitative data collected and provides a detailed description of the findings, analysis and conclusion.

#### **CHAPTER FOUR**

#### Result

### 4.0 Introduction

This chapter builds on the preceding chapters, where the subject was introduced, relevant studies reviewed, and the research procedure detailed. It further presents the detailed results from the survey discussed in the previous chapter.

### 4.1 Qualitative report

As highlighted in section 3.2.2, the application of a focus group in this study was targeted at both adults and youths (male and female), that use or have used tobacco products. The objective of the focus group discussion was to elicit their views on:

- General knowledge of the pattern of tobacco use.
- The attitude and perception of tobacco use
- Awareness of tobacco control.
- The impact of distal environmental factors on tobacco use behaviour.
- The impact of proximal environmental factors on tobacco use behaviour.
- The influence of the socio-economic impact on tobacco use behaviour.

According to Morgan (1996), a well-designed focus group is expected to last between 1 to 2 hours and consist of 6 to 10 participants. The rationale behind this is that, even though a focus group is expected to have enough participants to generate diverse information, having a group bigger than 12 or lesser than 4 creates an environment that causes participants not to feel comfortable sharing their thoughts, opinions, beliefs and experience (Onwuegbuzie et al., 2009). Focus groups with participants within the range of 6 to 10 are believed to permit the smooth flow of conversation and create an environment comfortable to manage by the moderator (Halcomb et al., 2007).

It is suggested that a good focus group consist of participants with a homogeneous background (Black, 2018). Thus, a conscious effort was made to ensure that all participants in the focus group shared a similar background and perspective. This was to avoid any situation of impingement on

interpersonal communication within the group (Billson, 2008). Likewise, efforts were made to minimise the chance of having close related participants together within a focus group. This is because theoretically, participants in a group should be strangers to one another and have no previous experience with the other focus group participants. Anonymity among participants is proven to minimise the inhibiting effect of the difference in status and prevent participants from forming a clique that impinge the flow of communication (Onwuegbuzie et al., 2009).

The application of probability sampling to generate an unbiased sample representative of the total population was not applicable to the selection of participants for the focus group interview. This was due to the practical necessity of conducting the focus group locally (Redmond and Curtis, 2009). The alternative practice was to rely on convenience sampling. It involved selecting participants based on their availability, as long as they met the predetermined criteria for the research. According to Billson (2008), well-conducted convenience sampling can represent the targeted population as much as possible. This can be achieved by either classifying the target population based on carefully selected criteria variables relevant to the research objective or by including participants from each category in a different group (Billson, 2008).

One of the common ways of identifying participants in a stratified society like many developing countries is to consult key informants who are knowledgeable about the local conditions. The informants can direct the researcher to readily available participants (Freeman, 2006). It is advisable to consult as much as possible informants to minimise the bias of individual preference. Going by this, the researcher consulted informants to assist in the preparing of lists of potential participants for the focus group exercise (Breen, 2006). The researcher then selected the number of participants required for the exercise based on qualification from predetermined criteria and the availability of participants. It was achieved by handing out a short questionnaire.

The research question and research design principles determined the participants' selection and size and how the focus group was constructed. Many studies have suggested that when selecting participants for a focus group, a

percentage of the relevant population needs to be covered (Billson, 2008; Onwuegbuzie et al., 2009; Cameron, 2005). However, there are countering study suggestions that the common-sense principle is to select a number that does not bias the response in any form (Parker and Tritter, 2006). A way to achieve this is by selecting participants by variables. This involved identifying major variables that are likely to impact on participants' response. On average, many studies suggest selecting two to four key variables to give the researcher total control of the research process (Billson, 2008). Table 4.1 and 4.2 shows the breakdown of possible group blueprint for the study.

# Table 4. 1: Group blueprint - Three variables

	Low- income	<i>Medium</i> income	High income
Gender			
Male	Group 1	Group 3	Group 5
Female	Group 2	Group 4	Group 6

*Source: Developed for the study* 

# Table 4. 2: Group blueprint - Four variables

Income	Low- income		Medium income		High ii	ncome
Gender	18-35 65	35-	18-35 65	35-	18-35 65	35-
Male	Group 1	Group 3	Group5	Group 7	Group 9	Group 11
Female	Group 2	Group 4	Group64	Group 8	Group 10	Group 12

*Source: Developed for the study* 

As with the survey, choosing the number of instances for a focus group interview depends on the point at which the researcher is expected to reach theoretical saturation (Parker and Tritter, 2006). However, considering research limitations such as limited funding, time constraints, and the burden of managing enormous amounts of qualitative data, researchers are sometimes forced to either cut the number of variables or cut the numbers of instances conducted per group (Cameron, 2005). This is particularly applicable in a study that does not require fine-tuning to generate robust data. The three variables blueprint was used for this research because of the difficulties of getting respondents for the data collection exercise. This was mainly due to cultural constraints that do not support the use and sharing of personal information about tobacco consumption behaviour in many areas.

An adequate effort was made to choose the right place to conduct the focus group sessions. This is because the environment where a focus group is conducted determines the quality of result that will be generated (Beg, 2004). The main element that was worried about was background noise. This is because if not well managed, it could affect the recording quality, thus making it difficult to transcribe the recorded discussion. In addition to this, conducting a focus group in a noisy environment can cause distractions to the participants. Thus, extra effort was made to make sure that the venue for the focus group exercise was free of any form of distraction (Freeman, 2006).

Another factor taken into consideration was the location where the focus group discussion took place. Many studies have proven that having the focus group location closer to the participants increases the chance of them turning up for the exercise (Krueger, 2006; Freeman, 2006). In the case where the participants lived far away from the focus group location, participants were induced with incentives to increase their chances of turning up for the exercise. However, the disadvantage of this was that it cost the researcher more money (Breen, 2006).

Recording of the discussion is an essential part of the focus group process. It is proven that moderators cannot always remember everything being discussed (Billson, 2008). Therefore, it is important to have in place a very effective recording method. There are three common methods of recording, namely video recording, tape recording and note-taking. Each of these methods can serve as stand-alone means of recording or can be combined according to resources available to the researcher. This research comprised the combination of tape recording and note-taking. It enabled the researcher to tackle ethical issues that were likely to arise during the focus group discussion. A common ethical issue is when a participant wishes not to be recorded, the moderator had the note-taker to fall back on.

The researcher worked closely with key informants who are knowledgeable about the local area and the condition of the sample area, to ensure that the diversity of the population sample was represented in the focus groups. Attention was particularly given to achieving an age, gender and ethnic group balance in the group, as well as having different participants with different socio-economic status. In total, five focus groups were organised across Lagos State Nigeria; the most populous state in Nigeria, consisting of a diverse population. The discussion was held at the convenience of each group, and each session lasted for an average of 90 mins. The table below shows the location, date, language and number of participants in each group.

Location	Date	Language	Number of participants
Ikeja, Lagos state	September 27, 2017	Hausa/ Yoruba	8
Agege, Lagos state	September 27, 2017	English	11
Fagba, Lagos state	September 28, 2017	English	9
Iyana-Ipaja, Lagos state	September 28, 2017	English	7
Island, Lagos state	September 29, 2017	English	15

Table 4. 3: Demographics of focus group participants

*Source: Developed for the study* 

Participants' engagement in the discussion was excellent and yielded some rich data. At the beginning of each session, the ice-breaker questions were effectively utilised by the researcher to break down barriers and small subgroups among participants and help participants feel more part of the session. After each of the sessions, participants were given the equivalent of £5 as an incentive for their cooperation.

# 4.1.1 The focus group analysis.

Although there is no standard framework available for researchers to delineate qualitative analysis techniques for focus group research, various techniques have been used by the researchers to analyse their focus group data (Onwuegbuzie et al., 2009). One of such is the concept map technique. Since the overall aim of focus group analysis is to collate focus group discussion into a more manageable form that allows for scientific conclusion on the subject of interest. Thus, the analysis of a focus group involves summarising the themes for each focus group questions discussed. Adopting Nagle and Williams (2008) concept map as a guide, all of the responses per focus group exercise for this study were summarised into a manageable form by creating a concept map. Accordingly, the concept map demonstrated the question topic and the themes that emerged for the concept.

The focus group questions consisted of five constructs with sub-questions to ascertain the current tobacco use behaviour in Nigeria (detailed responses can be found in the appendix a). The findings from this research are highlighted throughout this document with the use of participant verbatim comments. The comments originated from either the recording from group discussions or written worksheet exercises. Where necessary, comments have been modified to reflect correct grammar.

# 4.1.2 Reports from the focus group

The reporting of focus group investigation involves tieing all of the previous stages together into a coherent whole (Nagle and Williams, 2008). Consequently, the discovery from this exercise is narrated as follows:

#### 4.1.2.1 The general pattern of tobacco use

As mentioned in the introductory chapter, tobacco products can generally be divided into two types: smoked tobacco and smokeless tobacco. It appeared from the sets of focus group exercises that cigarette smoking is the most common means by which participants indulge in tobacco and feeds their nicotine addiction. More than 95% of the participants reported to smoke or have smoked cigarettes. The other 5% used different forms of tobacco products, including snuff and chewed tobacco. Likewise, smokeless tobacco appeared to be less popular among the participants, particularly among the younger group, as some of them have expressed their unfamiliarity with smokeless tobacco products. It agreed with the work of Desalu et al., (2010) that suggested that smokeless tobacco is more prevalent among older, less privileged and less educated tobacco users. An emerging theme from the focus group phase is the change in trend in preference of marijuana over cigarettes, particularly among the younger participants. While the study of marijuana use is out of the scope of this study, it was interesting to note the increase in the preference of marijuana over cigarettes. According to the findings from the focus group exercise, this change is catalysed by the increased in the shared belief that marijuana is greener and less harmful compared to cigarettes.

The question asked to establish tobacco use initiation showed that more than 75% of the total participants from the focus group phase agreed to have started smoking in their childhood. Others mentioned they started in their teenage years. The findings agreed with the literature on tobacco use that suggested that tobacco use initiation begins at an early age. However, one of the participants revealed to have smoked for a short period at an older age. While it is not uncommon for people to start to smoke at an older age, the dependence on nicotine that sustains tobacco use is believed to be greater in early age compared to an older age. It can explain the disparity in tobacco use establishment by age (Sharapova et al., 2020). It appears that it is relatively easier to quit tobacco use if its initiation started at an older age. The following quote is an illustration of this:

My friends pressured me to smoke, but I did not like it, so I stopped after two weeks. Since I stopped, I have not experienced a relapse, even when I am around other people that smoke... (Focus group 3).

The reason people smoke has been covered extensively in tobacco use studies. It is fair to presume that people continued tobacco use because they started to use it in the first place, particularly at an early age (Reitz, 2010). Likewise, the social environment plays a crucial role in tobacco use initiation and in sustaining its use (Unger et al., 2003). Questions asked to establish why participants started tobacco use conformed to the basic research findings on the socio-environmental impact on tobacco use. As anticipated, socio-environmental factors such as family, peer group and the local community played a crucial role in the establishment of tobacco use among the participants. The following quotes are an illustration of this:

My parents and grand-parents used to chew and smoke tobacco product around me. Many times I asked them to give me, but they refused. Out of curiosity, I started to roll cardboard paper in the shape of a cigarette and smoke when my parents are away. After I dropped out of secondary school, I started working with cattle rearers. This was when I learnt to smoke tobacco properly... (Focus group 2)

I started smoking because of my elder brother. He is a role model to me, and I look up to him for everything, and since he smokes, I thought it was a good thing to do, to become like my brother... (Focus group 5).

I started smoking because of the nature of my work. At my workplace, we do everything together. I noticed that all of my colleagues smoke after eating. Out of curiosity, I decided to try to smoke, and that was how I started smoking... (Focus group 3).

There are socialisation practices that play a crucial role in the establishment of tobacco use, particularly among children and young adult. One of such practices is respect for elders, as highlighted in chapter two (Egba et al., 2013).

In many collectivist societies such as Nigeria, importance is put on the subordinate respecting the superiors. Thus, it is not uncommon for older members of a community to send children on errands to purchase cigarettes. Occasionally, they are requested to light-up the cigarette at the point of sale. Such practice is found to serve as a risk influence on smoking among adolescents and young adults in Nigeria. The following quote is an illustration of this:

I started smoking because I was exposed to tobacco at an early age. My uncle usually sends me to buy cigarettes. So one day I decided to try it myself. I liked the feeling, and since then, I started to buy and smoke cigarettes regularly... (Focus group 1).

The psychosocial construct of tobacco use behaviour, as demonstrated in chapter two, play a crucial role in determining tobacco use behaviour (Egba et al., 2013). As highlighted, psychosocial constructs include personal belief, opinions, and subjective or social norm determines whether or not tobacco us will occur and how tobacco is used. It is said to operate in all the levels of influences that determine tobacco use behaviour. As anticipated, psychosocial constructs play a crucial role in determining tobacco use behaviour among the participants of the focus group exercise. The following quote is an illustration of this:

I have noticed that people smoke whenever they are stressed or angry. I remember that the first time I smoked was when my brother got me angry. I remember that whenever people are angry, they smoke, maybe to calm down. So I tried it too. I still smoke cigarettes occasionally when I get angry or stressed... (Focus group 2).

#### 4.1.2.2 The attitude and perception of tobacco use

Typically, an attitude explains why a person behaves in a particular way. It explains how a person sees a situation or thing and defines how the person behaves towards the situation or thing. Attitudes are either positive (that is, favourable) and negative (that is, unfavourable). According to Crano and Prislin (2006), there are three components of attitude. They include a cognitive component (the belief and knowledge), an affective component (Feeling), and a behavioural component (the effect of attitude on behaviour). The cognitive component is based on information or knowledge, whereas the affective component is based on feeling. The behavioural component reflects how attitude affects the way a person behaves. When put in perspective, a person with positive information or knowledge about a situation or thing should result in positive feeling towards such a situation or thing. Consequently, such an attitude should reflect on a person's behaviour and vice versa.

This is particularly important for this study, as findings from this study can help identify underlying issues in the context of consumer behaviour and inform how it can be effectively addressed. As suggested in section 2.3.1, attitude plays a crucial role in tobacco use behaviour and effective control of tobacco lies in the attitude towards its use. Understanding such attitudes can inform how they can be changed. Going by Gilmore et al., (2005), studying consumers attitude towards tobacco use is an important prerequisite to effective control of its use. The question asked to establish the attitude towards tobacco use showed that all the participants' had formed an attitude towards tobacco, that informs their behaviour towards its use. These attitudes are both in favour and against tobacco. As already mentioned, a positive attitude means a person is likely to behave in favour of tobacco use. In contrast, a negative attitude implies that a person is likely to behave against tobacco use. The following quotes are an illustration of this:

*Cigarette smoking is good. It helps me relax when I have a stressful day. I also smoke when I am upset or when I wish to increase my concentration... (Focus group 1)* 

*I used to smoke cigarettes. But I stopped because I realise it was harmful to my health. I also see adverts and read articles on the harm of tobacco to my health. I knew I had to stop because I did not want to fall sick... (Focus group 3)* 

While it is expected that a positive attitude results in favourable behaviour towards a situation or thing and vice versa, it is not uncommon for attitude not to correspond with the expected behavioural outcome. There is evidence that the affective components and cognitive components of attitude do not always match the behaviour outcome. It explains why people still smoke, knowing that smoking causes illness and diseases. McLeod (2017) demonstrates that the strength with which attitude is held predicts the tendency of a behavioural outcome. In this case, attitude strength is defined by how significant the attitude is to the person and relates to self-interest, social identification and value. Thus, an attitude with a high self-interest for a person (that is, held by the members of the social group a person belongs to and relates to the person's value) will be extremely important. Consequently, such an attitude will have a powerful influence on a person's behaviour and vice versa. The following quote is an illustration of this:

... I do not have any attachment to cigarette smoking. I cannot smoke by myself. I only smoke when I am around my friends or others that smoke... (Focus group 5).

Knowledge also plays a crucial role in attitude strength. In this case, knowledge encompasses the degree of awareness of a person about the attitude object (McLeod, 2017). Consequently, people are typically well-informed about things or situation that interest them and likely to hold strong attitudes, whether positive or negative as a result of this. Attitudes based on direct experience are more strongly held and likely to translate to behaviour than attitudes formed indirectly, say through watching television, or through word of mouth. The following quotes are an illustration of this.

*I have heard many people say that cigarette smoking is harmful to health. I have also heard on the radio too. I pray to God that I can stop smoking... (Focus group 2).* 

*I work in a quiet area, surrounded by thick forest. We smoke to chase away evil spirits. Evil spirits do not like the smoke... (Focus Group 4).* 

Perception is closely related to attitude. Perception is formed once a person interprets meanings to an experience. In other words, when a person is

confronted with a situation or thing, the person interprets the situation or thing as something meaningful on prior experience. Going by Sincero (2013), the process of perception consists of three components. They include the object perceived, the target and the situation. The object perceived refers to what is being perceived. Usually, this occurs unconsciously, but sometimes it happens intentionally. While many factors influence perceptions of the object perceived, it appears that motivational state, emotional state and experience greatly contributes to how a person perceives a situation or thing. The target, on the other hand, describes the objective of perception, that is the situation or thing being perceived. The amount of information gathered by the sensory organs of the perceiver usually impact on the interpretation and understanding of the object of perception. Lastly, the situation includes the environmental factors, timing and degree of stimulation that impact the process of perception.

A person's perception of tobacco plays a vital role in its initiation and continuous use. By putting the above into perspective, tobacco can be described as the perceived. Going by findings from basic research, tobacco use is generally perceived as harmful to health. The question asked to establish the perception of tobacco use among the participants of the focus group, shows that almost 96% already perceive tobacco use to be harmful to their body. The following quotes are an illustration of this.

*I* noticed that I get tired quickly when I engage in any activity such as running, lifting of heavy things or even climbing stairs when I have smoked consecutively... (Focus group 3)

*I know tobacco use does not have health benefits. I believe it is harmful to my health... (Focus group 2).* 

Likewise, the amount of information gathered by the sensory organs of a perceiver usually impacts on the interpretation and understanding of the object of perception. The following quote is an illustration of this.

You see how churches and mosques use incense in the form of smoke to scare away the evil spirit; the smoke from the cigarette also scares off evil spirits... (Focus group 4). Lastly, the environmental factors, timing and degree of stimulation influence the process of perception. Likewise, the situation where perception occurs is predisposed to change. It explains why perception towards a situation or thing changes. Take, for instance; environmental factors can stimulate a change in the perception of tobacco. The following quote is an illustration of this.

*I have noticed an increase in the smoking designated area in companies I have visited recently. I think tobacco users are increasingly accepted in the society... (Focus group 5)* 

There is marked evidence from the focus group that the general perception of tobacco use is changing. The change is mostly attributed to the increase in the acceptance of technology. Technology is believed to play a significant role in shaping the general public perception of tobacco use (Dixon, 2009). It appears that the change in perception, as a result of technology, cuts across all demographics. However, it is interesting to note the gradual increase in the prevalence of technology among the older generation. This is because they are generally perceived not to be technology compliant. Subsequently, the increasing exposure to information and trends as a result of the prevalence of technology is becoming apparent in the way they perceive things, including tobacco use. While this may be the case, it appears that the change in perception due to technology occurs on the back of local culture. Thus, the perception of information from technology is interpreted within the constraint of a person's culture.

Although it is expected that the perception hold of tobacco to impact on its use, it is not uncommon for people to act in contrary to the perception hold of tobacco. Typically, the phenomenon is attributed to the addictive constituent of tobacco that makes it difficult to quit. While this may be the case, Sincero (2013) suggest that the amount of information and type of information gathered by the sensory organ influences the behavioural outcome. It explains why people still smoke, knowing that smoking causes illness and diseases. The question asked to establish the perception and behaviour shows that even though many of the participants perceive tobacco to be harmful to their health, there are doubts among them that smoking kills. The following quote is an illustration of this. I know cigarette smoking is not good for everyone, and my advice is to stop when you discover cigarette is not good for you. I mean, I know many older people that have been smoking their whole life, if tobacco is that dangerous, they should be dead by now... (Focus group 5).

#### 4.1.2.3 Awareness of tobacco control

A considerable amount of studies have established that knowledge and appropriate awareness are essential for encouraging positive behaviour and promoting health. In particular, it has been found that awareness of the disadvantages of tobacco plays a crucial role in driving down the prevalence of tobacco use. As demonstrated in 2.3.6, the incessant global control of tobacco use was born out of the knowledge acquired of the danger associated with tobacco use to self and others. While awareness relates to the understanding of one's environment and the ability to interpret it accurately, it is dependent on the public information available to be processed. By putting this in perspective, depending on the public information about tobacco available for people to process will determine the positive or negative behavioural outcome. Typically, tobacco control policies are used as part of a comprehensive denormalisation strategy to reduce the social acceptability of smoking. They include government programs and actions to reinforce that tobacco use is not a mainstream or normal activity in society. The awareness of these type of anti-tobacco programs and actions have been established to associate positively with consumers feelings, and social disapproval of smoking.

The question asked to establish the participants' awareness of government programs and actions on tobacco control showed that efforts by the government to control tobacco use in Nigeria are inadequate. When the participants were asked about their knowledge of existing tobacco control law in Nigeria, almost 90% were not aware of any existing law. The other 10% that expressed their knowledge were only aware of the ban on tobacco use in public but questioned the adequate enforcement of the ban as people are still seen smoking in public without being prosecuted. The following quote is an illustration of this. *Not until the government begin to arrest people for defaulting the law, such law will not be taken seriously... (Focus group 2).* 

The WHO framework convention on tobacco control mandates countries to promote public awareness on the disadvantages associated with tobacco use and exposure to tobacco smoke, and about the benefits of tobacco use cessation and tobacco-free lifestyle. The tobacco control mass media campaigns are considered an essential part of a comprehensive tobacco control strategy, due to the potential of reaching a larger audience and the tendency of decreasing the prevalence of tobacco use and increasing tobacco use cessation.

The question to establish the awareness of tobacco control mass media campaigns among the participants showed that tobacco control mass media campaigns exist in Nigeria. Many of the participants mentioned seeing on T.V, newspapers, and tobacco package, and hearing on radio warning messages that tobacco kills. However, it appears that the efficiency of tobacco control mass media campaigns is low. It is evident from the further question asked to establish participants' awareness of the frequency and nature of tobacco campaigns available to decrease the prevalence of tobacco use and increase its cessation. Aside from warning messages on tobacco products' packaging, and adverts on T.V., radio and newspapers, there are no other known interventions by the government that participants are aware of. Likewise, there are inconsistencies in the government effort to denormalise tobacco use as a mainstream activity. Going by the account of some of the participants, it appears that tobacco adverts are still aired on national t.v and radio stations.

Typically, it is believed that it is the government's responsibility is to ensure that the lives and properties of its people are protected. The government is also liable for providing information, taking actions that others cannot or will not take, and protecting its people. One of such responsibilities is promoting good health for its people. While this is important in itself, it also contributes to economic development (Jha, 2000). This is particularly true of governments responsibility of protecting its people against tobacco use and exposure to tobacco smoke. As anticipated, a larger proportion of the participants believed

232

that it is the responsibility of the government to take proactive measures to control tobacco use. A noteworthy response by many of the participants is that they believe the government is more knowledgeable about the issue surrounding tobacco use, and that if the government feels tobacco use is dangerous for its citizens, they should ban its production outrightly. The following quotes are an illustration of this.

> I believe it is the government responsibility to regulate the manufacturing and sales of tobacco. I believe if tobacco productions and sales are banned entirely, I will not have any other choice than to stop smoking... (Focus group 3).

> I am of the opinion that the government needs to be more proactive in tobacco use control. Imagine, corner shops are still selling cigarettes without displaying warnings messages or conducting age verification before the sale of cigarette. The shocking thing is that these shops are commonly located in front of primary schools where children visit to purchase confectionary... (Focus group 5)

According to the WHO framework convention on tobacco control, tobacco cessation should be available in every country. However, it appears that many of the participants are not aware of tobacco cessation available to help them stop smoking. The following quote is an illustration of this.

*I have been trying to stop smoking for years, but I find it challenging to do it myself. If there is something that will stop me from smoking will be a great thing,... (Focus group 3).* 

While it is the general opinion of the participants that the government is responsible for control tobacco use, a small proportion of the participants believed that tobacco users have a role to play in the control of tobacco use. The following quote is an illustration of this.

> I believe there is little the government can do to control tobacco use than what they have done; which is pass a law

that bans public smoking, and mandate companies to include warning messages on tobacco packages. If after all these, anyone still chooses to smoke does so at his or her peril... (Focus group 4)

# 4.1.2.4 Influence of microenvironment factor on tobacco behaviour

The environment undoubtedly plays a critical role in determining nicotine dependence, as well as shaping tobacco use behaviour. In particular, environmental factors that include the family and members of the immediate environment are influential contexts in which behaviour mostly occur. The prevalence of tobacco use initiation and continuous use is said to be high in an environment that supports tobacco use and vice versa. Likewise, tobacco use cessation is likely to occur relatively easily in an environment that challenges tobacco use and vice versa (Smedley and Syme, 2001). The main theoretical concept that explains tobacco use in this context is social support. The family and members of the immediate environment supportive and undermining behaviour appears to correlate with the likelihood of making a quit attempt and achieving abstinence.

The findings from the question asked to establish the influence of the family and the immediate environment on tobacco use agreed with Smedley and Syme (2001) argument. As expected, people will find it difficult or almost impossible to change their behaviour if their immediate environment conspires against such change and vice versa. It appeared that environmental factors, including family, social class, community, religion, cultural group, belief, and respect for elders, play a crucial role in tobacco use behaviour among the respondents. The following quotes illustrate this.

> I know cigarette smoke is not right, and I am aware of the government warning against indoor smoking and smoking around children. I do not always feel comfortable smoking around my wife and children... (Focus group 2)

> I am Hausa, and our religion preaches against the use of substances such as alcohol, that makes you misbehave in

public. But cigarette smoking does not cause you to misbehave in public. So I have no problem smoking around my family or my immediate environment... (Focus group 1).

*My* Yoruba culture does not support cigarette smoking. *People see smokers as criminals and as unserious and irresponsible person... (Focus group 1).* 

None of my family members knows I smoke. Whenever I feel like smoking, I go to a place where people will not see me... (Focus group 3)

Typically, it is expected that the environmental impact on people's behaviour. Some of the ways environment impact behaviour include facilitating and discouraging a behaviour; influencing and motivating people to act some way; and the capability to influence mood towards a thing or situation, to mention a few. The awareness and the value attached to one's environment determines how and whether the environment will impact on their behaviour. The question was asked to ascertain participants responsiveness to their immediate environment and its impact on their attitude towards tobacco. It showed that not only does the environment play a significant role in shaping tobacco use behaviour, it also plays a critical role in forming an attitude. Consequently, a change in environmental attitude towards a thing or situation is likely to impact on individuals' attitude that can lead to a change of behaviour to such a situation or thing. The following quotes demonstrate this.

> When I am in an environment that I think smoking is not accepted, I always go to other places where smoking is allowed or hideaway somewhere no one will see me smoke (Focus group 3).

> I remember one time a friend of mine that smokes heavily had to stop smoking for 30days because of his sister that visited. Immediately his sister left, he started smoking again... (Focus group 5).

While it is not uncommon for people to change their tobacco use behaviour due to environmental factors as already identified in this study, there are indications that the environment does not automatically impact on tobacco use behaviour. It appears from the account of a few of the respondents that some environmental factors influence conformity to social norms regarding tobacco use more than the others. The finding suggests that the environment as a whole does not automatically influence tobacco use behaviour and that it is singular or multiple environmental factors that act to influence tobacco use behaviour. One of such factor identified from the focus group exercise is the age factor. Accordingly, it appeared that the older the tobacco user, the less likely they pay attention to the environment, and less likely they allow the environment to dictate their tobacco use behaviour. The following quote demonstrates this.

## *I* am old enough to know what is good for me, and what is the right thing to do... (Focus group 4)

Likewise, every cultural group have their unique beliefs, values, assumptions, customs, and practice that makes them unique. An opened cultural group respects and accepts the unique characteristics of other cultural groups as valid for that specific diverse group. In other words, an opened cultural group accepts lifestyles and beliefs that differ from theirs, and do not make unfavourable comparisons of differences in others to what they prefer base on their diversity grouping. It is not uncommon for an open cultural group to adopt lifestyle from other cultural groups they are exposed to. A closed cultural group, on the other hand, act in contrary to an open cultural group. Openness and closeness of the cultural group play a crucial role in tobacco use, as they determine the acceptance of tobacco use within a cultural group and the probability that the lifestyles and beliefs of others will rub on them. Accordingly, it appears that respondents from different cultural group expressed a different opinion on the environmental impact on tobacco use. The Hausa participants responded that their environment supports the use of tobacco, while the Yoruba participants responded otherwise.

While environmental factors act as agents that enforce conformity to social norms, findings from the study suggest that such enforcement can be

overridden. This occurs when a person acts in contrary to the social norm regarding tobacco smoking. It can lead to neutralisation of environmental influence on tobacco use behaviour. The following quote is an illustration of this.

> I used to hide my smoking habit away from my family because I know they will be disappointed to find out I smoke. As expected, the day they found out I smoke, they were disappointed. But since they found out, I did not care anymore about their approval or disapproval of my smoking habit. Now, I smoke whenever and where ever I want to smoke. I do not find it discomforting to smoke around my family of immediate environment anymore (Focus group 3).

The finding from the further question asked to understand if there has been a change in the environmental attitude towards tobacco use indicates that tobacco has remained unaccepted within environments that kicked against it. Likewise, a change was observed in environments that support it. It appeared that tobacco is increasingly perceived to be unfavourable in those environments, thereby leading to a decrease in its acceptability. The change in environmental attitude was attributed to the increase in the awareness of the danger associated with tobacco. In addition to this, exposure to external information, mainly powered by technology, have also contributed to the phenomenon. While this may be the case, there are indications from the focus group findings that age generation plays a crucial role in the change in environmental attitude towards tobacco use. As such, the younger the age generation, the probability that attitude will easily change when compared with older generations. Consequently, the change in environmental attitude is expected to occur more with younger generations, as the older generations are more likely to hold on to their beliefs.

# 4.1.2.5 Influence of macro-environment factor on tobacco behaviour

Macro-environmental factors such as globalisation, media, and global culture have been identified to have an uncontrollable influence on behaviour. Technology is said to play a crucial role in this regards, as it acts as the bridge that brings together different cultural groups. It allows for intermix, especially exchange of information, that in return, affects everyday life and strongly influence culture. While this may be the case, there are strong pieces of evidence that indicate the prevalence of technology in many developing countries, including Nigeria. By putting this into perspective, it is expected that technology help facilitates the influence of macro-environmental factors on tobacco use in developing countries, including Nigeria. The change in the trend of tobacco use in many developed countries is expected to rub off on the way tobacco is perceived in Nigeria. The rub-off is predicted to lead to the formation of environmental attitude in Nigeria that is capable of causing a change to tobacco use behaviour.

The findings from the question asked to establish the Knowledge on the decline in tobacco use in other countries showed that majority of the respondents are not aware of the decrease in the consumption of tobacco use in developed countries. While practically this is the case, there are indications in the literature that suggest the decrease in the exposure to tobacco, particularly via media. If that is so, it is fair to presume that it will not be long until the change in trend impacts on tobacco use in developing countries, including Nigeria. The following quote is an illustration of this.

> I know smoking is a western behaviour and I have many friends that started smoking because they wanted to copy the western lifestyle. If there is a change in the way tobacco is used in western countries because they know that it is not good for their health, we should also find a way to stop using tobacco in Nigeria... (Focus group 2)

Likewise, consumers in developing countries are increasingly open to new global trends from developed countries. One of such lifestyles is people moving towards organic lifestyle. This kind of lifestyle does not support the use of tobacco.

*I* am aware of the decrease in tobacco use in developed countries, particularly among the younger generation. People

are now moving towards an organic lifestyle that favours marijuana over tobacco (Focus group 5).

While the findings above appear to be logical, an emerging finding from the focus group exercise suggested that the impact of macro-environmental factors on tobacco use behaviour may not be distributed evenly among established and non-established smokers. The quotes below demonstrate this.

I believe that one thing that matters to a smoker is 'how to get cigarette', regardless of the location, price or whatever is happening. I think that the decline in tobacco use in developed countries can be immediate on the attitude of a non-established smoker. But such an impact might not be noticed immediately on established smokers (Focus group 5).

There is nothing that can change my attitude toward smoking. I am a chain smoker, and I am aware of the danger of tobacco use. I do not believe that the decline in tobacco consumption in developed countries will have any significant change in my smoking habit.

The finding from the further question asked to determine the impact change in tobacco use behavioural trend has on respondents' tobacco use suggested that while macro-environmental factors have the capability to influence behaviour, it is subjective to personal choice. Different people smoke for various reasons, and such reasons predetermine whether macro-environmental factors will be capable of influencing tobacco use behaviour. Likewise, the choice to smoke is stronger among established smokers as compared to non-established smokers. The quotes below demonstrate this.

I started smoking as a way to cope with the challenges of a lack of good and well-paying job that provides enough money to meet my financial needs. If I get a better paying job, I believe my stress and worries will reduce, and the need to smoke will reduce (Focus group 4). With all that is going on in the country; bad governance, poor economy, and expensive costs of living contributes to the frustration that pushed me to smoke... (Focus group 4)

Further findings suggest that the government need to take more stringent actions to reduce the prevalence of tobacco use behaviour in Nigeria. Overall, this qualitative research provided some useful insight that can be built on to understand the underlying issue of consumer behaviour in the context of tobacco use in developing countries such as Nigeria. While the argument for this research stems from the fact that many developing countries lack proper tobacco control intervention, findings from this study are consistent with the literature. It suggests the building of evidence-based measures applicable to tobacco control in developing countries rather than on intuition or uncritical adoption of strategies from other parts of the world, particularly the developed countries. It suggests that taking a conscious move to understand contemporary tobacco use in this region can provide useful information to measure the magnitude of the proposed epidemic in this region and inform how it can be controlled.

#### 4.2 The quantitative report

This section builds on the two previous chapters (that is, the literature review, the methodology chapters) where relevant studies were reviewed for information about contemporary tobacco use behaviour and the research procedure was detailed. Likewise, findings from the qualitative research were incorporated in the quantitative research in the form of questionnaire building, as indicated in the methodology chapter. It was identified from the preliminary study that the macro-environment (globalisation, global culture, and media and technology) and the micro-environment (cultural identity, social network, personality, symbolic meaning and social environment) impact on tobacco use behaviour. Additional quantitative information was collected using the questionnaire to generate numerical data that was transformed into usable statistics for the research, and the result is discussed in this chapter. As with any study, the quantitative data analysis is an important stage for this research because it provided a means to explore the concepts, theories, and framework

for the study empirically. In the case of this study, data analysis was conducted across eight constructs that include:

- Tobacco use behavioural establishment
- Social network
- Symbolic meaning
- Self-efficacy
- Self-concept
- Tobacco use deterrent
- The dimension of culture and
- Globalisation.

Before the data analysis, the data sets collected using the questionnaire were inputted and cleaned up by using the data handling software IBM SPSS. The exercise involved transforming data from the questionnaire codes to meaningful codes and pruning the questions for presentation clarification purposes. The data sets were examined for missing data. The exercise included identifying the patterns of missingness, checking for associations between missing data and observed data, and deciding how to handle the missing data. As with any research, missing data is a common problem that a researcher should not ignore, as it may have a significant impact on the overall result of the study. According to Soley-Bori (2013), the rate of missing data, the kind of missing data and reason for its missing determines how to deal with it. Thus, this study followed the guideline proposed by Soley-Bori (2013) for dealing with missing data.

Going by the literature, the proportion of missing data is directly related to the quality of statistical interference. However, there is no established threshold in literature as to the acceptable percentages of missing data in a data set for valid statistical interferences. For instance, Schafer (1999) has argued that a missing data rate of 5% or less is inconsequential, while Bennett (2001), believed that missing data more significant than 10% could cause a statistical analysis to be biased. Likewise, Peng et al., (2006), suggests that when more than 20% of data is missing, statistical analysis is expected to be biased. Going by Tabachnick and Fidell (2013), the missing data mechanism and the missing data pattern is posited to have a greater impact on the research results than

the proportion of the missing data. Thus, the next step was to check for the missing data mechanism and pattern.

According to Rubin (1976), there are three mechanisms by which missing data can occur. These include MCAR (missing completely at random), MAR (missing at random), and NMAR (not missing at random). It is assumed for MCAR that a variable (say Y) is said to have data missing completely on random if the probability of missing data on Y is unrelated to the value of Y itself or the values of any other variable in the data set (Briggs et al., 2003). Likewise, for MAR, it is assumed that the probability of missing data on Y is unrelated to the analysis (say X). Lastly, for NMAR, it is assumed that missing values depend on unobserved values.

In general, missing data mechanism is said to be ignorable if the MAR assumption is fulfilled. Consequently, MAR must be modelled to get a good estimate of the parameters of interest if the MAR assumption is not fulfilled. The pattern of missingness can be identified by observing how the missing data is distributed in the data sets. Soley-Bori (2013) identifies the pattern of missingness as monotone (if the pattern among the missing values can be observed) or arbitrary (if there is no clear pattern observed for the missing values). It is posited that the assumption and pattern of missingness are used to determine what method to use when dealing with missing data, and that monotone missing data patterns are more comfortable to handle than an arbitrary pattern. The two conventional methods. In addition to these, statistics has developed two approaches to handling missing data that offer a substantial improvement over the conventional method. These include multiple imputations and maximum likelihood (Soley-Bori, 2013).

The researcher started by evaluating the data sets for missing data, by running a descriptive statistic (in this case, frequencies) on each variable for the study using the data handling software IBM SPSS. A total of 3,826 data were missing from the data sets, ranging from 25(4.4%) to 75(13.3%) from each variable. If the researcher were to go with the default way of handling missing data, which would have been to exclude the cases with the missing values from the data set, it would have reduced the number of cases from 564 to 194, losing

65.6% of the total samples for the study. Excluding that number of cases will have a significant impact on the overall outcome of the study. This prompted the researcher to seek an alternative way to handle the missing data, such as testing for the missing data mechanism and missing data pattern following the guidelines proposed by Soley-Bori (2013). However, before testing for the missing data mechanism and the missing pattern, 45 cases with missing data >20% was excluded to reduce the rate of the missing data. The remaining missing data were then tested for a pattern, using the data handling software IBM SPSS. The result of the test is demonstrated in figure 4.1 and 4.2. The missing value pattern graphs provide a virtual representation of the pattern of the missing data. It can be seen from the distribution of missing values as represented in the graphs below that the pattern of missing value suggests that data was missing in a random pattern. This shows a positive sign because it minimises the chances there might be biasness in the missing value. Since it was identified that the amount of the missing data is fairly large and that the data were missing at random, the next step was to perform an imputation to replace the missing values.

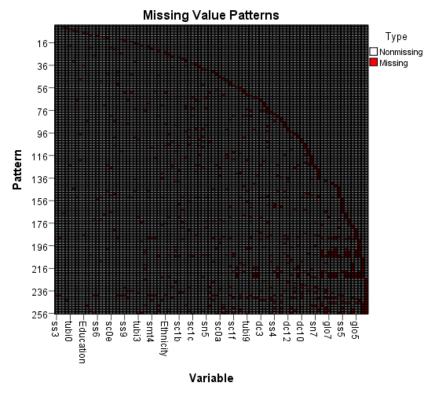
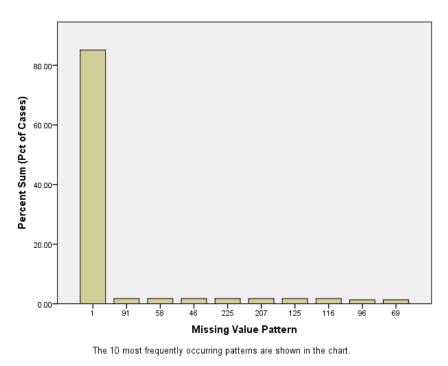






Figure 4. 2: Graph showing the missing value pattern



#### Source: Generated for the study

The imputation methods imply substituting each missing value for a reasonable guess, to enable an analysis to be conducted as if there were no missing values. While there are numbers of ways to do this, the multiple imputations appear to be the most favourite and are primarily utilised in social science research because of its tendency to produce unbiased results. Multiple imputations is a simulation-based process that involves replacing each missing item with two or more acceptable values, representing a distribution of possibilities (Allison, 2001). According to Schafer (2003), the purpose of multiple imputations is not to re-create missing data to mirror the true ones as such but to handle missing data to achieve valid statistical inference. The multiple imputations for the missing data for this study were conducted following the steps proposed by Schafer (2003). The advantage with multiple imputations is that they can be used on any form of data and can be model with conventional software such as the SPSS. When the data is missing at random (MAR), it can lead to consistent, asymptotically efficient, and asymptotically normal estimates (Soley-Bori, 2013). However, the limitation with multiple imputations is that it produces different estimates that can lead to a situation whereby different

results can be derived from the same data using the same methods (Allison, 2001; Schafer, 1997; and Soley-Bori, 2013).

Once the multiple imputations were performed, the next step was to conduct the reverse coding (also known as the reverse scoring) for the data sets. A questionnaire that uses the Likert Scale for answering questions most times contains items that may need to be reverse coded as they may have both positive and negative worded questions in them. For, instance, the attitude questionnaire may have positive statements, as well as negative statements that involve a rating response from 1- strongly disagree to 5- strongly agree. Using the same scoring for the two types of questions can be catastrophic. What to do is to reverse-score the negatively worded questions in the opposite direction. The numerical scoring scale for the negatively worded questions for this study ran in the opposite direction before running the Cronbach's alpha for the reliability questionnaire.

#### 4.2.1 The demographic profile

The demographic characteristics of consumers, including age, gender, ethnicity, level of education and income, have been identified in the literature to have a significant impact on tobacco use behaviour. Thus, the demographic data was collated by asking respondents to choose options that applied to them, through a simple procedure of replying to multiple-choice questions. Due to ethics, an extra option label 'preferred not to answer' was included in multiple choices. The details of the demographic profile of the respondents are illustrated in table 4.4. It shows that the respondents consisted of 58.1% males and 40.2% females, while 1.2% preferred not to say. Regarding the ethnic background, about 17.7% of the respondents were Hausas, while 42.3% were Yorubas and 38.7% were Igbos. In terms of age, the respondents composed of 1.2% for under 16, 20.4 for ages 16-25, 42.9% for ages 26-35, 23.1% for ages 36-45, 7.5% for ages 46-55, 0.8% for ages 56-65, while 3.8% of the respondents preferred not to say. The breakdown of the level of educational qualification for the respondents include 10.6% had no qualification, 5.8% had a secondary gualification, 16.7% had a college degree, 34.4% had an undergraduate degree, 5.0% had a postgraduate degree, and 26.9 of respondents preferred not to say. Lastly, the classification of respondents with

regard to income shows that 27.7% were earning low income, 26.2% were earning medium income, 2.1% were earning a high income, while 40.8% preferred not to say.

Variables	Categories	Number	Percentage
	Cases	= 520	
Gender	Male	302	58.1
	Female	209	40.2
	Preferred not to say	6	1.2
Ethnicity	Hausa	92	17.7
	Yoruba	220	42.3
	Igbo	201	38.7
Age	Under 16	6	1.2
	16-25	106	20.4
	26-35	223	42.9
	36-45	120	23.1
	46-55	39	7.5
	56-65	4	.8
	prefer not to say	20	3.8
Qualification	None	55	10.6
	Secondary	30	5.8
	College	87	16.7
	Undergraduate	179	34.4
	Postgraduate	26	5.0
	Prefer not to say	140	26.9
Level of income	Low income	144	27.7
	Medium income	136	26.2
	High income	11	2.1
	Prefer not to say	212	40.8

Table 4. 4: The demographic characteristic of the quantitative research

#### 4.2.2 Behavioural pattern of tobacco use

In this section, the general knowledge of the pattern of tobacco use is discussed. It discussed the impact of demographic characteristics (as mentioned above) on the pattern of tobacco use.

Source: Developed by the Author

Going by the World Health Organisation proposal (1998), respondents that reported to smoke cigarette at the time of this survey were categorised into regular/daily or occasional smokers. Accordingly, regular or daily smokers are those that smoke tobacco at least once a day, whereas occasional smokers are those that smoke but not every day (World Health Organisation, 1998). The data handling software IBM SPSS was used to conduct a descriptive statistic to evaluate the frequency of tobacco use among the surveyed participants. It showed that 45.8% of the respondents currently smoke cigarettes regularly, 26.5% currently smoke occasionally, while 27.1% do not currently smoke.

Kaleta et al. (2014) suggest that daily smokers can be further categorised into light or heavy smokers, depending on satisfying sets of conditions. A heavy smoker is one that currently smokes 15 or more cigarettes daily and had not made any attempt to quit in the past 12 months and has no intention to quit smoking in the next 12 months. The light smoker, on the other hand, is the one that smokes daily but does not meet the other defining criteria of heavy smokers. Light smokers are typically believed to smoke less than 15 cigarettes daily. It is posited that light smokers are more likely to be receptive to tobacco control measures and are more likely to guit than heavy smokers. The followup question asked to establish the categories of smokers showed that 97 respondents (that is 42% of the 241 that reported smoking daily) fall in the category of light smokers since they consume less than 15 sticks of cigarette daily. Whereas, 134 respondents (that is 58% of 241) appear to be heavy smokers as they consume more than 15 sticks of cigarette daily. 14.9% of the nondaily smokers (n=78) smoked at least one day in the week, 33.1% (n=174)smoked between 2-4 days in the week, while 18.8 (n=98) smoked almost every day.

Do you smoke cigarettes now?		Frequen	Per	Valid Percent	Cumulative	
Cigare	-	Cy	cent	Percent	Percent	
Valid	yes, regularly Go to 2.	241	45.9	46.2	46.2	
	no, Go to 4	139	26.5	26.6	72.8	

	Occasionally, go to 3	142	27.0	27.2	100.0
	Total	522	99.4	100.0	
Missin g	System	3	.6		
Total		525	100.0		

On how many days a week do you smoke cigarettes?		Frequen cy	Per cent	Valid Percent	Cumulative Percent
	usually on one day or less	78	14.9	22.1	22.1
Valid	usually on 2 to 4 days	174	33.1	49.3	71.4
	almost every day	101	19.2	28.6	100.0
	Total	353	67.2	100.0	
Missin g	System	172	32.8		
Total		525	100.0		

#### **Source:** Generated for the study

Generally, male counterparts tend to use tobacco products more than their female counterparts. Significant studies have been conducted on tobacco use between male and female counterparts, and a number of factors have been identified to be responsible for the difference in the rate of tobacco use between the two genders. One of which suggests that smoking activates a male's reward pathways more than females. Likewise, it is not uncommon for social norms to define female smoking as inappropriate and unfeminine. In which case, women internalise such norms or risk the sanctions against tobacco smoking from their immediate social networks.

In accord with the four stages model proposed by Lopez et al. (1994), the study compared the categories of smokers (light, heavy, and non-daily smokers) relative to gender. As expected, the rate of smoking relative to gender shows that the prevalence of tobacco smoking is higher in males when compared to females. Accordingly, 63.1% (n=152) of males as compared to 36.5% (n=88) of females were daily smokers. 21.9% (n=51) males and 18.9%

(n=44) females reported to be light smokers, while 40.5% (n=94) males and 37.5 (n=87) females reported they are heavy smokers. Likewise, regarding non-daily smoking, 13.5% (n=47) males and 7.8% (27) females reported they usually smoke one day in the week, 26.9% (n=93) males and 22.5% (n=78) females reported they usually smoke 2-4 days a week. In comparison, 17.9% (n=62) males and 11.3% (n=39) females smoke almost every day of the week.

Do you smoke c will you describ	-		How will	you descr gender	ibe your	Total
Crosstabulation	Crosstabulation		Male	Female	Prefer not to say	
		Count	152	88	1	241
	yes, regularly Go to 2.	% within Do you smoke cigarettes now?	63.1%	36.5%	0.4%	100.0%
		Count	82	53	1	136
Do you smoke cigarettes now?	no, Go to 4	% within Do you smoke cigarettes now?	60.3%	39.0%	0.7%	100.0%
		Count	67	70	4	141
	Occasion ally, go to 3	% within Do you smoke cigarettes now?	47.5%	49.6%	2.8%	100.0%
		Count	301	211	6	518
Total		% within Do you smoke cigarettes now?	58.1%	40.7%	1.2%	100.0%

# Table 4. 6: Table displaying the frequency of tobacco use per respondents

	nany days a v garettes? * H	-	How will you describe your gender			Total
describe	your gender (	Cross-tabulation	Male	Femal e	Prefer not to say	
	usually on	Count % within On how	47	27	4	78
On how	one day or less	many days a week do you smoke cigarettes?	60.3%	34.6 %	5.1%	100.0%
many		Count	93	78	2	173
days a week do you smoke cigarettes	usually on 2 to 4 days	% within On how many days a week do you smoke cigarettes?	53.8%	45.1 %	1.2%	100.0%
?		Count	62	39	0	101
	almost every day	week do you smoke	61.4%	38.6 %	0.0%	100.0%
		cigarettes? Count	202	144	6	352
Total		% within On how many days a week do you smoke cigarettes?	57.4%	40.9 %	1.7%	100.0%

*Source: Developed for the study* 

While the age tobacco use behaviour becomes established in a user varies across countries, there is a consensus that regular tobacco smoking tends to start between the age of 12 and 25. Some of the factors associated with tobacco use among young teenagers and young adults include the social and physical environment, biological and genetic factors, personal experience, self-image and self-esteem and socio-economic factors. The question asked to determine tobacco use establishment among the respondents showed that 69.1% (n=363) of the respondents started smoking between the ages of 12

and 25. Likewise, a cross-tabulation between educational level and current tobacco use showed that tobacco use is prevalent among undergraduates, college students and those without a degree at 30.5% (n=73), 15.1% (n=36) and 13.% (31) respectively. Similarly, a cross-tabulation between income and current tobacco use behaviour showed that tobacco use is prevalent between low- and medium-income earners than high-income earners at 31.8% (n=75), 26.7% (n=63), and 2.1% (n=5) respectively.

#### 4.2.3 Analysis of scale reliability and validity

After establishing the characteristics of the respondents, the next step was to test the reliability of the Likert scales generated for this study. As mentioned in the previous chapter, the reliability measure helps identify the stability of the measurement tools. While there are several statistical tools available to measure reliability, the Cronbach's alpha was utilised for this study to measure the internal consistency of the scale. It allowed the researcher to be sure that the items included in the scale measured what they were set out to measure (that is, the underlying construct). Cronbach's alpha is commonly applied to Likert scale questions where the researcher intends to determine the reliability of the scale (Easterby- Smith et al., 2015). It is recommended that for items of a variable to be considered to have high internal consistency, the reliability coefficient should be 0.7 or greater for most social science research situations. The results from the test of reliability for each of the Likert scales considered in this study (that is, tobacco use behavioural establishment, Social network, Symbolic meaning, Self-efficacy, Self-concept, Tobacco use deterrent, Dimension of culture and Globalisation) are discussed in the following subsections.

#### 4.2.3.1 Tobacco use behavioural establishment

The items generated to measure tobacco use behavioural establishment was adopted from the Global Adult Tobacco Survey (GATS) core questionnaire (Pallpudi et al., 2010). While the scale has been validated and proven to be reliable, it was necessary to check again that it fits the current study. The table below shows the reliability test result for tobacco use behavioural establishment scale. The scale had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.876.

#### **Reliability Statistics**

Imputation	Cronbach's	Cronbach's	N of
Number	Alpha	Alpha	Items
		Based on	
		Standardise	
		d Items	
Original data	.876	.877	14

	item-i otal Statistics						
Imputation Nur	mber	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted	
Original data	Your parents smoke/smoked.	26.36	106.914	.566	.546	.867	
	Your parents or other close relatives encouraged you to try it.	25.95	105.979	.643	.624	.862	
	Many of your friends smoke/smoked.	25.63	105.832	.626	.615	.863	
	Many of your friends encouraged you to try it.	25.43	106.122	.628	.648	.863	
	You knew someone that smoked that you looked up to and respected (i.e. teacher, sports star, neighbor, someone at church, etc.).	25.40	106.011	.657	.568	.862	
	Television/Movie advertising.	25.97	112.185	.400	.676	.875	
	Advertising in stores, windows, sidewalk signs, etc.	25.94	114.146	.342	.656	.878	
	The rebellious side of you.	25.72	112.524	.418	.388	.874	
	You believe smoking is a sign of maturity.	25.32	108.392	.634	.539	.864	
	You have/had many problems in your life, and at the time you started smoking, you didn't care if it might hurt or kill you.	25.35	110.006	.513	.491	.869	
	You were able to buy or obtain cigarettes easily as a minor.	25.31	109.870	.548	.563	.867	
	It was cheap to purchase cigarette.	25.45	109.773	.553	.514	.867	
	You see people around smoke to calm their nerves whenever they are stressed.	25.21	110.575	.547	.548	.868	
	You see people smoke because of the the belief held of the benefit of smoking (e.g. The smoke from tobacco drives away evil spirits or as a sign of strength).	25.25	110.969	.507	.435	.869	

#### Item-Total Statistics

#### 4.2.3.2 Social network

Following the same procedure as above, the reliability of the social network scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.792.

Reliability Statistics						
Imputation	Cronbach's	Cronbach's	N of			
Number	Alpha	Alpha	Items			
		Based on				
		Standardise				
		d Items				
Original data	.792	.790	9			

Imputation Nu	mber	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Original data	l always consider others around me when smoking and don't smoke in front of children or non- smokers, unless they say it's okay.	16.96	35.222	.459	.255	.774
	l abide by the law of the land, if it's legal to smoke, l do. If it's illegal to smoke, l don't.	17.56	35.277	.450	.365	.775
	It's my right to smoke most anywhere I want, if others don't like it, they have the right to leave	17.44	34.001	.518	.397	.766
	l have kids (or if I have kids), although they know I smoke, I try not to smoke in front of them.	17.25	32.651	.619	.518	.751
	l am conscious not to let some people know that l smoke (i.e. parents, teachers, boss, spouse, doctor, etc.).	17.18	33.566	.617	.456	.753
	l do not hide the fact that l smoke from anyone.	17.25	35.711	.436	.369	.777
	l do not believe secondhand smoke hurts anyone in any way.	17.30	35.519	.445	.382	.776
	l have supported the motion regarding smoking ban	17.35	36.506	.382	.218	.784
	I have objected the motion regarding smoking ban	17.44	36.791	.385	.246	.783

## 4.2.3.3 Symbolic meaning

Following the same procedure as above, the reliability for the symbolic meaning scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.820.

Imputation	Cronbach's	Cronbach's	N of
Number	Alpha	Alpha	Items
		Based on	
		Standardise	
		d Items	
Original data	.820	.822	8

Imputation Number		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Original data	Tobacco smoking help me to relate with the different roles I play in life (employer/employee/pare nt /colleague etc).	15.51	29.462	.504	.407	.806
	Smoking gives me life fulfillment.	15.40	29.980	.624	.486	.789
	l smoke tobacco but l don't like it.	15.57	31.194	.455	.279	.811
	l know tobacco smoking is bad and harmful to my body, but I still smoke.	15.21	30.478	.564	.379	.796
	Smoking tobacco is best way for me to relax.	15.23	29.751	.572	.432	.795
	l always make sure I have tobacco with me.	15.32	30.143	.558	.500	.797
	Tobacco smoking is positive and necessary part of my everyday life.	15.44	30.583	.537	.432	.800
	l feel like I am part of a group when I'm around smokers	15.10	30.208	.520	.310	.802

#### 4.2.3.4 Self-esteem

Following the same procedure as above, the reliability of the self-esteem scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.733.

Imputation	Cronbach's	Cronbach's Alpha	N of					
Number	Alpha	Based on	Items					
		Standardised Items						
Original data	.733	.737	10					

Imputation Nu	mber	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Original data	On the whole, I am satisfied with myself.	19.00	34.155	.450	.406	.702
	At times I think I am no good at all.	19.71	36.290	.284	.303	.729
	l feel that I have a number of good qualities.	18.86	34.747	.459	.487	.701
	l am able to do things as well as most other people.	18.87	34.230	.493	.518	.696
	l feel I do not have much to be proud of.	19.59	34.749	.371	.444	.715
	l certainly feel useless at times.	19.73	35.164	.355	.467	.718
	l feel that I'm a person of worth, at least on an equal plane with others.	18.90	34.419	.504	.405	.695
	l wish I could have more respect for myself.	18.85	35.831	.408	.372	.710
	All in all, I am inclined to feel that I am a failure.	19.56	36.667	.294	.199	.726
	l take a positive attitude toward myself.	18.74	36.076	.334	.271	.720

#### 4.2.3.5.1 Self-concept

#### **Positive dimension**

Following the same procedure as above, the reliability for the self-concept (positive dimension) scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.827.

Reliability Statistics							
Imputation	Cronbach's	Cronbach's	N of				
Number	Alpha	Alpha	Items				
		Based on					
		Standardise					
		d Items					
Original data	.827	.825	7				

Imputation Nu	mber	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Original data	What happens in life is largely a matter of chance	13.75	25.319	.471	.347	.820
	l sometimes feel I have little control over the direction my life is taking	13.84	23.613	.639	.474	.792
	For me, one day is no different from another	13.75	23.163	.668	.509	.787
	The world is too complicated for me to understand	13.76	24.432	.574	.409	.803
	The future is too unsure for a person to plan ahead.	13.62	23.600	.623	.418	.795
	l find it difficult to be optimistic about anything nowadays	13.67	24.073	.623	.471	.795
	I have little influence over things that happen to me	13.55	26.894	.401	.277	.829

#### Negative dimension

Following the same procedure as above, the reliability for the self-concept (negative dimension) scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.870.

Imputation	Cronbach's	Cronbach's	N of
Number	Alpha	Alpha	Items
		Based on	
		Standardise	
		d Items	
Original data	.870	.870	6

Imputation Nu	mber	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Original data	My smoking makes me respect myself less	9.00	23.541	.594	.414	.861
	l look ridiculous while smoking	8.96	22.586	.741	.627	.836
	l feel guilty about smoking	8.85	21.466	.757	.617	.832
	lf I was not so weak, I could quit smoking	8.86	22.556	.702	.530	.842
	l think people should 'bash' smoking	8.59	23.540	.672	.483	.848
	I hate the way I smell after smoking	8.49	23.994	.558	.384	.867

#### 4.2.3.6 Tobacco use deterrent

Following the same procedure as above, the reliability for the dimension of culture scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.799.

Reliability Statistics						
Imputation Number	Cronbach's Alpha	Cronbach's Alpha	N of Items			
Number	Арна	Based on	Items			
		Standardise				
		d Items				
Original data	.799	.806	7			

		item-T	otal Statistics			
Imputation Nur	mber	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Original data	High price of cigarette	12.55	27.028	.418	.290	.794
	Disapproval of friends/relative	11.96	24.580	.638	.536	.753
	Health reasons	11.59	24.861	.672	.612	.748
	Concern over the health of others in the household	11.52	24.799	.696	.665	.745
	Concern about future health risks	11.60	24.380	.682	.643	.745
	Restricted smoking law	11.93	26.288	.492	.270	.780
	It is nothing to do anymore	12.27	29.437	.199	.112	.835

#### 4.2.3.7 Globalisation

Following the same procedure as above, the reliability for the globalisation scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.765

#### 257

### **Reliability Statistics**

Imputation	Cronbach's	Cronbach's	N of
Number	Alpha	Alpha	Items
		Based on	
		Standardise	
		d Items	
Original data	.765	.769	8

		Item-Te	otal Statistics			
Imputation Nu	mber	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Original data	Seeing people smoke in a public place does not bother me.	15.10	26.829	.424	.464	.747
	Seeing people smoke in prohibited places does not bother me.	15.08	26.632	.449	.451	.742
	l have received advice from friends and family to quit smoking.	14.82	25.766	.570	.405	.721
	Seeing tobacco use warning messages have impacted positively on my smoking habit.	14.81	25.839	.521	.344	.729
	Tobacco smoking is a lifestyle to me.	14.87	26.190	.541	.377	.727
	Human interaction and interconnectivity play a critical role in my smoking behaviour	14.76	26.448	.532	.405	.729
	l watch/observe how others use tobacco, and this impact on my smoking behaviour	14.67	27.199	.447	.381	.743
	l don't feel comfortable smoking tobacco because it has lost its social acceptance.	14.98	28.557	.258	.149	.778

#### 4.2.3.8 Dimension of culture

Following the same procedure as above, the reliability for the globalisation scale was conducted. The scale also had a high level of internal consistency, as determined by a Cronbach's alpha value of 0.891.

#### 258

Reliability Statistics				
Imputation	Cronbach's	Cronbach's	N of	
Number	Alpha	Alpha	Items	
		Based on		
		Standardise		
		d Items		
Original data	.891	.894	18	

	-		lai Slalis			
Imputation	n Number	Scale	Scale	Corrected	Squared	Cronbach's
		Mean if	Variance	Item-Total	Multiple	Alpha if
		Item	if Item	Correlation	Correlation	Item
		Deleted	Deleted			Deleted
	I live in a society where orderliness and consistency are stressed, even at the expense of experimentation and innovation.	43.21	148.446	.469	.590	.887
Original	I live in a society where societal requirements and instructions are spelt out in detail to citizens what they are expected to do	43.27	150.056	.403	.644	.890
data	I live in a society where followers are expected to obey their leaders without question	43.43	151.264	.327	.469	.893
	I live in a society where power is concentrated at the top	42.59	143.866	.632	.457	.882
	I live in a society where leaders encourage group loyalty even if individual goals suffer	42.96	147.907	.445	.503	.888

The economic system in the society I live in is designed to maximise individual interest	42.80	146.027	.572	.516	.884
In my society, children take pride in the individual accomplishment of their parents In my society,	42.53	145.701	.613	.573	.882
parents take pride in the individual accomplishment of their children In my society,	42.47	147.221	.616	.622	.883
boys are encouraged more than girls to attain a higher education	42.54	146.860	.556	.522	.884
In my society, men are likely to serve in a position of high office	42.43	145.332	.619	.538	.882
In this society, people are generally nonassertive	42.90	147.049	.492	.416	.886
In this society, people are generally tough	42.83	144.891	.568	.520	.884
In this society, the accepted norm is to plan for the future	42.49	145.922	.641	.532	.882

In this society, people place more emphasis on solving current problems	42.71	144.905	.629	.547	.882
In this society, students are encouraged to strive for continuously improved performance	42.66	146.245	.597	.537	.883
In this society, people are rewarded for excellent performance	42.83	148.162	.514	.470	.886
In this society, people are generally very concerned about others	43.07	149.121	.500	.437	.886
In this society, people are generally not at all sensitive to others	43.11	151.902	.369	.285	.890

#### 4.2.4 The descriptive analysis of measurement scale

This section provides the descriptive information from the measurement scale for this study. The measurement was undertaken as part of the survey to measure the influence macro-environmental, and macro-environmental factors have on tobacco use behaviour. The measurement scale consisted of 87 items for nine variables, as highlighted in the previous section. As a 'Likert scale type of items', each item was in five-point points that indicated the degree of agreement or disagreement with a statement in ascending order. '1' indicated strongly disagree (or not important at all), '2' indicated disagree (or slightly important), '3' indicated neutral, '4' indicated agree (or somewhat important), and '5' indicated strongly agree (or extremely important). While the response categories in Likert scales have a rank order, it is advised not to presume that the interval between values are equal. Thus, the mean is said to be inappropriate for ordinal data (Jamieson, 2004). It is recommended that Likert scale analysis is presented by summarising its results using media or mode, with mode considered to be more suitable and easier to interpret. Likewise, the distribution of observation is recommended to be displayed in a bar chart. Accordingly, the descriptive information for the measurement scale is presented as follows.

### 4.2.4.1 The result for Tobacco use behavioural intention

The outcome of the factors that tend to influence tobacco use behaviour is illustrated in table 4.7. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure tobacco use intention. The factors including peer group, societal role model, a sign of maturity, personal experience, symbolic meaning and benefit attachment to tobacco appeared to influence tobacco use intentions. This finding conforms to prior literature on factors that influence tobacco use behaviour.

Statistics				
Items	N Medi		Medi	Mod
	Valid	Missin	an	е
		g		
Your parents smoke/smoked.	311 7	3	1.00	0
Your parents or other close relatives encouraged you to try it.	311 3	7	1.00	1
Many of your friend's smoke/smoked.	311 5	5	2.00	3
Many of your friends encouraged you to try it.	311 3	7	2.00	3
You knew someone that smoked that you looked up to and respected (i.e. teacher, sports star, neighbour, someone at church, etc.).	311 4	6	2.00	3
Television/Movie advertising.	310 9	11	1.47	0

Advertising in stores, windows, sidewalk signs, etc.	311 3	7	2.00	0
The rebellious side of you.	310 4	16	2.00	2
You believe smoking is a sign of maturity.	310 8	12	2.00	3
You have/had many problems in your life, and at the time you started smoking, you didn't care if it might hurt or kill you.	310 8	12	2.23	3
You were able to buy or obtain cigarettes easily as a minor.	311 3	7	2.00	2
It was cheap to purchase cigarette.	311 1	9	2.00	2
You see people around smoke to calm their nerves whenever they are stressed.	310 6	14	3.00	3
You see people smoke because of the belief held of the benefit of smoking (e.g. The smoke from tobacco drives away evil spirits or as a sign of strength).	311 6	4	3.00	3

**Source:** Generated for the study

### 4.2.4.2 The result on social network

The outcome of the social network on tobacco use intention is illuminated in table 4.8. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure social network. Although there seemed to be a positive consciousness about smoking around people such as children or non-smokers, it appeared the consciousness leaned more towards social pressure than the impact of government intervention to curb tobacco use. Likewise, while there seemed to be positive awareness of the dangers associated with tobacco use, it appeared not to be enough to dissuade people from smoking, as figures from this research suggested that many people still feel indifferent about the consequence of tobacco use.

### Table 4. 8: Table displaying the result on the social network

Items		N	Medi	Mod
	Valid	Missin	an	е
		g		
I always consider others around me when smoking and don't smoke in front of children or non-smokers, unless they say it's okay.	311 6	4	3.00	3
I abide by the law of the land, if it's legal to smoke, I do. If it's illegal to smoke, I don't.	310 9	11	2.00	1
It's my right to smoke most anywhere I want, if others don't like it, they have the right to leave	311 1	9	2.00	2
I have kids (or if I have kids), although they know I smoke, I try not to smoke in front of them.	311 0	10	2.00	2
I am conscious not to let some people know that I smoke (i.e. parents, teachers, boss, spouse, doctor, etc.).	311 2	8	2.00	3
I do not hide the fact that I smoke from anyone.	311 0	10	2.00	2
I do not believe secondhand smoke hurts anyone in any way.	310 6	14	2.00	2
I have supported the motion regarding the smoking ban	310 2	18	2.00	2
I have objected the motion regarding the smoking ban	311 0	10	2.00	2

#### Statistics

**Source:** Generated for the study

#### 4.2.4.3 The results for Symbolic meaning

The outcome of symbolic meaning on tobacco use intention is illustrated in table 4.9. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure symbolic meaning. It appeared that as well as people attaching benefits to tobacco use, it also served as a symbolic meaning for many of its users. Many have reported that smoking helped them relate with different roles of their daily activities, including interpersonal relationship at work and home. Whereas it served as a leisure activity for others.

Statistics				
Items	N		Medi	Mod
	Valid	Missin	an	е
		g		
Tobacco smoking helps me to relate with the different roles I play in life (employer/employee/parent /colleague etc).	311 4	6	2.00	3
Smoking gives me life fulfilment.	311 3	7	2.00	3
I smoke tobacco but I don't like it.	310 9	11	2.00	2
I know tobacco smoking is bad and harmful to my body, but I still smoke.	311 0	10	2.00	1
Smoking tobacco is the best way for me to relax.	311 3	7	3.00	3
I always make sure I have tobacco with me.	310 8	12	2.00	3
Tobacco smoking is a positive and necessary part of my everyday life.	311 3	7	2.00	2
I feel like I am part of a group when I'm around smokers	311 8	2	3.00	3

Table 4. 9: Table displaying the result from the symbolic meaning

Source: Generated for the study

## 4.2.4.4 Results for Self-esteem

The outcome of self-esteem on tobacco use intention is illuminated in table 4.10. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure self-esteem. Studies of the relationship between self-esteem and tobacco use behaviour have posited low-level self-esteem in people, particularly adolescents, to have a strong link to tobacco use (Khodayari et al., 2018). Conversely, high-level self-esteem is posited to lead to reduced levels of smoking. However, the impact of high-level self-esteem is suggested to vary across gender as it may lead to an increase in bravery in females that can cause an increase in tobacco use behaviour. While it is out of the scope of this study to analyse self-esteem on a gender basis, and its impact on tobacco use behaviour, it appeared that the self-esteem of the participants

is high. Thus, it will be easy to reduce their tobacco use behaviour. Going by Hattie (1992, p.54), 'to have high self-esteem implies both that we consider aspects of our life as important, and that we have the confidence to fulfil our expectations.

Statistics			-	
Items		N	Medi	Mod
	Valid	Missin	an	е
		g		
On the whole, I am satisfied with myself.	311 0	10	3.00	3
At times I think I am no good at all.	310 5	15	3.00	4
I feel that I have a number of good qualities.	311 6	4	3.00	3
I am able to do things as well as most other people.	311 4	6	3.00	3
I feel I do not have much to be proud of.	310 6	14	2.92	4
I certainly feel useless at times.	309 7	23	3.00	4
I feel that I'm a person of worth, at least on an equal plane with others.	311 6	4	3.00	3
I wish I could have more respect for myself.	311 4	6	1.00	1
All in all, I am inclined to feel that I am a failure.	308 0	40	2.00	2
I take a positive attitude toward myself.	311 4	6	3.00	3

Statistics

**Source:** Generated for the study

## 4.2.4.5 The result on self-concept

#### **Positive dimension**

The outcome for the positive dimension of self-concept on tobacco use intention is illustrated in table 4.11. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive

frequency statistic for the mode of the items used to measure positive dimensions of self-concept. Going by Sert, Bektas and Ozturk, (2014), a person with a positive self-concept is posited to have a low perception of smoking pros, and a high perception of smoking cons. That is, a person with a high selfconcept has a low benefit perception and a high harm perception regarding tobacco use. The result of the positive dimension of self-concept may explain why respondents in this research feel indifferent about the consequence of tobacco use, as the results show they exhibit a low self-concept.

Table 4. 11: Table displaying	g findings from	the self-concept (p	ositive
dimension)			

Statistics				
Items	Ν		Medi	Mod
	Valid	Missin	an	е
		g		
What happens in life is largely a matter of chance	311 0	10	3.00	3
I sometimes feel I have little control over the direction my life is taking	311 5	5	2.00	1
For me, one day is no different from another	311 7	3	2.00	3
The world is too complicated for me to understand	311 2	8	2.00	1
The future is too unsure for a person to plan ahead.	311 5	5	1.00	1
I find it difficult to be optimistic about anything nowadays	310 4	16	2.00	1
I have little influence over things that happen to me	311 8	2	1.00	1

Source: Generated for the study

#### **Negative dimension**

The outcome of the negative dimension of self-concept on tobacco use intention is illustrated in table 4.12. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure the negative dimension of self-concept. Going by Snow and Bruce (2003), there is an established link between a low score on a range of self-concept dimensions and an increased risk of smoking. Likewise, Frydenberg and Lewis (1994) suggest that tobacco users are most likely to use tobacco as a productive coping strategy to deal with stress. The findings below as with that above strengthens the argument on self-concept and tobacco use behaviour.

Table 4. 12:	Table	displaying	result	from	the	self-concept	(negative
dimension)							

Statistics				
Items	Ν		Medi	Mod
	Valid	Missin	an	е
		g		
My smoking makes me respect myself less	311 2	8	3.00	3
I look ridiculous while smoking	311 2	8	2.00	2
I feel guilty about smoking	311 1	9	2.00	2
If I was not so weak, I could quit smoking	311 3	7	2.00	2
I think people should 'bash' smoking	310 0	20	2.00	2
I hate the way I smell after smoking	310 9	11	2.00	2

**Source:** Generated for the study

#### 4.2.4.6 The result of Tobacco use deterrent

The outcome for tobacco use deterrent on tobacco use intention is illustrated in table 4.13. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure tobacco use deterrent. Studies have demonstrated that the high price of cigarettes dissuades people engaging in tobacco use. However, the result here showed otherwise, as the high price of tobacco does not appear to influence tobacco use behaviour. A justification for this may be the relatively low cost of tobacco products as the price of a cigarette pack in Nigeria ranges between  $\pounds$ 0.55 to  $\pounds$ 1. Likewise, cigarettes can be bought in pieces of sticks. Notably, health concerns appeared to have a positive impact on deterring tobacco use, as results showed that people might stop tobacco use due to health concern for oneself and others. The awareness of the harm caused by tobacco use has been established to lead to shaping social norms surroundings, that in return cause a downturn in smoking prevalence.

Statistics				
Items	Ν		Medi	Mod
	Valid	Missin	an	е
		g		
High price of cigarettes	310	16	1.00	0
Thigh price of eightettes	4	10	1.00	Ŭ
Disapproval of friends/relative	310 9	11	2.00	1
	310			
Health reasons	6	14	2.00	3
Concern over the health of others in the household	310	13	3.00	3
concern over the health of others in the household	7	15	5.00	J
Concern about future health risks	310	13	3.00	3
	/ 309			
Restricted smoking law	309	27	2.00	2
It is nothing to do anymoro	308	36	2.00	2
It is nothing to do anymore	4	30	2.00	Z

**Source:** Generated for the study

#### 4.2.4.7 The result on globalisation

The outcome for globalisation on tobacco use intention is illustrated in table 4.14. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure globalisation. The findings showed that interrelationship and exchange of information and idea played a significant role in determining tobacco use behaviour. These are the fundamental characteristics of globalisation because it allows the exchange of information, ideas, culture and interrelationship among people, regardless of location.

Statistics					
Items	Ν		Medi	Mod	
	Valid	Missin	an	е	
		g			
Seeing people smoke in a public place does not bother me.	309 2	28	2.00	2	
Seeing people smoke in prohibited places does not bother me.	309 7	23	2.00	2	
I have received advice from friends and family to quit smoking.	310 1	19	2.00	2	
Seeing tobacco use of warning messages have impacted positively on my smoking habit.	309 8	22	2.00	3	
Tobacco smoking is a lifestyle for me.	309 6	24	2.00	1	
Human interaction and interconnectivity play a critical role in my smoking behaviour	309 3	27	2.00	3	
I watch/observe how others use tobacco and this impact on my smoking behaviour	309 9	21	2.00	3	
I don't feel comfortable smoking tobacco because it has lost its social acceptance.	310 0	20	2.00	3	

## Table 4. 14: Table displaying results from the globalisation

**Source:** Generated for the study

#### 4.2.4.8 Result on the cultural dimension

The outcome for the cultural dimension of tobacco use intention is illustrated in table 4.15. As stated in the previous section, the median or mode is recommended for presenting findings from the Likert scale. Thus, the data handling software IBM SPSS was used to conduct a descriptive frequency statistic for the mode of the items used to measure cultural dimension. It is evident from the response that they live in a collectivist society, with a highpower distance culture. Activities are performed in a circle, demonstrating that information is passed from one generation to another. Lastly, their society is characterised by a masculine culture, where men are thought to be assertive, tough and materialistic (focus on material success), while women are thought to be more tender, discrete, and focused on their quality of life.

Statistics				
Items		Ν		Mod
	Valid	Missin g	an	е
I live in a society where orderliness and consistency are stressed, even at the expense of experimentation and innovation.	309 8	22	2.00	3
I live in a society where societal requirements and instructions are spelt out in details to citizens what they are expected to do	311 6	4	2.00	3
I live in a society where followers are expected to obey their leaders without questions	311 7	3	2.00	3
I live in a society where power concentrated at the top	310 7	13	3.00	4
I live in a society where leaders encourage group loyalty even if individual goals suffer	311 4	6	3.00	3
The economic system in the society I live in is designed to maximise individual interest	311 4	6	3.00	3
In my society, children take pride in the individual accomplishment of their parents	311 1	9	3.00	3
In my society, parents take pride in the individual accomplishment of their children	311 3	7	3.00	3
In my society, boys are encouraged more than girls to attain a higher education	311 1	9	3.00	3
In my society, men are likely to serve in a position of high office	310 5	15	3.00	4
In this society, people are generally nonassertive	310 4	16	3.00	3
In this society, people are generally tough	310 4	16	3.00	3
In this society, the accepted norm is to plan for the future	310 5	15	3.00	3
In this society, people place more emphasis on solving current problems	310 3	17	3.00	3
In this society, students are encouraged to strive for continuously improved performance	311 2	8	3.00	3
In this society, people are rewarded for excellent performance	310 7	13	3.00	3

# Table 4. 15: Table displaying results from the cultural dimension

In this society, people are generally very concerned about others	310 2	18	2.00	2
In this society, people are generally not at all sensitive to others	310 9	11	2.00	2

*Source: Generated for the study* 

# 4.2.5 The report of statistical tests

The literature has revealed that much of the behavioural research depends on the critical interplay between theory and data. According to Braun and Oswald (2011), relevant theory helps determine appropriate criteria and the variables that predict them. Consequently, empirical results that are based on good measures help to inform and refine the theory. The linear regression appears to be a common tool for creating and testing predicted models. Thus, it was utilised for the statistical test of this study. The datasets were randomly split into two sets: training and test data sets. According to Xu and Goodacre (2018), it is recommended that training datasets be significantly larger than the test datasets. Thus, the data sets for this study were split unevenly. The first group of random data sets were used to develop the proposed conceptual model. It investigates the association between tobacco use intention (dependent variable), and social network, symbolic meaning, self-efficacy, self-concept, tobacco use deterrent, the dimension of culture and globalisation (independent variables). The second group of random data sets were used to test that the model fits. It is believed that using the test dataset helps avoid errors such as overfitting. Lastly, the trained model was run against the test data to determine how well the model performed.

# 4.2.5.1 correlation analysis

According to Osborne and Waters (2002), for regression analysis to be considered reliable and valid, some assumptions need to be met when conducting a multiple regression. These include testing whether the relationship between independent variables and the dependent variable is linear. The scatterplots were plotted for the dependent variables and each of the independent variables. This exercise allowed for the visual observation of the existing relationship between the variables. Going by Gogtay and Thatte (2016), a linear correlation may be positive or negative depending on the direction of the line. Upon the observation of the relationship between the variables for this research, it appeared that a positive linear correlation existed between all the independent and dependent variables (See: Appendix a).

Once it has been ascertained that there is a linear correlation among the variables, the normality test was then conducted. One common way of doing this is by conducting the Shapiro-Wilk's test for normality or abnormality in all the variable distribution. According to the null hypothesis of the Shapiro-Wilk's test, a variable is considered to be normally distributed if sig.>0.05 and is regarded as not normally distributed if the sig.<0.05. However, going by the result in figure 4.16, Shapiro is sig.<0.05. Thus, we assume that the variables are not evenly distributed.

		Kolm	nogorov-Smi	rnov <sup>a</sup>	Shapiro-Wilk			
Imputation Number		Statistic	df	Sig.	Statistic	df	Sig.	
Original data	Tobacco_Use_Intention	.066	256	.009	.982	256	.003	
	Social_network	.067	256	.008	.992	256	.157	
	Symbolic_meaning	.067	256	.008	.989	256	.043	
	Social_esteem_Scale	.058	256	.034	.981	256	.002	
	Self_concept_positive	.080	256	.000	.983	256	.004	
	Self_concept_negative	.068	256	.006	.984	256	.007	
	Tobacco_use_deterrent	.077	256	.001	.984	256	.005	
	Globalisation	.091	256	.000	.987	256	.021	
	Dimension_of_culture	.088	256	.000	.952	256	.000	

Tests of Normality

Table 4. 16: Table displaying test of normality

# a. Lilliefors Significance Correction *Source: Generated for the study*

According to Schober et al., (2018), if the variables appear abnormally distributed, then the Spearman correlation needs to be utilised to measure the direction and strength of the relationship between independent and dependent variables. The Spearman's rank-order correlation coefficient is a nonparametric measure of strength and direction of association that exists between variables measured on at least an ordinal scale (Statistics, 2015). It is denoted by symbol  $r_s$ , and rank from -1(that is a perfect negative linear relationship) to +1(that is a perfect positive relationship). 0(zero) on the other hand, denotes that there is no relationship between dependent and independent variables. In order to distinguish between strong and weak correlation, Cohen (1988) argued that the closer coefficient value is to zero, the weaker the correlation.

Likewise, correlation coefficient  $r_s$  that ranges from 0.3 to 0.49 is considered medium, while the correlation coefficient  $r_s$  that ranges from 0.5 and above is considered strong.

					Correla	tions						
Imputation Nu	mber			Tobacco_Use _Intention	Social_networ k	Symbolic_me aning	Social_estee m_Scale	Self_concept_ positive	Self_concept_ negative	Tobacco_use _deterrent	Globalisation	Dimension_of _culture
Original data	Spearman's rho	Tobacco_Use_Intention	Correlation Coefficient	1.000	.394	.521	.329	.391	.134	.338	.345	.409
			Sig. (2-tailed)		.000	.000	.000	.000	.028	.000	.000	.000
			Ν	268	268	267	267	268	267	261	259	267
		Social_network	Correlation Coefficient	.394	1.000	.485	.485	.516	.319	.504	.328	.399
			Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
			Ν	268	268	267	267	268	267	261	259	267
		Symbolic_meaning	Correlation Coefficient	.521	.485	1.000	.441**	.453	.084	.406	.413	.404
			Sig. (2-tailed)	.000	.000		.000	.000	.170	.000	.000	.000
			Ν	267	267	267	267	267	266	260	258	266
		Social_esteem_Scale	Correlation Coefficient	.329	.485	.441**	1.000	.492	.279	.463	.466	.451
			Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
		Ν	267	267	267	267	267	266	260	258	266	
		Self_concept_positive	Correlation Coefficient	.391	.516	.453	.492**	1.000	.235	.428	.431	.591
			Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000
			Ν	268	268	267	267	268	267	261	259	267
		Self_concept_negative	Correlation Coefficient	.134	.319	.084	.279	.235	1.000	.314	.136	.252
			Sig. (2-tailed)	.028	.000	.170	.000	.000		.000	.029	.000
			Ν	267	267	266	266	267	267	260	259	266
		Tobacco_use_deterrent	Correlation Coefficient	.338	.504	.406	.463	.428	.314	1.000	.312	.450
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000
			Ν	261	261	260	260	261	260	261	258	260
		Globalisation	Correlation Coefficient	.345	.328	.413	.466	.431	.136	.312	1.000	.391
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.029	.000		.000
			Ν	259	259	258	258	259	259	258	259	258
		Dimension_of_culture	Correlation Coefficient	.409	.399	.404**	.451	.591	.252	.450	.391	1.000
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.
			Ν	267	267	266	266	267	266	260	258	267

. ...

### Table 4. 17: Table showing the correlation result

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Correlation is significant at the 0.05 level (2-tailed).

\*. Corr. is significant at .05 level 1-tail...

\*\*. Corr. is significant at .01 level 1-tail...

#### Source: Generated for the study

Subsequently, the result of the Spearman rank-order correlation test for the association between the dependent and independent variables appeared to be positive, indicating a statistically significant strong positive correlation between symbolic meaning ( $r_s = 0.521$ , n = 267, p < 0.001) and tobacco behavioural intention. Other independent variables including social network ( $r_s = 0.394$ , n = 268, p < 0.001), social esteem scale ( $r_s = 0.329$ , n = 267, p < 0.001), self-concept (positive dimension) ( $r_s = 0.391$ , n = 268, p < 0.001), tobacco use deterrent ( $r_s = 0.338$ , n = 261, p < 0.001), globalisation ( $r_s = 0.345$ , n = 259, p < 0.001) and cultural dimension ( $r_s = 0.409$ , n = 267, p < 0.001) showed a

moderately positive correlation with tobacco use behavioural intention. While self-concept (negative dimension) ( $r_s = 0.134$ , n = 267, p < 0.001) showed a weak positive correlation with tobacco use behaviour intention. Once it was established that there is a positive correlation between the dependent and independent variables, the multiple regression analysis was conducted to predict the values of the dependent variable based on the value of the independent variables.

### 4.2.5.2 Multiple regression analysis

According to Uyanik and Guler (2013), multiple analysis is the statistical analysis that is conducted to predict the value of a variable based on the value of two or more variables. Usually, the dependent variable is the variable that needs to be predicted by the independent variables. This exercise allowed the researcher to establish the overall fit of the model. Likewise, it enabled the researcher to establish the relative contribution of each of the predictors to the overall variance explained in the model (Statistics, 2015). The result of the regression was then used to test the posited hypothesis in research. The Durbin-Waston statistic was utilised to test that the residuals are independent or uncorrelated. The Durbin-Watson statistical analysis for this research is shown in table 4.18. According to Kenton (2019), the Durbin-Walson statistic test always has a value that ranges from 0 to 4.0. A value of 2.0 is thought to indicate no detection of autocorrelation and values from 2.0 to 4.0 indicate a negative autocorrelation.

# Table 4. 18: Table showing the Model summary

Model Summary"											
Imputation Number	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin- Watson
Original data	1	.520ª	.271	.268	.69531	.271	94.204	1	254	.000	
	2	.558 <sup>b</sup>	.312	.306	.67667	.041	15.181	1	253	.000	1.589

a. Predictors: (Constant), Symbolic\_meaning

b. Predictors: (Constant), Symbolic\_meaning, Dimension\_of\_culture

#### Source: Generated for the study

Going by the Dubin-Watson statistical report for this research as displayed above, it indicated there is positive independence of residuals, as the value of Durbin- Watson is closer to 2 (Durbin-Watson= 1.589) (Statistics, 2015). Another significant measure is the R square that denotes the coefficient of determination and a measure of the proportion of variance in the dependent variable that is explained by the independent variables in the model (Statistics, 2015). According to Frost (2019), the value of R-square is usually expressed from 0 to 100%. An R-square value of 0% indicates that the model does not explain any of the variations in the response variable around the mean. In contrast, 100% indicates that the model explains all the variation in the response variable around its means. Subsequently, it is said that the larger the R square, the better the regression model fits a research observation. Going by this, it appeared from the regression report that the model could explain 31.2% of the variance in tobacco use intention in Nigeria. R square for the overall model was 31.2% with an adjustable R square of 30.6%, a substantial effect, according to Cohen (1988).

The model was tested for multicollinearity by conducting the collinearity test. The result showed that none of the independent variables is highly correlated as the Pearson correlation showed that all the correlations are <0.8. As illustrated in table 4.21, the VIF scores were well below 10, and the tolerance scores were all above 0.2 (Statsitics, 2015). The test to check the variance of the residual showed that there was homoscedasticity. The visual inspection of the studentized residual suggested that as the predicted value increases (along the X-axis), the variation in the residuals is roughly similar (See appendix c). The test to check if the values of the residuals were normally distributed for this study suggested a violation as the data points as indicated in the P-P plot for the model showed that they hardly touch the diagonal line. Thus, it is suggested that the result be interpreted with caution. Lastly, to check no influential cases are biasing the model, Cook's distance values were checked to see that no value was over 1, which in this case, such instance did not occur.

# Table 4. 19: illuminates the assumptions tested from the multiple regression analysis for this study

Assumption	Findings.
Assumption #1: The relationship	The visual inspection of the scatterplot
between independent variables and the	for the relationship between the
dependent variable is linear.	dependent variable and each of the
	independent variables shows that the
	assumption was met (See appendix b).
Assumption #2: The statistical test for	The Shapiro-Wilk's test shows that the
normality.	variables are not evenly distributed since
	the sig.<0.05 for all variables. However,
	the Spearman rank-order demonstrated
	that there is a positive correlation
	between the dependent and independent
	variables.
Assumption #3: There is no	The analysis of the collinearity statistics
multicollinearity in the data.	demonstrates that the assumption was
	met, as the VIF scores were well below
	10 (1.893, 1.802, 1.910, 2.031, 1.247,
	1.663, 1.568 and 1.658 respectively),
	and the tolerance scores were above 0.2.
	(0.528, 0.555, 0.524, 0.492, 0.802,
	0.601, 0.638, and 0.603 respectively)
Assumption #4: The variance of the	The Durbin-Watson statistics showed
residuals is independent.	that this assumption was met, as the
	obtained value was close to 2 (Durbin-
	Watson = $1.704$ ).
Assumption #5: The variance of the	The standard predicted values were
residuals is constant.	plotted against the plot of standardised
	residuals, and the values showed no
	apparent signs of funnelling. Thus,
	suggesting that the assumption of
	homoscedasticity was met (See appendix
	c).
Assumption #6: The values of the	The result from the P-P plot for the model
residual are normally distributed.	suggested that the assumption of
	normality of the residuals may have been

	violated. However, there was no extreme
	deviation from the normality, suggesting
	that the violation is likely not to have a
	significant impact on the overall finding.
	Thus, the result is probably still valid but
	interpreted with caution.
Assumption #7: There are no influential	Going by the Cook's distance values, it
cases biasing the model.	appears that individual cases were not
	unduly influencing the model as the
	Cook's distance values were all under 1.

Source: Generated for the study

The ANOVA report presented in table 4.20 shows F (8,2247) = 15.160, p<0.001. It indicates the statistical significance of the model. In other words, the independent variables are a significant predictor of tobacco use intention at F (8,2247) = 15.160, p<0.001.

# Table 4. 20: Table displaying the ANOVA result

Imputation Number	Model		Sum of Squares	df	Mean Square	F	Sig.
Original data	1	Regression	55.436	8	6.929	15.160	.000 <sup>b</sup>
		Residual	112.904	247	.457		
		Total	168.339	255			

#### *Source: Generated for the study*

The coefficient table 4.21 below shows the factors that contributed to respondents' intention towards tobacco use. It appeared that symbolic meaning contributed the most to tobacco use intention.

		Coefficients <sup>a</sup>									
			Unstandardize	d Coefficients	Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
Imputation Number	Model		В	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
Original data	1	(Constant)	.105	.191		.548	.584	272	.481		
		Social_network	.032	.085	.027	.372	.710	136	.199	.513	1.949
		Symbolic_meaning	.406	.074	.368	5.524	.000	.261	.551	.612	1.635
		Social_esteem_Scale	008	.089	007	093	.926	183	.166	.517	1.935
		Self_concept_positive	.023	.072	.023	.323	.747	119	.166	.524	1.908
		Self_concept_negative	.039	.050	.044	.778	.437	060	.139	.832	1.202
		Tobacco_use_deterrent	.057	.064	.059	.887	.376	069	.183	.608	1.646
		Globalisation	.105	.074	.091	1.415	.158	041	.252	.663	1.508
		Dimension_of_culture	.174	.076	.156	2.284	.023	.024	.325	.581	1.722

# Table 4. 21: Table showing the result for the Coefficients

a. Dependent Variable: Tobacco\_Use\_Intention

Source: Generated for the study

Multiple regression was conducted to investigate whether the independent variables, including social network, symbolic meaning, self-efficacy, self-concept, tobacco use deterrent, the dimension of culture and globalisation could significantly predict tobacco use behavioural intention. The results of the regression suggested that the model explained 40.6% of the variance and that the model was a significant predictor of tobacco use behavioural intention, F (8,2247) = 15.160, p<0.001. Symbolic meaning contributed significantly to the model (B= 0.406, p<0.001). The cultural dimension (B=0.174, p<0.05), globalisation (B=0.105, p=0.158), tobacco use deterrent (B=0.057, p=0.376), self-concept (negative dimension) (B=0.039, p=0.437), social network (B=0.032, p=0.710), self-concept (positive dimension) (B=0.023, p=0.747), with a self-esteem scale coming out negative (B=-0.008, p=0.926) respectively did not contribute significantly to the model. The final predictive model was:

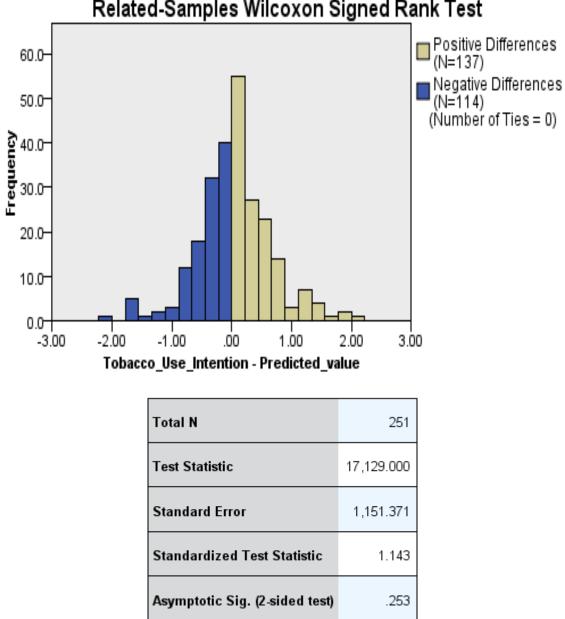
The information from the coefficient was substituted into regression *Tobacco* use intention =  $a+b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8$  as: *Tobacco use intention* = 0.105 + 0.032 (*sn*) + 0.406 (*sm*) + 0.023 (*scp*) + 0.039 (*scn*) + 0.057 (*tud*) + 0.105 (*glo*) + 0.174 (*dm*) - 0.008 (*ss*).

#### 4.2.5.3 Model predictive testing

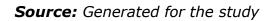
As mentioned in section 4.3, the datasets for this study were randomly split into two: the training and the testing datasets. It is recommended that onesample t-test be conducted to determine whether the sample of observation can be regenerated, or the sample comes from a population with a specific mean. In this case, a one-sample t-test was conducted to determine whether the model generated to predict tobacco use intention can be replicated in the population (Statisitics, 2015). The one-sample t-test is only applicable if certain assumptions are met. These include that: the dependent variables are measured in interval or ratio; the data is independent (that is, no correlated or related); there are no significant outliers; and that the dependent variable is normally distributed. Going by the findings from the previous sections, it appeared that the fourth assumption was violated. Thus, it is assumed that there is no statistically significant difference between observed and predicted values.

The training random sample datasets were examined for significant outliers, using the boxplot. It appeared significant outliers were identified. Thus, prompted the space use of Wilcox on signed-rank to investigate whether there is a median difference between paired observation. According to Statistics (2015), Wilcoxon signed-rank is applicable when the assumption of the normal distribution of variable has been violated. It involves comparing two sets of scores from the same participants and is applicable when individuals are subjected to more than one condition. The random testing dataset was used to test the Wilcoxon signed-rank, as displayed in figure 4.3. Subsequently, when initial tobacco use intention scores (observed score) were predicted scores, 137 scored positive difference, while 114 scored a negative difference. As observed in the histogram, it appeared that the difference scores were symmetrically distributed. The Wilcoxon signed-rank test showed that the difference scores were not statistically significant between tobacco use intension scores (Mdn=1.9286) and predicted value (Mdn=1.9915), Z=-1.143, p=0.253. The null hypothesis is retained. The result showed that there is no statistically significant difference in the median of difference scores between tobacco use intension and predicted scores in the sample tested.





Related-Samples Wilcoxon Signed Rank Test



#### 4.2.5.4 **Hypothesis test**

As stated in the latter part of the second chapter, the hypothesis for this study are as follows:

Hypothesis 1: The social network will affect tobacco use behaviour intention.

*Hypothesis 2:* The symbolic meaning will affect tobacco use behaviour intention.

Hypothesis 3: The person's trait will affect tobacco use behaviour.

Hypothesis 4: The tobacco use deterrent will affect tobacco use intention

Hypothesis 5: The cultural dimension will affect tobacco use intention

Hypothesis 6: Globalisation will affect tobacco use intention.

The multiple regression analysis was utilised to test the proposed hypothesis for this study. It can be recalled that the result was presented in section 4.3.2, and the result shows that symbolic meaning has the highest contributing variable in the model (B=0.406, p <0.001). The rest of the hypothesis result is as follow:

**Hypothesis 1:** The social network will affect tobacco use behaviour intention. The test of social network on tobacco use intention shows that B=0.032, p=0.584. Thus, the result will not support the hypothesis.

**Hypothesis 2:** The symbolic meaning will affect tobacco use behaviour intention. The test of symbolic meaning on tobacco use intention shows that B=0.406, p<0.001. Thus, the report supports the hypothesis that symbolic meaning will affect tobacco use intention.

**Hypothesis 3:** The personal traits will affect tobacco use behaviour. The test on personal trait on tobacco use behaviour shows that: B=-0.008, p=0.926 for self-esteem; B=0.023, p=0.747 for self-concept positive dimension; and B=0.039, p=0.437 for self-concept negative dimension. Thus, the result will not support the hypothesis.

**Hypothesis 4:** the tobacco use deterrent will affect tobacco use intention. The result of the tobacco use deterrent on tobacco use behaviour intention shows that B=0.057, p=0.376. Thus, the result will not support the hypothesis.

**Hypothesis 5:** The cultural dimension will affect tobacco use intention. The result of the cultural dimension of tobacco use behaviour shows that B=0.174, p<0.05. Thus, the result will not support the hypothesis.

**Hypothesis 6:** Globalisation will impact tobacco use intention. The findings on globalisation on tobacco use behaviour show that B=0.105, p=0.158. Thus, the result will not support the hypothesis.

Hypothesis	В	р	Result
H1: Social network $\rightarrow$	B=0.032	P=0.584	Not supported
Tobacco use intension.			
H2: Symbolic meaning $\rightarrow$	B=0.406	p<0.001	Supported
Tobacco use intension.			
H3: Personal traits $\rightarrow$	B=-0.008 (self-	p=0.926 (self-	Not supported
Tobacco use intension.	esteem);	esteem);	
	B=0.023(self-concept	(self-concept	
	positive dimension);	positive	
	B=0.039 (self-concept	dimension);	
	negative dimension)	p=0.437 (self-	
		concept negative	
		dimension)	
H4: Tobacco use	B=0.057	p=0.376	Not supported
deterrent $\rightarrow$ Tobacco use			
intension.			
H5: Cultural dimension $\rightarrow$	B=0.174	p<0.05	No supported
Tobacco use intension.			
H6: Globalisation $\rightarrow$	B=0.105	p=0.158	Not supported
Tobacco use intension.			

# Table 4. 22: The hypothesis test results

Source: Generated from this study

# 4.3 Limitation

As with many aspects of the research process, data collection is subjected to human behaviour, so it is expected to have some limits on its usability when obtained. Here the limitation of the data analysis for this study is discussed as follows. Incomplete data: One of the common limitations in research is missing values. Having missing values may limit its usability. Although the multiple imputations were utilised to fill in the missing data sets for the measurement scale for the research construct the same could not be applied to missing values from the measurement of general knowledge on the pattern of tobacco use, as this will lead to bias in the findings. Thus, the information gathered from the general knowledge on the pattern of tobacco use could not be correlated with another measurement scale. The same applied to the demographic characteristics.

#### 4.4 Summary

In this chapter, the findings from the descriptive qualitative and quantitative analysis were presented. The qualitative analysis started by providing the steps followed to analyze the primary data obtained, followed by presenting the findings from the primary research. The quantitative analysis, on the other hand, started by providing the steps followed for data cleaning before presenting the demographic characteristics of the participants for the survey. The measurement scale was then tested for interval reliability, followed by the descriptive statistics analysis of the measurement scale using the data handling software IBM SPSS. The multiple regression analysis was also covered in this chapter, and the hypothesis test result was presented. The next chapter presents the account of the contribution of the current study to previous studies, particularly in terms of theory, knowledge and practice.

#### **CHAPTER FIVE**

#### Discussion

#### 5.0 Introduction

The overall aim of the study was to translate the global culture theory in literature into reasonable control of tobacco use. It is interesting to note that this study is one of the few studies that investigated tobacco use behaviour through the lens of the impact the behavioural change in a region will have on another area. An attempt was made in the literature chapter to explore the relationship between global culture and tobacco use behaviour from the perspective of macro-environment and micro-environment, by elucidating literature review. Although there are few studies in this perspective, the critical inquiry of these as conducted in this study revealed that there is a subtle link between ongoing events in the global world and tobacco use behaviour. It appears that the growing globalisation allows for sharing of information, ideas, culture and interrelationship among people that subsequently influence behavioural intention (Dixon 2009). It is also interesting to note that while the global environment influences individual behaviour, contemporary decision making occurs against the backdrop of interpretation of the global environment, within the constraints of the local environment. This is particularly true of tobacco use intention, as revealed in this study.

The rest of this chapter presents the significant contribution of this study to knowledge, theory and practice, as it relates to tobacco use by synthesising the findings from the literature and survey exercise.

# **5.1** The findings from research questions and the research objectives

The discussion in this chapter starts by recapping the research problem as identified in chapter one. It can be recalled that nicotine and other additives are conceived as the major factors responsible for sustaining tobacco use behaviour and that the variation in tobacco use has a strong biological basis. However, evidence gathered has shown that nicotine and other tobacco additives, and biological factors cannot solely explain the phenomenon but lie in understanding tobacco use from the individual consumer characteristics. Tobacco use behaviour across populations varies around the world. Take, for instance, the male and the female population of tobacco use varies across countries. Generally, the rates of female vs male tobacco users in developed countries are typically only a few percentages apart with the male population slightly higher. Whereas in developing countries, the rates of male tobacco users are usually higher with very few rate of female tobacco users. Same applies to age, religions and cultural groups, to mention a few. The diversity in the prevalence of tobacco use across populations creates opportunities for advancing the scientific understanding of factors that influences tobacco use behaviour.

Several studies on tobacco use in many developing countries, including Nigeria, are centred around successful implementation of evidence-based measures proposed by the World Health Organisation. While these studies are generally conducted with good intention, behavioural issues that are particularly relevant to understanding the behavioural context of cigarette smoking on a global scale, such as cultural norm, cultural transference and the influence of global cultural shifts on tobacco consumption are hardly understood. In agreement with the works of Owusu-Dabo et al., (2010) and Jallow et al., (2019), the challenges associated with the transfer of evidence-based measures as indicated in the literature and the findings from respondents from this study include the absence of a clear strategy and legal framework for tobacco control, the lack of enforcement of existing directives for tobacco control, lack of national capacity for effective implementation of FCTC, the slow implementation of the FCTC, the lack of cessation program for existing tobacco users, and lack of prioritisation of tobacco control policy. These warranted this study; to investigate contemporary tobacco use behaviour in Nigeria. The general research questions associated with the study include:

- Since it appears the government of most developing countries lack the political will to enforce strict tobacco control policies (Stebbins, 1990), will the trend in global tobacco use regarding consumer behaviour have an impact on the prevalence of tobacco in developing countries?
- Moreover, if it does, what will be the nature of this impact? Ordinarily, the literature suggests that tobacco consumption in these regions will

dramatically increase because they are vulnerable new target markets for multinational tobacco companies (Cummings et al., 2014; Lawrence and Williams, 2015). However, the emerging argument suggests that the change in global attitude and behaviour towards tobacco will rub off on tobacco use behaviour in developing countries, thereby leading to a worldwide decline in its use.

• Lastly, how can the evidence from this research be utilised in developing more decisive measures to curb the use of tobacco in developing countries, given the detrimental impact tobacco use have on society?

In an attempt to answer the following research questions, the researcher outlined the following sets of objectives:

- To review literature and documents on tobacco consumption in developing countries, particularly in Nigeria to determine existing knowledge gaps
- To examine the level of awareness and enlightenment of consumers on the harm caused by tobacco use, and the impact on tobacco consumption.
- To investigate the impact global consumer culture has on the behaviour of tobacco use.
- To conclude from the empirical evidence that will further inform the debate and contribute to the discussion on tobacco control in developing countries.

The rest of this chapter is arranged in such a way that it answered the outlined research questions and provided the contribution to knowledge. As demonstrated in the latter part of the literature chapter, a conceptual model was developed to examine contemporary tobacco use behaviour, and this chapter builds around it. The main finding from the qualitative study showed that psychosocial constructs that include: personal beliefs, opinions, attitude and perception, and psychosocial factors that include: family and peer pressure, and use of other substances were some of the identified factors that influence tobacco use behaviour among the respondents. While this is so, it appeared that micro-level socio-environmental factors, including cultural identity, social network, symbolic meaning and social environment, play a

crucial role in the formation of psychosocial constructs that influence the tobacco use behaviour. Likewise, the macro socio-environmental factors such as media act as an active facilitator of tobacco use initiation and continuous use both at a micro-level and personal level.

A quantitative study was conducted to explore the concepts, theories and framework of the study empirically. It included the use of a measuring scale consisting of 87 items to examine the research constructs. It appeared that symbolic meaning has a direct relationship with tobacco use intention. Likewise, it appeared that there is a link between tobacco use intension and social network, personal traits, tobacco use deterrents, cultural dimension and globalisation. While this is so, it seemed the link is indirect, thereby having an indirect effect on tobacco use intention. The overview of the findings from the data analysis is presented in the subsequent section.

#### 5.1.1 Overview of findings from the qualitative research

The main aim of the study was to explore the impact of the change in the global tobacco environment on tobacco use behaviour in Nigeria. The study conceptualised tobacco use behaviour from the lens of consumer behaviour. The study further viewed consumer behaviour from the perspective of micro-environment (local environment) and macro-environment (global community). The findings from the research showed that the interplay among culture (the collective way of doing things), social environment (the place culture is formed and operational) and technology (elements that act as a bridge among different people from different cultural groups and social environment) influence tobacco use behaviour. Likewise, such influence is capable of facilitating the impact of the change in the global tobacco environment on tobacco use behaviour on a local level.

Culture, as described in the literature chapter, encompasses a broad spectrum of behavioural traits: from what a person holds dearly, to the person's way of living. It is said to be the reason people think and behave uniquely from one cultural group to another (Little 2012). The works of Adeloye et al., (2019); Ibrahim et al., (2014) and Aniwada et al., (2018) demonstrated disparity in the prevalence of tobacco use across the six geopolitical zones of Nigeria. The prevalence of tobacco use appears to be higher in the Northern part of the country when compared with other regions, and culture seems to play a crucial role in this instance. The Hausas predominantly dominate northern Nigeria, and the Yorubas mostly dominate the Western part of Nigeria. The Igbos predominately dominate the Eastern parts of Nigeria. It appears that the degree of cultural value associated with cigarette smoking is a key determinant of tobacco use prevalence across regions in Nigeria. The Hausa culture has a strong association with cigarette smoking in men, whereas the Yoruba culture kicks against such behaviour. The Igbos, on the other hand, practise tradition that encourages tobacco use, such that demand the provision of cigarettes at cultural ceremonies (Egbe et al., 2014).

In line with the above, findings from this study showed that culture played a crucial role in tobacco use initiation and continuous use. Respondents' reports indicated that the cultural value they associate with tobacco predetermined their tobacco use behaviour. As demonstrated in the literature chapter, humans are social being that negotiates with others actively and acts based on the interpretation of the perception of others of themselves. Thus form symbolic meaning that has a strong association with tobacco use behaviour. Accordingly, the respondents that reported to smoke cigarettes does so for various reasons ranging from the perception of cigarette smoking as being cool, to smoking to feel accepted as part of society. The social settings play an essential role in this process as the social meaning and expectation of roles and behaviour shared in a social setting can either encourage or discourage tobacco use behaviour (Goffman, 1990). It is interesting to note that the scope of the social network is more than ever varied, and one's immediate social network does not solely dictate behaviour. The more social networks an individual is exposed to, the more their behaviour is likely to be influenced. It justified the findings from this study on the preference of marijuana over cigarettes. Technology, in the form of media, plays a significant role in bridging societies and exposing people to multiple networks.

The finding from the study also showed socialisation practices to have a strong association with tobacco use. As demonstrated in the literature chapter, an individual's cultural orientation play an essential role in determining how an individual thinks, feel or act in a culturally determined way. They consist of individualism-collectivism, power distance, time orientation, and masculinityfemininity as discussed below. While it appears that all of these have the role they play in tobacco use, as demonstrated in the research findings, the power distance somewhat stands out. The power distance defines the power distribution within a cultural group. Subsequently, a low power distance culture is the one with equal power distribution, whereas a high power distance culture is the one with unequal power distribution. The findings from this study showed that Nigeria is characterised by high power distance culture, where much importance is put on subordinate respecting superiors without any justifications. This, in return, acts as a risk factor in the increasing access and acceptance of tobacco use.

Lastly, technology transforms culture in a powerful and unforeseen way, and such transformation applies to cultural change towards tobacco. As demonstrated in the literature chapter, the relationship between culture and environment on behaviour is socially constructed, and technology, in this case, dissolve the barrier among different people from different cultural groups and social environment. As such, exposure to multiple social networks and exchange of information in this magnitude causes the formation and change of firmly held culture. In agreement with this, findings suggested a shift in the way tobacco use is perceived due to media. Likewise, going by the prior study, cultural imperialism theory explained the way such change can occur. The exposure to western influence via the media is prevalent in Nigeria, particularly among the youths, and it tends to facilitate the imitation of tobacco use behavioural trends from the Western world.

#### 5.1.2 Overview of findings from the quantitative research

As identified in the preliminary study, macro-environment (globalisation, global culture, and media and technology) and the micro-environment (cultural identity, social network, personality, symbolic meaning and social environment) impact on tobacco use behaviour. Quantitative research was further conducted to explore the concepts, theory and framework for the study empirically. The data analysis was conducted across eight constructs, including tobacco use behavioural establishment, social network, symbolic meaning,

self-efficacy, self-concept, tobacco use deterrent, the dimension of culture and globalisation.

According to Shmueli (2010), the in-sample R square is used to determine the explanatory of a model. Thus, going by the number in figure 4.18, it is assumed that the extended model developed for this research allowed 31.2% of the variance in tobacco use intention in Nigeria to be explained. While the more extensive the R square determines how well the model fits an observation (that is the closer R square is to 100%), some field of study such as this study that tries to understand human behaviour generally have R square values less than 50%. This is because, unlike the physical process, people are difficult to predict. Thus, going by Cohen (1988), R square for the overall model has a substantial effect at 31.2%. The result of the data analysis in this research confirmed support for the hypotheses that symbolic meaning (B=0.406, p<0.001) will have a significant influence on tobacco use intention in Nigeria. Consequently, the proposed model suggests that this construct can be considered the main predictors of tobacco use intention in Nigeria. The findings from this research correspond to the work of Rugkasa et al., (2009); Gana et al., (2018); Odukoya et al., (2013); and Eqbe et al., (2014) that symbolic meaning plays a critical role in tobacco use intention.

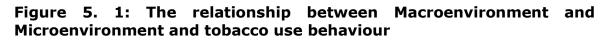
Although self-esteem, self-concept, tobacco use deterrent, cultural dimension and globalisation have been identified in the literature as a determinant of tobacco use and posited to have a significant impact on tobacco use intention, it appeared that hypotheses where not supported in the results. The test suggests that whatever effect they have are only indirect. An explanation for this might be the fact that the cultural characteristics in Nigeria do not support sharing personal information, particularly with strangers. Likewise, tobacco use in many parts of Nigeria is not socially accepted and comes with a stigma. Thus, leading to many tobacco users not to be open about it. While the level of awareness on the danger of tobacco use seems to be positive, it appeared not to be enough to cause a significant effect on knowledge, attitude and perception that predicts tobacco use intention. Lastly, the taxes and price of tobacco are relatively low in Nigeria, making it affordable for the majority of people. These are in agreement with the report from the Global Adult Tobacco Survey (GATS Nigeria, 2012), suggesting that in-depth analysis is necessary, particularly the impact of media and technology, and price and taxation on tobacco use intention in Nigeria.

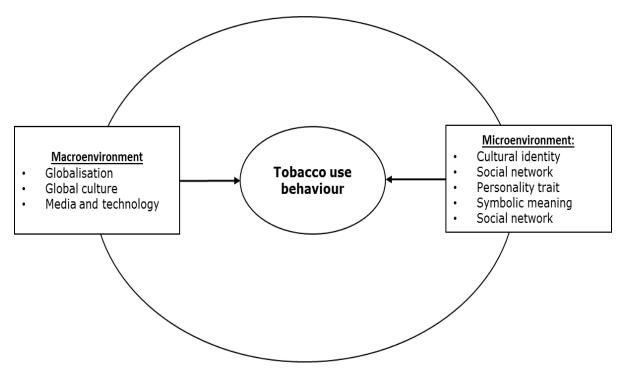
#### 5.2 The impact of the global environment

This section discusses the effects of the global environment on the behavioural intention from the accrued information from the literature, preliminary study and the survey exercise. Going by the model presented in the literature chapter that illuminated the relationship between micro-environment and macro-environment and self-identity towards tobacco use, the conclusion on the impact global environment has on behavioural intention is discussed through the lens of globalisation. The literature demonstrated that a larger society encompasses local society, and predicted that a change in the larger society is capable of influencing the local society through media proliferation, technology, as well as the global culture.

The literature review showed that the continued global control of tobacco use, particularly in many developed countries was born out of the knowledge acquired about the danger associated with tobacco use to oneself and others (Samet, 2016 and Berg et al., 2018). The increase in public knowledge of the danger associated with tobacco use is identified to facilitate the change in the public image of tobacco use from what it was before to what it is now. Tobacco use that was viewed as luxurious and hip behaviour is now increasingly considered as the cause of life-threatening illness such as cancer for its users. Public knowledge, as widely understood, comprises the insight attained through communal processes of public information and subjective to what information available to the public domain can result in either a positive attitude or negative attitude to tobacco use (Ashley and Cohen, 2003). Lastly, the integration of product perception and self-image is demonstrated to be crucial to consumer behaviour and is influenced by information exchanged in the social environment, popular social media, and market activities (Henriksen, 2012).

Public attitude is demonstrated to be as a result of the linear progression of environmental features. It suggests that public awareness will lead to a proactive behavioural outcome. Human as rational beings make systematic use of the information available to them, and that behaviour is ultimately determined by the attitude that influences behavioural intention, the behavioural beliefs concerning its consequence and normative belief concerning the perception of others (Ajzen and Fishbein, 1980, p.239). Macro-environmental factors including globalisation, media proliferation and technology, as well as the global culture, influence tobacco use as it allows for the exchange of information, ideas, culture and interrelationship among people, regardless of the location.





**Source:** Generated for the study

The subsequent sections discuss the findings on the relationship between environmental factors and tobacco use, as demonstrated in the diagram above.

#### 5.2.1 Media and technology

As indicated in the literature chapter, media and technology work hand in hand as media cannot exist without technology. The fundamental attribute of media and technology is the ability to allow societies to communicate at a fast-moving pace. In other words, it allows for the exchange of information and ideas. In return, enable individuals to continue to create and recreate self-concept against the backdrop of the dynamic environment (Barbosa, 1998). The findings from this study agreed with the prior research on the relationship between media and technology on tobacco use intention. It showed significant evidence that depending on the type of information that is being transmitted (in this case, tobacco use is undesirable) can cause a substantial change to the general perception of tobacco use (Ashley and Cohen, 2003).

Likewise, the media have been linked to cultural imperialism, which as such can influence other countries where the foreign media is present. Many developing countries, including Nigeria, are said to be dominated by exported media and the values and ideologies they contain. One such media is Facebook, where information capable of shaping people's behaviour is prevalent. It has become a norm in Nigeria to disseminate information and lifestyle via the media and has become the source for behaviour imitation, particularly among teenagers and young adults (Isaac, 2010). A positive impact of this on tobacco use is that it helps raise awareness of the danger of tobacco. It helps denormalise tobacco use behaviour as acceptable behaviour.

However, it comes with its disadvantages, such as revealed in the primary findings from this study. As demonstrated by Papastathopoulou, Avlonitis and Gounaris (2006), it appeared from findings from this study that the values and ideology imported through media do not outrightly delete or discredit former behaviour. Most times, it profers a substitute behaviour to replace the former one and depending on the alternative behaviour being proffered can become another looming disaster to happen. Early identification of such behaviour and its impact on peoples wellbeing can facilitate early control of such behaviour to neutralise its effects.

#### 5.2.2 Globalisation

In addition to the findings on the relationship between media and technology and tobacco behaviour, globalisation explains the process of homogenous tobacco use behaviour (Dixon, 2009). Globalisation explains the process by which people and society integrate. It allows the globalised world that is characterised by people and communities who experience increased similarities in economics, social and cultural environment. Globalisation is seen as a positive phenomenon because it creates a new class of global consumers, allowing for a greater range of choice for people to form a hybrid global identity.

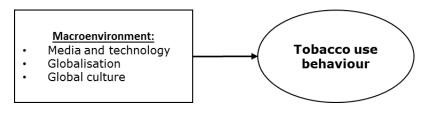
The findings from the literature review, qualitative and quantitative analysis for this study shows that human interaction and interconnectivity plays a critical role in dictating tobacco use behaviour. While this is the case, the relationship between globalisation, and media and technology, and the role it plays in this cannot be overlooked, because it has become apparent that there is no globalisation without media and technology. As such, it is argued that the global world has come to stay, and any effort to tackle the issue of tobacco use must consider globalisation in order to remain relevant (Held and McGrew, 2000).

# 5.2.3 Global culture

Global culture is the product of the institutionalisation of transmitted ideas, meaning and values (Castells, 2014). A process that is said to be inter-related with globalisation, and media and technology is evident to play a significant role in tobacco use behaviour. It involves the formation of shared norms and knowledge that people associate their individual and collective cultural identities with, and what governs individual behaviour. While the literature suggested that the awareness of declining in tobacco use will impact on tobacco use intention in Nigeria, the research findings did not explicitly demonstrate that this is the case.

The awareness of declining global tobacco use, as demonstrated in the primary findings, is relatively lower than anticipated, as not many people are aware of the decline in the statistics of tobacco use in developed countries. However, the good news is that there are indications of a decrease in exposure to tobacco use in the media. The prior research, as well as personal statements from the participants, suggested that tobacco use is no longer in vogue. The other suggestion was regarding health concerns, as some have reported moving towards healthy living, which appears to be the new trend promoted via the media (Cumming and Proctor, 2014). These findings agree with the quantitative research that showed participants are beginning to consider their tobacco use behaviour due to health concerns and because tobacco is increasingly perceived as nothing to do anymore.

# Figure 5. 2: The relationship between macroenvironment and tobacco use



Source: Generated for the study

# 5.3 The impact of the local environment

The literature chapter demonstrated that while the global environment is capable of impacting on individual behaviour, contemporary decision making occurs on the backdrop of the interpretation of the global environment, within the constraint of the local environment. What this translates into is that the global environment does not automatically dictate individual behaviour, but such a decision is made in the constraint of the individuals' local environment. In other to understand the nature of the impact global tobacco control will have on the prevalence of tobacco use in the context of this study, the cultural identity, social network, personality, symbolic meaning, and social environment were explored in relation to tobacco use. The findings are discussed as follows:

# 5.3.1 The cultural identity

Generally, cultural identity is often discussed in the context of value. Value, on the other hand, is described as the principle that gives orders and guidance to people in their thought and actions as they face common human problems and issues. Thus, by observing the principles that different cultural groups exhibit in their thought and action can help identify their shared values (Hofstede, 1994). The common framework utilised in social science studies to examine cultural value is the individualism and collectivism dimensions. Consequently, it is believed that a collectivist culture changes behaviour quickly when compared to an individualistic culture. Likewise, members of a collectivist culture are less committed to self-consistency, which contributes to susceptibility to influence from others. This cultural difference in influenceability has implications on tobacco use behaviour.

Regarding this study, the Hofstede cultural dimension was utilised to measure the cultural identity of the participants. As anticipated, the results showed that the respondents from the study are of a collectivist culture. Thus, the global tobacco control is capable of impacting the prevalence of tobacco use positively, thereby causing a decline in the rate of tobacco use. While it expected that people from a collectivist culture must conform to the majority opinion for culture change to occur, studies have shown that people in collectivist culture may also be susceptible to minority influence and other forms of interpersonal persuasions (Muthukrishna and Schaller, 2020). The issue of whether people have to conformity to minority or majority opinion for tobacco use behaviour to change remains unclear. It may require more research to establish which conformity is more effective in this regards when it comes to tobacco use.

### 5.3.2 Social network

Building on cultural identity, the social network is thought to be the structure of the relationship linking social actors. It generally relates to the number or contact frequency of social actors such as family members, friends, relatives and colleagues. Typically, beliefs, attitudes, information and social norms about a situation or thing that influences the behaviour towards such a situation or thing are mostly formulated through interactions with members of the social network. Likewise, a social network can act as a form of structural social support. In this instance, the behaviour of members of a social network is capable of influencing behaviour or causing a behavioural change.

Regarding tobacco use behaviour, this study established that social network plays a critical role in tobacco use. While this is the case, it seemed that the influence of the social network on tobacco use is indirect. In addition to possible reasons as highlighted in section 5.1.2, the prior study (that is, the literature review) has established that the contemporary consumption environment means that people are increasingly exposed to more (multiple) social networks. So, although this research was able to demonstrate that social network indeed plays a significant role in tobacco use behaviour, it was not clear what social networks (local or global) have a stronger link to contemporary tobacco use behaviour. As indicated in the qualitative study, the change of behaviour from the preference of marijuana to cigarettes among the younger ones appeared to be instigated by exposure to multiple social networks (predominantly global). At the same time, it appears that the older people thought to be resistant or reluctant to external influence (Kunze et al., 2013) are increasingly embracing social media that means they are exposed to more social networks than ever. Thus, to understand the true impact of social network on tobacco use, particularly in this regards, require further research.

#### 5.3.3 Personality

As highlighted in the literature chapter, personality as a level is specific to the individual and is, according to Hofstede (1994), partly inherited and partly learnt. Learnt, in this case, means modified, on the one hand, by the influence of people's culture and on the other hand, by personal experience. It contains a unique set of mental programmes that characterise a person and usually not shared with anybody else. While this is so, it appears that there are persistent broad personality patterns that are common within groups and that give rise to identifiable and discernible social segments (Atorough, 2013, p.26). Personality traits are an enduring disposition and have a strong link with tobacco use behaviour. Consequently, the chance that a person will use or stop using tobacco can be determined by the personality trait.

The literature chapter covered the dimensions of characters that relate to cigarette smoking, including extroversion, neuroticism and psychoticism. The participants' traits were tested by measuring self-concept and self-esteem. Subsequently, this study, in agreement with the literature showed that people with low-level self-esteem have a strong link to tobacco use and vice versa. Likewise, people with a positive self-concept has a low perception of cigarette smoking cons and vice versa. Thus, the change in the perception of tobacco use behaviour, particularly the one that results in the denormalisation of tobacco use is expected to impact tobacco use accordingly.

While this is the case, personality is not fixed and is predisposed to change over time (Kandler and Bleidorn, 2015). People are believed to change, and such changes are mostly subtle. The change in expectations has been strongly linked to personality change, and these expectations are usually reinforced by a change in life experiences such as marriages, the birth of a child, or loss of love ones. Although these events in themselves are not capable of predicting behaviour, the perceived norm, such as how to behave in a situation, has a strong link to personality change (Kandler and Bleidorn, 2015). The environmental factors, in this case, represent the primary source of perceived norms. In-depth research into personality and scope of the social environment (as proposed in this study) and how it relates to tobacco use behaviour can further inform ways to denormalise tobacco use.

#### 5.3.4 Symbolic meaning

As stated in the literature, people in a society use symbols to ascertain their actions. Symbolic interactionism explains the process of how people negotiate with their social network and act towards ideas, concepts, and values based on the meaning attributed to it (expectations exchanged by people). By putting this in the perspective of this research, the process of symbolic interaction can be understood as follows:

- People act towards a situation or event based on the meaning ascribe to it. In this instance, tobacco smoking. While cigarette smoking for some is to pass the time, to some cigarette smoking help them through difficult times such as stress and anger.
- Symbolic meanings are created in interaction with other people. Such as when a tobacco user informs an unknowing person the benefits of smoking, such as smoking helps digestion or that smoking help them calm down when they are stressed or upset. Such information is capable of changing the host's perception.
- Lastly, symbolic meanings are handled and modified through an interpretative process with things people encounter. In the case of tobacco smoking, when a proud tobacco user tells others about the

benefits of smoking, and gets complimented and hears stories about its value, they tend to learn to appreciate cigarette smoking more. Conversely, when they know from the interaction with other people the detail of the component of cigarettes that reveals that it is actually harmful to health as against the benefits derived from its use, the tobacco user now has to find a way to deal with the new situation.

People process experience in two stages, including internal senses and feelings, and deciding what they mean and how to relate to them (Snow, 2001). It implies that the interaction of a person with others involves ambiguous emotions, regulated and shaped through social reflection processes that focus on the self. Emotions are consciously or unconsciously expressed through sentic modulation through culturally and personally determined gestures and behaviour. Subsequently, the cultural value dimension (individualism versus collectivism) can explain how an individual will behave. An individualist is motivated by personal reword, while collectivist is motivated by group goals. Taking tobacco use as presented in this section, symbolic meaning is posited to have more impact on a collectivistic person as oppose to individualistic person.

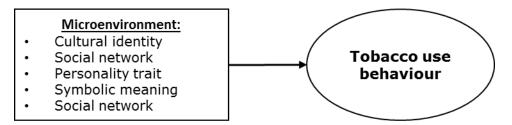
As anticipated, the finding in qualitative and quantitative research demonstrated that people attach benefits to tobacco and serves as a symbolic meaning for many of its users. Many have reported that smoking helps them relate with different roles of their daily activities, including interpersonal relationships at work or home. It also serves as a leisure activity for others. Both personal identity and social benefits encourage tobacco use for many of the participants. While this is the case, symbolic meaning also has a strong link with dissuading tobacco use behaviour in many societies in Nigeria, particularly in societies characterised by power distance culture. The findings from the qualitative study demonstrated that socialisation practices, such as respect for elders, are capable of dissuading tobacco use behaviour. As such traditional political structure, such as proposed by Egbe et al., (2013), can be incorporated into tobacco control measures in such societies.

### 5.3.5 Social environment

Building on the symbolic meaning, marketing activities such as the advertising of tobacco is used to shape symbolic meaning, and media such as newspapers, television, radio and social networks are often used as agents to expose people to tobacco. Studies have revealed that the more people are exposed to tobacco, the more the propensity they will smoke, thereby resulting in the society experiencing a high prevalence of tobacco use and vice versa. Likewise, socio-environmental factors such as family, peer pressure, work colleagues, religious beliefs, socio-economic status, and immediate community that support tobacco, will lead to a high prevalence of tobacco use in such society and vice versa.

The results from the survey demonstrated that a significant proportion of societies in Nigeria does not permit tobacco use. According to personal statements from the participants, tobacco use is perceived as dirty behaviour and associated with negativity. It appears the decline in the exposure to external information, mainly powered by technology, have also contributed to the phenomenon.

Figure 5. 3: Relationship between microenvironment and tobacco use behaviour



**Source:** Generated for the study.

# 5.4 Theoretical contribution

This research offered an alternative and practical means to the study of tobacco use behaviour. It combined the anthropological and epidemiological approach to understand tobacco use behaviour better and to identify potential causes and risk factors associated with its use. Although the primary data for this research was obtained from Nigeria, the model developed is transferrable to tobacco study in other settings, particularly developing countries. As established in the literature, people smoke for different reasons. Reitz (2010) further suggested that people continued to smoke because they started smoking in the first place. The argument by McAthleen (2006, p.15) that the study of tobacco use behaviour in isolation from the socio-environmental context is incomplete summarises the motivation for carrying out this study. While the physiological dimensions of addiction have been widely covered, the knowledge of consumer entity from the socio-environmental context of tobacco use behaviour is not sufficiently addressed in the literature. Priority has always been given to policies and successful implementation of evidence-based measures proposed by the World Health Organisation. The implication of this is that socio-environmental factors that act as potential risk factors are hardly known.

Emerging studies on the control of tobacco use have consistently linked the solution to tobacco cessation to behavioural change (Sandford, 2003; McDaniel et al., 2015; U.S. Department of Health and Human Services, 2012; and Cumming, 2009). This thesis is part of the emerging discussion of the increasing importance of the social environment in causing behavioural change capable of driving down tobacco use. Study of this nature is not to replace or deny the importance of the physiological dimensions of addiction but to understand and ultimately address diverse sources of potential risk factors associated with tobacco use. Socio-environmental context is usually viewed as the integral to know why, how, where and with whom people smoke, and the non-random social distribution of cigarettes smoking (Poland et al., 2006). While this is so, it rarely gets direct attention when tobacco use control is being investigated, particularly in developing countries settings. Most of the research and literature that investigates tobacco use control in developing countries investigates tobacco use from an individual perspective and how such behaviour is driven by social factors such as parental, peer, and broader sociocultural norms.

This research makes a case for socio-environmental context as a vital determinator of cigarette smoking. It adds to the literature by drawing critical insight from social theory in various domains of social sciences, including

anthropology and sociology, where rich discussion on the socio-environmental context on tobacco control predated. It supports the call for socioenvironmental context to be understood as a crucial determinant of tobacco use behaviour rather than sets of mediating variables that explain individual actions. A key emerging theme from the findings from the study of the socioenvironmental context of tobacco use as conducted in this study is the power of symbolic meaning. Accordingly, symbolic meaning constructs and maintain self-identification that predate consumption practices. Contemporary consumption practices, on the other hand, are increasingly based on the communication of values. Thus, identifying such values puts tobacco control in a better position to denormalise tobacco use and address potential risk factors that act as resisting agents. It will further help neutralise some of the tactics utilised by the tobacco industry in promoting their products.

#### 5.5 Methodological contribution

As mention in section 5.4, this study consisted of the combination of the epidemiological and anthropological approach. Subsequently, the epidemiological approach is concerned with identifying the causal factors of tobacco use. In contrast, the anthropological approach is concerned with providing the social context to the behavioural pattern. According to Trostle et al., (1996), the collaboration between two approaches is significant to contemporary behavioural research, as both methods address the biological, social and cultural causes and ramifications of health behaviour. Even though they both differ in their objectives, what they tend to investigate is said to be complementary. An epidemiology study signifies behaviour-change objectives as defined by aetiology study, while anthropology study considers the cultural mediation of behaviour patterns. Study of this nature allowed for more careful interpretations of behaviour within specific socio-cultural contexts, as well as intercultural comparisons.

Trostle et al., (1996) argue that studies that allow the interaction between qualitative anthropology and quantitative epidemiology within a study makes it possible for in-depth and consistent analysis of events and factors that maintain such events within the social context it is evaluated. Going by the explanation presented in the literature on human behaviour and the ability of a functional theory to explain why things happen rather than only describe or predict behaviour or phenomena, the combination of the epidemiology and anthropology within this study help filled the gap. The collaboration of the epidemiology and anthropology approaches within this study helped to describe the epistemology of the research. According to Barbosa (1998), as the epidemiology study is essential to identify the cause and effect of behaviour or phenomenon, so is anthropology essential to factor the complex nature of humans. It thus made the combination of the two studies complementary within this study. Both the biological and social determinants were worth regarding as causal attributes. These include personal trait, the environment and socio-economic stratification, as well as the cultural components in its historical dimensions and symbolic representation.

Going by these, the interdisciplinary collaboration applied in this study began by exploring past epidemiological study on tobacco use behaviour in developing countries, particularly, studies relating to tobacco use behaviour in Nigeria. This exploration served as the conceptual work that defined known evidence about tobacco use in the region. It further helped to elucidate the question the study intended to investigate. Lastly, it helped clarify how the investigation unfolds. The anthropology study, on the other hand, made it possible to incorporate theories of social and cultural environment texture to the knowledge from epidemiological studies. It helped explain the construction and the reconstruction of behaviour as it relates particularly to tobacco use in developing countries (Behague, Goncalves, and Victoria, 2008).

# CHAPTER SIX

# Conclusion

# 6.0 Introduction

The result chapter discussed the findings for this study. It explained them within the context of the past studies and the prior research on the subject matter as explored in the literature chapter. As highlighted in the introductory chapter, this study set out to investigate the effect of the current anti-tobacco regime in major developed countries on tobacco usage in developing countries like Nigeria. The research proposition included:

- will the current trend in global tobacco use impact on the prevalence of tobacco in developing countries?
- If it does, what will be the nature of the impact?
- How can the evidence from the research be utilised in developing decisive tobacco control measures?

This chapter further summarised the findings for the research proposition in the context of past studies and prior research in the literature chapter.

# 6.1 Conclusion on the impact of contemporary global culture on tobacco use in developing countries

Global culture in the traditional sense of it is the set of shared experiences, norms, symbols and ideas that unite people at the global level (Larsen and Patterson, 2018 and Robertson, 1992). While culture is generally considered as mutually exclusive, it can also be overlapping in countless ways (An, and Kim, 2007). It is particularly true of the contemporary consumer environment increasingly characterised by growing globalisation, technology advancement, and media proliferation such as Nigeria. It has contributed to an increase in shared values among different cultural groups. One of such is fashion, where trendy styles, materials or designs spread on a global basis.

In regards to tobacco use, it is not uncommon for people to smoke based on psychosocial constructs associated with cigarettes smoking (Egba et al., 2014). Such psychosocial construct includes smoking as a sign of glamour, maturity,

and friendship. Likewise, people usually smoke cigarettes as a coping mechanism such as to improve concentration and performance, relief of boredom and also elevate mood. Lastly, people smoke as a way to relate with other people, such as family, peers and work colleagues. Although people smoke for different reseason, including the ones already mentioned, many of the smoking behaviours are common among tobacco users, regardless of their cultural background. The social environment influence, including family, peers, co-workers, and other closed members within a cultural group is established to have a strong link with shaping the psychosocial constructs.

While this is the case, the ability of socio-environmental factors, such as the ones mentioned above, to shape psychosocial constructs is increasingly fragmented in the contemporary consumer environment. In agreement with Shectman et al., (2013), contemporary consumers in their pursuit of satisfaction, pleasure and fulfilment are becoming more active in defining their self-identity. By so doing, consumption practices are more based on the communication of value, and products usage is a unique source of symbolic meaning for the construction and maintenance of self-identification. Although the traditional consumers depend on the immediate group affiliate for the formation of self-identity, contemporary consumers no longer restrict themselves to the immediate environment (Shectman et al., 2013; and Larsen and Patterson, 2018). In the contemporary consumption environment, consumers are able to create their worldviews based on their own cultures and values, and the social environment. Thus, the introduction of a dynamic dimension to understanding the influence of social environment on cigarette smoking from two nested levels; the global and local environmental level proved useful to understand the impact of the global culture on tobacco use.

In agreement with prior research on consumer culture and tobacco use, although people smoked cigarettes for different reasons, this study recognised a degree of shared culture on tobacco use behaviour among the people. Many of the people smoked as a result of family and peer pressure. At the same time, others smoked because of the attributes attached to cigarettes smoking, such as hip behaviour. However, the observed change in tobacco use behaviour such as the preference of marijuana over cigarettes appeared to occur as a result of shared experiences, norms, symbols and ideas beyond the constraint of the immediate surrounding. The psychosocial elements of tobacco behaviour, as demonstrated in this study, showed that the social environment (both the global and local) played a key role in its formation (Unger et al., 2003). While it was not explicitly clear from the research the degree of influence the global culture of tobacco use has on tobacco consumption in Nigeria, it was interesting to note that regarding this research, it does have a positive impact on tobacco use behaviour.

# 6.2 Conclusion on the nature of the impact of contemporary global culture on tobacco use in developing countries

Building on the previous section, global culture involves the sharing of experiences, norms, symbols and ideas that unite people at the global level. It applies to many social behaviours, including tobacco use. The growing globalisation, technology advancement, and media proliferation have contributed to the progressive global culture. Likewise, the social environment has also been established to play a significant role in the formation of psychosocial constructs as a result of global cultural influence, particularly the ones relating to tobacco use (Unger et al., 2003). By understanding the nature of the impact contemporary global culture has on tobacco use in developing countries can help inform effective ways to control tobacco use. Such as adopting evidence-based measures from other settings where the measures have been effective.

As a vector of the tobacco epidemic, prior research suggested that transnational tobacco industries are aware of the characteristics of globalisation. Thus, utilised it in their favour. Such actions included mega merging and acquisitions, as demonstrated in the literature chapter. This enables them to produce in greater volume, cut down production cost, increase profitability and get closer to their target markets (Mamudu et al., 2020, and Onyekwena et al., 2019). In return, leads to an economy that depends heavily on tobacco to survive, such as seen in Malawi. Another of such action is the use of litigation to bully governments of the targeted market from taking strict measures against the sales and use of tobacco. Such is witnessed in many developing countries, including Nigeria.

In addition to the above, transnational tobacco companies are aware of the influence of global culture. Thus, their marketing strategies are intimately linked with the idea of international brands. As such, marketing strategies such as advertising, product packaging and quality standards are homogenous. Accordingly, the homogenous nature of the products makes it easy for them to create and manage their products as a global brand and creating global tobacco users as a way to overcome challenges of operating in a non-traditional market (Lee et al., 2016). In other words, the literature suggested that transnational tobacco industries strategies are conducted in a way that it encourages homogenisation of global tobacco products and creating global tobacco users that share the same cultural value attached to tobacco.

Studies have constantly predicted that tobacco consumption in regions increasingly targeted by the transnational tobacco companies would increase drastically. The presumption was backed with the fact that many of these regions were characterised by weak tobacco measures, and lack of national capacity for effective tobacco control. However, emerging evidence from the literature indicated the opposite, suggesting an increase in the change of attitude and behaviour, particularly in many developed countries that ones supported the tobacco industry activities and its products. The link between tobacco use and associated disadvantages prompted the control of tobacco use, thereby causing a fall in the social acceptance of tobacco use in many of the regions where tobacco use was controlled (Dani and Balfour, 2011). Revealing that smokers' concern about their health and concern about social censure were vital forces that drive tobacco use behaviour.

Going by prior study, and the findings from this research, it is safe to conclude that the contemporary global culture of tobacco use will have a positive impact on tobacco use in developing countries such as Nigeria. The transnational tobacco companies strategies that push for homogenisation of the global tobacco industry and global tobacco products enshrined with a shared culture supports this inference (Lee et al., 2016). As demonstrated in this research, Nigeria is increasingly characterised by growing globalisation, technology advancement, and media proliferation. Thus, people are able to make decisions outside the constraints of their immediate surroundings. Likewise, concern about social censure and about their health appeared to be strongly linked to tobacco use behaviour. As such, the exposure to information, mostly via the media, that condemns tobacco use and profers an alternative lifestyle is likely to lead to a change in tobacco use behaviour. Already, this is evident in the preference of marijuana over cigarettes.

The findings from this research can be built upon to understand better the impact of the ongoing global tobacco control on tobacco use behaviour in developing countries. The next section discussed the implication of this research for tobacco control in developing countries, particularly Nigeria.

# 6.3 Conclusion on the implication for tobacco control

The findings from this study are relevant for tobacco control intervention in developing countries, especially Nigeria. As established in the prior study, the pro-tobacco control culture and weak policy environment have contributed to the increase in the prevalence of tobacco smoking in these regions, particularly among adolescents and young adults (McCarthy, 2016). While there are indications that some countries in these regions, including Nigeria have started taking measures to tackle the issue of tobacco use, it appeared that such measures are inadequate and most time poorly implement. Likewise, it appeared that many of these measures are sometimes lifted directly from the World Health Framework Convention on Tobacco Control or borrowed from developed countries where the measures appeared to be effective without taking into consideration of the environmental settings (Egba et al., 2014 and Owusu et al., 2010). This research in solidarity with the literature on environmental influence on tobacco use and its control challenge the need to take into consideration the socio-environmental factors as applied in this study to effectively achieve the desired outcome of reducing tobacco use prevalence, particularly among adolescents and young adults.

While the primary aim of this study was to investigate the impact of the contemporary global culture of tobacco use on developing countries, the study made some discovery relevant to tobacco control in Nigeria. This study established that social identity has a strong link with tobacco use in Nigeria. Thus, it is recommended that effort from the government and stakeholders to

reduce tobacco use should account for the social identities of its people (Egba et al., 2014). This is because Nigeria is predominantly characterised by collectivist culture, consisting of people whose social identities are engrained in the cultural environment. The same can be said of many African countries. Likewise, there is a lack of evidence-based research relating to tobacco use in Nigeria. Hence, this study supports the call for more evidence-based studies on tobacco use in Nigeria. Such studies should aim at renegotiation of social norms and cultural practices around tobacco and its use within the cultural environment.

The World Health Organisation has identified health promotion as a key driver that reduces the tobacco-growing burden of chronic disease. It implies that a comprehensive and active awareness of the population through health promotion strategies are the primary tools for smoking prevention and cessation (Mamudu et al., 2020, and Onyekwena et al., 2019). However, going by the findings from this study, health promotions to prevent tobacco use in Nigeria is either lacking, poorly implemented or not available. There are indications of people willing to guit tobacco use, but could not get access to necessary help. Thus, this study strongly recommends the conscious effort by the government to increase health promotion on the detrimental health effects associated with tobacco use. Likewise, more priority needs to be put on creating tobacco smoking cessation program, in such a way that help is readily available at either no cost or meagre cost, particularly for the most vulnerable groups. The health promotion and cessation program can benefit from the socio-environmental setting of Nigeria that is predominantly characterised by collectivist culture (Eqba et al., 2014). This will make it easier for the population to accept proposed health promotion and cessation programs.

#### 6.4 Limitation of the study

Limitation of study comprises of characteristics design or methodology that influences the interpretation of findings from research (James and Murnan, 2004). While a conscious effort was made to mitigate the limitation of this study, some challenges surfaced that were beyond the researcher's control. Some of these limitations have been captured in the literature, methodology and result chapter. In addition to the already captured limitations are the challenges of facilities, time and money. It can be recalled that this research comprised of qualitative research in the form of focus groups, and quantitative research in the form of a questionnaire. Although the findings derived from the qualitative study was adequate for the purpose of the research, virtual capturing of the focus group exercise would have contributed significantly to the study. Perhaps, it would have been possible to observe the participants actions and reactions that would be instrumental for a further quantitative study. This is particularly useful for a study of this nature where the socioenvironmental factors such as family, peers and community play a significant role in determining behaviour (Unger et al., 2003).

Taken that behavioural changes do not occur overnight and that it requires a series of event for behavioural change to occur, this research could have benefited from the use of longitudinal approach rather than a cross-sectional approach used in this study. It could have either strengthen the findings from the research or provide a new perspective for further study. It would have been interesting to understand how tobacco use behaviour has been altered by the ongoing events in the global world over time. This would have provided robust evidence on the extent global culture would have played in shaping tobacco use behaviour. Likewise, a longitudinal approach rather than a cross-sectional approach as utilised in this study could have produced a clearer picture of the study due to the dynamic nature of the social environment, that is consistently changing.

In addition to the limitations mentioned above, expanding the geographical boundaries, particularly to the northern part of the country might have increased the source of data that would have made the research more convincing (Cumming et al., 2014). This is because the prior study has established that the prevalence of tobacco use is higher in the Northern region compared to other parts of Nigeria. The Hausas predominantly composed of Muslims dominate the northern region of Nigeria. Going by the literature, it suggested that the Islamic religion does not explicitly discourage cigarettes smoking. Thus cigarette smoking is generally not perceived as unacceptable behaviour in this region. Likewise, northern Nigeria has been identified to have the highest percentage of people living below the poverty line. The expansion

of the subject matter across to a social setting with these dynamic features would have provided more robust evidence for the conclusion by allowing for comparing and collaborating findings by regions. However, some parts of this region are reported to be dangerous as a result of militant attack, thereby, making it unsafe for the researcher to conduct data collection in the region.

The demographic characteristics of tobacco users such as age, gualification and income level, as demonstrated by the literature, are significantly important for the subject matter (World Health Organisation, 2017). Prior research suggested that age has a strong link with the global cultural influence on behaviour. Tobacco use behaviour for many tobacco users started when they were young. Likewise, the literature suggested that teenagers and young adults are most impacted by contemporary consumption environment characterised by increasing globalisation, technology advancement and media proliferation. Thus, they are prone to creating new recombinations of diverse cultural variants. While it would have been interesting to note the impact of age in the subject matter, the limitation caused by missing values in the primary research meant it was improbable to identify age factors from the findings, as detailed in the result chapter. Same applied to qualification and income level. As indicated in the literature chapter, there were challenges obtaining information from participants.

Lastly, taking into consideration that the aim and objectives for this study are subjective, the underlying assumption serves as a limitation for more objective research. While the adopted social theories and concepts provided the foundation for this research, the context at which the theories were developed may not be directly relevant in the contemporary social environment. Take, for instance, the birth of globalisation has resulted in people increasingly exposed to ideology, values and lifestyle different from their local culture that alters their behaviour. Understanding such theoretical and conceptual issues in the view of a contemporary social environment may inform key constructs that may have been overlooked, thereby prompting a rethink of the existing knowledge on the subject matter. However, studies of this nature are usually criticised for oversimplification, due to the difficulties associated with explaining the complex and often paradoxical nature of the social world. Although the current study has its limitations, the strength of the study lies in the use of qualitative and quantitative methods, such as detailed in the methodology chapter, to investigate real-life issues. It allowed for the research to be subjective at the same time possess some degree of objectivity. The subsequent chapter discussed the recommendation for future study.

## 6.5 The recommendation for future research

The limitations above provide a direction for future research. In addition to recommendations proposed within preceding chapters, this section further discussed other recommendations from which the study of contemporary tobacco behaviour can benefit. As established in the study, the onset of globalisation has resulted in people increasingly exposed to ideology, values and lifestyles different from their local culture. While this in itself is capable of altering behaviour, the contemporary decision-making process occurs on the backdrop of the interpretation of the global environment within the constraint of the local environment. Thus, the local culture of an individual plays a significant role in the interpretation of global influence. The refinement of the research approach and methodology could potentially improve this research significantly. As stated in the previous section, a longitudinal approach rather than a cross-sectional approach will produce a clearer picture of the study due to the dynamic nature of the social environment.

Likewise, future research would benefit from a consumer-centred perspective to tobacco control instead of a product-centred perspective. Conventional studies on tobacco control in developing countries are usually conducted in such a way that most of the attentions are placed on tobacco products with very little attention placed on the people that consume it. This has resulted in uninformed importation of tobacco control measures from developed countries that do not give significant consideration to the consumers from dynamic socioenvironmental settings and how tobacco is used in such regions. This, in return, has contributed to the disappointing results in many measures implemented to control tobacco use in developing countries. Today's consumption environment is characterised by consumers that are actively involved defining themselves. As a result, consumers will only purchase products that are relevant to their identities. Lastly, future research should consider improving the model proposed for this study, and specifically link it to the pattern of tobacco use and demographic characteristics of the participants for the study. The influence of macro-environmental and micro-environmental factors on tobacco use behaviour has been established to be associated with demographic characteristics. Take, for instance, people that tried to smoke cigarettes at an early age are more likely to become an established smoker and would usually find it challenging to quit tobacco use compared to their counterpart. Likewise, the social and economic development of an environment has a strong association with a person's lifestyle and beliefs. Thus, a person residing in a socially and economically well-developed area is more likely to be exposed to a healthier lifestyle as compared with the counterpart. While the findings from this research have contributed significantly to the knowledge of the impact of macro and micro-environment on tobacco use, additional studies in the line of tobacco use pattern and demographic characteristics can help shed more light to the subject matter.

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# Appendix 1: Highlights from the focus group exercises

Group 1	
Purpose	Questions
<ol> <li>General knowledge of the pattern of tobacco use.</li> </ol>	<ul><li>Q: What type of tobacco product(s) do you use</li><li>They all consumed cigarette.</li></ul>
	<ul> <li>Q: When did you start using the tobacco product(s)?</li> <li>All the participants stated they started smoking either in their late childhood or early teenage years.</li> </ul>
	<ul> <li>Q: Can you tell us how you started using the tobacco product(s)?</li> <li>Tobacco use amongst many of the participants was a habit they picked from either their family members or the immediate environment.</li> <li>One of the participants mentioned that he started smoking as a result of exposure to tobacco product at an early age. He mentioned that he was constantly sent to purchase cigarette by his uncle, then decided one day to try the product. Since then he has become a regular user of cigarette.</li> <li>Another mentioned similar situation, but the difference is that in his case, his elder brother persuaded him to try the cigarette. He mentioned that as at late 70s tobacco was very affordable. A pack was sold for N20.</li> </ul>
2. The attitude and perception of tobacco use?	<ul> <li>Q: What does the use of tobacco mean to you (benefit)?</li> <li>One of the participants mentioned that since his establishment of tobacco use behaviour, he sees himself smoking more whenever he is among his colleagues that smoke as well as for socializing. He mentioned that smoking was a great deal among his colleague and that none of them will relate well with whoever does not smoke as them.</li> <li>Another participant mentioned he uses tobacco to relax or leisure or calm his nerve whenever he is upset or stressed. He also</li> </ul>

#### Focus Group transcription Group 1

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	<ul> <li>mentioned he uses tobacco whenever he wishes to enhance his concentration.</li> <li>They believe tobacco help ease stress.</li> <li>Q: Think back to whenever you started using a</li> </ul>
	<ul> <li>tobacco product, do you think anything has changed in term of the way you perceive tobacco use?</li> <li>According to the response from the participants, it appeared that there have been significant changes in the attitude and perception toward tobacco use.</li> <li>More than half the participants acknowledged that the prevalence of tobacco use as a prerequisite for socialising is on the decline.</li> </ul>
	<ul> <li>Q: If I tell you are told tobacco kills more people in the world than malaria and HIV put together, will it stop you from using it?</li> <li>Although most of the participants appeared to perceive tobacco as harmful either as a result of information gotten through the media, friends and family and even their personal experience, they feel getting help to quit will help overcome tobacco use.</li> <li>According to one of the participants, he mentioned that he believes tobacco use is a cheap habit he hopes he can drop. He mentioned that he withdraws from smoking whenever he feels unwell as a result of smoking but finds himself going back to smoking whenever he feels better.</li> </ul>
3. Awareness of tobacco control	<ul> <li>Q: Are you aware of any existing law related to control of tobacco use?</li> <li>Majority of the participants are not aware of any existing law against tobacco use. They are however aware of the information that tobacco use kills. These they got through media such as the TV, Radio and newspapers.</li> </ul>
	<ul> <li>Q: What is your opinion on the government's effort to control tobacco use?</li> <li>Majority of the participants feel the government as the final say on tobacco use. They believe that it is the responsibility of the government to check the production and use of tobacco products.</li> <li>According to one of the participants, the government should ban tobacco product out rightly. He believes that any other form of</li> </ul>

	<ul> <li>interventions that try to restrict its sales or accessibly will only result in illegal use and smuggling of the product.</li> <li>Q: What was the last anti-tobacco advert or campaign you saw and where did you see it?</li> <li>Word of mouth, radio, and the warnings on the pack of the product.</li> </ul>
4. Influence of microenvironmental factors on the behaviour of tobacco use.	<ul> <li>Q: How comfortable are you using tobacco products around your family or your immediate environment?</li> <li>There appeared to be cultural support for and against tobacco use behaviour around the immediate environment. While the Hausa participants appeared not to perceive smoking around people as being a problem, the Yoruba participants do not perceive the impact of smoking to constitute public nuisance compared to other drug substances such as alcohol, thus do not see why they should feel uncomfortable using tobacco around their family or immediate environment. They expressed that tobacco users are likely to be accepted in their society compared to users of other drug substance.</li> <li>The Yoruba participants, however, expressed the opposite, saying their culture frowns at tobacco use behaviour, and users risk suffering being told off, labelled as rebellious or criminal.</li> <li>Q: Do you think that your environment has an impact on your attitude towards tobacco use?</li> <li>The Hausa participants responded that their environment supports the use of tobacco, while the Yoruba participants responded to therwise.</li> <li>Q: Have you ever noticed any changes in the attitude towards tobacco use in your environment?</li> <li>The two groups of participants expressed that there have been gradual changes in the attitude towards tobacco use is gradually perceived as not being favourable.</li> </ul>

	<ul> <li>As mentioned by one of the participants, it will be more beneficial to him if he can use the money used in purchasing tobacco to feed himself</li> <li>However, all of the participants mentioned that they wish to quite, but do not know how to quite.</li> </ul>
5. Influence of macro- environmental factors on the behaviour of tobacco use.	<ul> <li>Q: Are you aware of the decline in tobacco in other countries?</li> <li>None of the participants is aware of the decline of tobacco use in any developed country.</li> </ul>
	<ul> <li>Q: Do you feel this has impacted on the current attitude toward tobacco use in your environment?</li> <li>Majority of the percipients do not believe the decline of tobacco use in developed countries will impact on their tobacco use behaviour. They believe government taking severe measures against tobacco companies will be more beneficial in driving down the prevalence of tobacco use.</li> </ul>
	<ul> <li>Q: How will you react if you notice tobacco use is no longer in vogue?</li> <li>They all agreed that if there is any enacted law that restricts the use of tobacco will make them not to use tobacco, however, there is no likelihood that just because tobacco is no more in vogue will stop them from using it.</li> </ul>

Purpose	Questions
<ol> <li>General knowledge of the pattern of tobacco use.</li> </ol>	<ul><li>Q: What type of tobacco product(s) do you use</li><li>They all consumed cigarette.</li></ul>
	<ul> <li>Q: When did you start using the tobacco product(s)?</li> <li>All the participants stated that they started smoking either in their late childhood or early teenage years.</li> </ul>
	<ul> <li>Q: Can you tell us how you started using the tobacco product(s)?</li> <li>The behaviour of tobacco use amongst the majority of the participants was picked from</li> </ul>

	either their family members or the
	<ul> <li>According to one of the participants, his parents and grand-parents used to chew and tobacco product around him. He had asked them several times to give him the product to chew, but they refused. Out of curiosity, he started rolling cardboard paper to smoke whenever his parents were away. After he dropped out of secondary school, he started working with cattle rearers. This was when he learnt to smoke tobacco properly.</li> <li>Another of the participants expressed he had a similar experience. He mentioned that he usually sees people use tobacco to calm themselves down whenever they are stressed or angry. He recounted that the first time he ever used tobacco was when his younger one got him angry. He has since then graduated from chewing tobacco to the use of cigarette. He, however, mentioned that he is an occasional smoker and hope to quit tobacco use as he no longer feels comfortable using it.</li> </ul>
2. The attitude and perception of tobacco use?	<ul> <li>Q: What does the use of tobacco mean to you?</li> <li>Most of the participants believe tobacco use has no health benefits to them. They believe tobacco use is harmful to their health. According to one of the participants, he said he prays to God to help him stop smoking.</li> <li>The researchers further asked the participants that if participants will agree to clinical treatment to assist them to stop smoking? They all answered YES.</li> <li>Q: Think back to whenever you started using a tobacco product, do you think anything has changed in term of the way you perceive tobacco use?</li> <li>There has being a significant change in the way tobacco is now perceived. Majority of the participants perceive tobacco to be harmful and not beneficial to their wellbeing. Due to the addictive nature of the substance, many of the participants find it challenging to quit, which gives the majority of them lots of concerns. The majority of the participants believe that the continuous use of tobacco</li> </ul>
	<ul> <li>A participant mentioned that when he uses tobacco around his house or family</li> </ul>

	members, it makes them smell which he feels it is unfair to them.
	<ul> <li>Another participant mentioned that he noticed that whenever he smokes, he quickly gets tired when he engages in any activity such as running, lifting heavy things or even climbing stairs.</li> </ul>
	<ul> <li>Q: If I tell you tobacco kills more people in the world than malaria and HIV put together, will it stop you from using it?</li> <li>Majority of the participants are aware of the harm caused by tobacco. They all showed willingness to quit tobacco use, however, this might not be possible without governments intervention.</li> <li>According to one of the participants, he stated he wishes not to see tobacco product again, and that is the only way he thinks he can quit using tobacco.</li> </ul>
3. Awareness of tobacco control	<ul> <li>Q: Are you aware of any existing law related to control of tobacco use?</li> <li>Majority of the participants said they are not aware of any existing law that controls the use of tobacco. However, they mentioned seeing or hearing messages on TV and Radio advertising the danger of tobacco use. They further mention that they often hear people suffering or died as a result of too much tobacco consumption.</li> </ul>
	<ul> <li>Q: What is your opinion on the government's effort to control tobacco use?</li> <li>Few of the participants feel that it is not the government's responsibility to control tobacco use. According to one of the participants, he said 'no one can help you to stop smoking, and that it is only God that can help you to stop'.</li> <li>Majority others had a contrary opinion. They believe that since the government is aware of the danger caused by tobacco, effort should be made to ban its sales just like other harmful substances such as marijuana.</li> </ul>
	<ul> <li>Q: What was the last anti-tobacco advert or campaign you saw and where did you see it?</li> <li>Word of mouth, radio, and the warnings on the pack of the product.</li> </ul>

<ol> <li>Influence of microenvironmental factors on the behaviour of tobacco use.</li> </ol>	<ul> <li>Q: How comfortable are you using tobacco products around your family or your immediate environment?</li> <li>Even though the majority of the participants use tobacco around their family and their immediate environment, they do not feel comfortable doing it. Many of the participants are aware of the harm from second-hand smoke and expressed their concern about the danger of using tobacco around none user family and friends.</li> <li>During the discussion, one of the participants indicated his awareness of government warning against smoking indoor or anywhere around children.</li> </ul>
	<ul> <li>Q: Do you think that your environment has an impact on your attitude towards tobacco use?</li> <li>They all agreed that their immediate environment plays a vital role in shaping their attitude towards tobacco use.</li> <li>One of the participants expressed that 'he will find it difficult to smoke cigarettes in front of his family because he is aware of the danger this can cause to his wife and children.</li> </ul>
	<ul> <li>Q: Have you ever noticed any changes in the attitude towards tobacco use in your environment?</li> <li>All the participants agreed that there is a change in the acceptability of tobacco use. They agreed that there is a decline in the acceptability of tobacco use due to change in the myth associated with tobacco use among its users. They are now aware of the danger associated with tobacco use.</li> </ul>
5. Influence of macro- environmental factors on the behaviour of tobacco use.	<ul> <li>Q: Are you aware of the decline in tobacco in other countries?</li> <li>Although none of the participants is aware of the decline in tobacco use in developed countries, the majority of the participants are aware of tobacco use in developed countries. Base on what they hear on the radio and see on tv, they have the impression that the prevalence of tobacco use is higher in these regions compared to Nigeria, mainly due to their cold weather.</li> </ul>

Purpose	Questions
<ol> <li>General knowledge of the pattern of tobacco use.</li> </ol>	<ul><li>Q: What type of tobacco product(s) do you use</li><li>They appear to all consumed cigarette.</li></ul>
	<b>Q:</b> When did you start using the tobacco product(s)?

	<ul> <li>All of the participants acknowledged that they started smoking either in their late childhood or early teenage years.</li> <li>One of the participants mentioned he only smoked cigarettes for 2 weeks before stopping. His friends pressured him to smoke. He further stated that since he stopped smoking he has not experienced a relapse even when he is around people that smoke.</li> </ul>
	<ul> <li>Q: Can you tell us how you started using the tobacco product(s)?</li> <li>The tobacco use behaviour for many of the participants was picked from either their family members, friends and colleague from work, school mates, or the immediate environment.</li> <li>Two of the participants mentioned they started smoking cause of the nature of their work and the people they worked with.</li> <li>The first participant stated that he used to work on the sea where every other worker smoke to keep warm. That was how he picked up his smoking behaviour. The other participant expressed that he used to work in a place where everyone does things together. He noticed that they all smoked after eating. Out of curiosity, he decided to try to smoke cigarette, and that was how he got initiated to smoking.</li> </ul>
2. The attitude and perception of tobacco use?	<ul> <li>Q: What does the use of tobacco mean to you?</li> <li>Tobacco use meant different things to the participants. Some of the participants indicated that tobacco use calms them down after a stressful day at work. While some use tobacco to adjust to the condition of their job. Majority of the participants believe tobacco enhances their concentration level. Some of the participants stated that they only use tobacco when they can afford it, while others stated that even though they can afford it, they reduce or stop using tobacco for a while whenever they feel the tobacco is making them feel ill. According to one of the participants, he stated that he stops smoking cigarette whenever he feels the cigarette makes him feel sick but return to smoking whenever he feels well.</li> <li>Q: Think back to whenever you started using a tobacco product, do you think anything has</li> </ul>

	abanaad in torm of the way you remain
	<ul> <li>changed in term of the way you perceive tobacco use?</li> <li>According to the response from the participants, there appear to be significant changes in the general attitude and perception toward tobacco use.</li> <li>One of the participants expressed that even though the way tobacco is perceived these days has changed, the habit is in him and he finds it challenging to get over the habit of tobacco smoking. He mentioned that whenever he tries to stop smoking no matter how long, once he sees other people smoking he gets the urge to smoke.</li> </ul>
	<ul> <li>Q: If I tell you tobacco kills more people in the world than malaria and HIV put together, will it stop you from using it?</li> <li>All of the participants are aware that tobacco use is harmful to the body and that tobacco is liable to kill its users. However, whether or not they believe it was not clear.</li> <li>One of the participants mentioned that he sees the warning on the cigarette pack, but that won't stop him from smoking cigarette. According to him, he believes that he will only stop smoking when he is ready to stop.</li> </ul>
3. Awareness of tobacco control	<ul> <li>Q: Are you aware of any existing law related to control of tobacco use?</li> <li>The majority of the participants appeared not to be aware of any existing law against tobacco use.</li> <li>According to one of the participants, he is aware of the ban on tobacco use in public places but feels it is not effectively enforced. He further stated that as a smoker, he is aware of the harm and discomfort smoking can cause to non-smokers, and that is why he does not smoke in public or around non-smokers.</li> <li>Another participant expressed that his family members will be shocked to discover that he smokes and that because he knows they will not be happy to find out he smokes, he tends to smoke secretly.</li> </ul>
	<ul> <li>Q: What is your opinion on the government's effort to control tobacco use?</li> <li>All of the participants believe the government must regulate the manufacturing and sales of tobacco. They all believe that if tobacco production and sales are banned entirely, the users will be left</li> </ul>

	<ul> <li>with no choice than to quit. According to one of the participant 'tobacco product is not like food that you cannot do without, and banning tobacco production and sales will not harm anyone'.</li> <li>The researcher further asked how receptive will the participants be to clinical aide from the government to help them quit tobacco use? They responded positively in favour of clinical intervention.</li> <li>According to one of the participants, he said he has been trying to stop the use of tobacco for years but finds it difficult to do by himself. He feels that getting help to quit tobacco use will be a great thing. He further mentioned that 'as a Christian, he feels guilty every time he uses tobacco and whenever he thinks about the rapture and the judgement day these causes him to seek for help the more'. He said 'if there is anything the government can do to help him quit tobacco use will make him feel extremely happy'.</li> <li>Q: What was the last anti-tobacco advert or campaign you saw and where did you see it?</li> <li>All of the participants agreed that they do not see anti-tobacco advert often apart from the warning message on tobacco products' package.</li> <li>One of the participants said the last time he saw anti-tobacco advert was on the T.V. and was like a year ago.</li> <li>Majority of the participants expressed that there used to be lots of anti-tobacco advert is necent time.</li> <li>And that apart from the warning message on tobacco product's package, there are not aware of any.</li> </ul>
<ol> <li>Influence of microenvironmental factors on the behaviour of tobacco use.</li> </ol>	<ul> <li>Q: How comfortable are you using tobacco products around your family or your immediate environment?</li> <li>The majority of the participants believe tobacco use especially cigarette still remain unacceptable within their community. They expressed that they find it challenging to use tobacco in the presence of their family or immediate environment. Thus they use tobacco most of the time secretly.</li> </ul>

<ol> <li>Influence of macro- environmental factors on the behaviour of tobacco use.</li> </ol>	<ul> <li>Q: Are you aware of the decline in tobacco in other countries?</li> <li>The participants are not aware of the decline in tobacco use among developed countries.</li> <li>Q: Do you feel this has impacted on the current attitude toward tobacco use in your environment?</li> </ul>
	<ul> <li>as criminals'.</li> <li>Another of the participants expressed that none of his family members knows he smokes. He mentioned that whenever he feels the urge to smoke, he does it secretly so that his family members and direct neighbours are not aware of his smoking habit.</li> <li>Q: Do you think that your environment has an impact on your attitude towards tobacco use?</li> <li>All of the participants agreed that their environment determines their attitude towards tobacco use. They all agreed that since tobacco use is not acceptable within their community, they cannot use tobacco freely within their community.</li> <li>One of the participants expressed that whenever he is in an environment he perceives smoking is not acceptable, he goes away to other places, especially the bush to smoke.</li> <li>There is also the evidence that ones the constraint is broken; tobacco use behaviour changes and tobacco users don't care much about their immediate environment. According to one of the participants, his family expressed their disappointment whenever they found out he was a smoker. Since then he did not care much about their disapproval and did not find it discomforting to smoke around his family and his immediate environment anymore.</li> <li>Q: Have you ever noticed any changes in the attitude towards tobacco use in your environment?</li> <li>They all responded that tobacco use has remained unacceptable within their immediate environment.</li> </ul>
	<ul> <li>According to one of the participants, he said 'tobacco users in his community are seen as being irresponsible and most time classified</li> </ul>

	<ul> <li>Although they all expressed their ignorance on the decline in tobacco use among</li> </ul>
	5
	developed countries, however, they
	expressed that if there is such thing it means
	there is something wrong, that they might
	have discovered that tobacco use is
	dangerous to their health. Moreover, if that
	is the case, they believe it is a matter of
	time, they will also follow the trend, and stop
	tobacco use.
	<ul> <li>According to one of the participants, he</li> </ul>
	believes the prevalence of tobacco use in
	most developed countries is as a result of
	their weather. This, when compared to
	developing countries such as Nigeria with
	hot weather all year round, does not justify
	the reason for anyone to smoke in the first
	place. In agreement with this statement,
	another participant went on to say that he
	believes tobacco use is a western behaviour
	adopted by people in many developing
	countries, particularly Nigeria and that if
	there are changes in the trend of tobacco
	use behaviour in these regions, he believes
	these will impact on many tobacco users
	behaviour in developing countries including
	himself.
_	How will you react if you notice tobacco use is
no l	onger in vogue?
	<ul> <li>Tobacco use to the majority of the</li> </ul>
	participant is a lifestyle they perceive as not
	good and harmful to their health, and wish
	they can stop.
	• Some of the factors raised by the
	participants that influence their tobacco use
	behaviour include:
	- Financial support: the majority of the
	participants expressed that what pushes
	them to smoke is the lack of a good and
	well-paying job to meet their need. They
	expressed that with a good-paying job,
	they believe their stress and worries will
	reduce, and the need to use tobacco will
	also reduce.
	- The socio-economy state of the
	environment: The majority of the
	participants expressed that they are not
	happy with how things are going in the
	country. They further expressed that the
	economy is bad, things are expensive, to
	live is very difficult, and people are
	suffering. They expressed all of these

<ul> <li>contribute to the frustration that pushes them to smoke.</li> <li>Tobacco use as a habit: They expressed that tobacco use is a habit and expresses that with government intervention to assist people to quit smoking will go a long way in reducing the national prevalence of tobacco use and improving the prevalence of tobacco use and use use use use use and tobacco use and tobacco use and use use use use use use use use use use</li></ul>
the economy. They further
acknowledged that a country with a healthy workforce would equally have a
healthy economy.

Purpose	Questions
1. General knowledge on the pattern of tobacco use.	<ul> <li>Q: What type of tobacco product(s) do you use</li> <li>The common tobacco products consumed are cigarette and snuff.</li> <li>The group consist of both current users and extobacco user</li> </ul>
	<ul> <li>Q: When did you start using the tobacco product(s)?</li> <li>All of the participants stated that they started using tobacco products either in their late childhood or early teenage years.</li> </ul>
	<ul> <li>Q: Can you tell us how you started using the tobacco product(s)?</li> <li>The behaviour of tobacco use for the majority of the participants was shaped by their beliefs, type of work and their immediate environment.</li> <li>One of the participants stated that he started smoking just after he finished high school, but the habit became apparent when he joined the paramilitary service. He expressed that his tobacco use habit was aided by the myth they held of the benefits of tobacco since they were little children. One of such myth is the ability of the smoke from tobacco to drives away the evil spirit. And since his the nature of his work required him to work mostly in the deep forest where they were faced with challenges including wild animals, they usually rely on the light from the cigarette to keep them strong and overcome their challenges whenever they are on shift.</li> <li>Another participant also expressed the myth that they believe and feel that tobacco enhances their strength.</li> </ul>

	and of	<ul> <li>Q: What does the use of tobacco mean to you?</li> <li>One of the participants expressed that apart from the belief they hold about the ability of tobacco smoke to chase evil spirit, he smokes to pass the time. He recounted that his workplace was located in a quiet area with little activities to do to pass the time than seat, gamble, play games, drink beer and smoke all sorts of substance in the hope that the month will end quickly.</li> <li>Another participant mentioned that smoking keeps them warm, and because of this, they consume more tobacco at night. He also mentioned that they smoke a lot when they drink alcohol during their leisure.</li> </ul>
		<ul> <li>Q: Think back to whenever you started using a tobacco product, do you think anything has changed in term of the way you perceive tobacco use?</li> <li>In terms of the myths held of tobacco, many of the participants still believe strongly in them.</li> <li>Some of the participants believe that the myth that smoke from tobacco scares off evil spirits still exist. One of the participants expressed that not only does the smoke from tobacco is used for this purpose. He mentioned that churches and mosques use other forms of incense to scare away the evil spirit.</li> </ul>
	<ul> <li>Q: If I tell you are told tobacco kills more people in the world than malaria and HIV put together, will it stop you from using it?</li> <li>Some of the participants expressed that they already perceive tobacco use to be harmful to the body and are willing to stop its use.</li> <li>According to one of the participants, he expressed that you don't have to think twice to stop a behaviour or habit (especially if you are an adult) when told such behaviour or habit is dangerous to your health.</li> <li>However, not all participants perceive tobacco use to be harmful. According to one of the participants that use snuff, he believes the snuff helps cure migraine whenever he uses it, and also help improve his sight. He expressed that tobacco is not good for everyone, and should stop when they discovered it is not good for their body. His argument was that he knows of elderly people that use tobacco before he was born and are still using it till date. He argued that if tobacco use is that dangerous, these people will be dead by now.</li> <li>Another participant countered his argument by stating that tobacco use does not kill instantly and that it affects the body gradually, probably the</li> </ul>	

	reason these people still live. He then stated two reasons he thinks tobacco kills. - Excess use of tobacco. - The abuse of tobacco.
3. Awareness of tobacco control	<ul> <li>Q: Are you aware of any existing law related to control of tobacco use?</li> <li>All of the participants expressed their awareness of the ban on tobacco use in public, but do not feel it is well enforced.</li> <li>According to one of the participants, not until the government starts to arrest people for defaulting a law, such law will not be taken seriously.</li> <li>Q: What is your opinion on the government's effort to control tobacco use?</li> <li>While the majority of the participants expressed that the government should have taken more rigid measures to curb tobacco use, few of them are still of the opinion that there is little the government can do to control the use of tobacco than what they have done, which is to pass a law that bans public use of tobacco products and compel tobacco package. And if after all these, anyone that chooses to use the product does so at his or her peril.</li> <li>According to one of the participants, he argued that every step the government takes to curb tobacco use has the potential of impacting on the economy of the nation negatively. According to him, such steps can drive down the sales of tobacco, and since tobacco companies play a major role in providing job especially within the area they operate, such laws can lead to job loss for so many people thereby increasing the rate of unemployment in such country.</li> <li>Q: What was the last anti-tobacco advert or campaign you saw and where did you see it?</li> <li>Word of mouth, radio, and the warnings on the</li> </ul>
4. Influence of	pack of the product.
microenvironmental factors on the behaviour of tobacco use.	<ul> <li>Q: How comfortable are you using tobacco products around your family or your immediate environment?</li> <li>All the participants expressed that they do not feel uncomfortable using tobacco product around their family or immediate environment. According to one of the participants, he expressed that he has grown past the age anyone can dictate what he can do from what he should not do.</li> </ul>
	<b>Q:</b> Do you think that your environment has an impact on your attitude towards tobacco use?

	<ul> <li>Many of the participants do not believe the environment directly impact on their attitude towards tobacco use, as they feel they are old enough to know what is the right thing to do.</li> <li>Q: Have you ever noticed any changes in the attitude towards tobacco use in your environment?</li> <li>Many of the participants agreed that the awareness of the harm caused by tobacco use is on the increase.</li> </ul>
<ol> <li>Influence of macro- environmental factors on the behaviour of tobacco use.</li> </ol>	<ul> <li>Q: Are you aware of the decline in tobacco in other countries?</li> <li>Many of the participants are not aware of the decline in the consumption of tobacco use in developed countries.</li> </ul>
	<ul> <li>Q: Do you feel this has impacted on the current attitude toward tobacco use in your environment?</li> <li>One of the participants disagrees that tobacco products are being imposed on developing countries such as Nigeria. He expressed that year in year out, the Nigerian government are always seeking for investors, and tobacco companies being investors are just in Nigeria like every other investor to do business.</li> <li>However, one of the participants argued that he believes there are other ways to use tobacco than smoking and that he does not feel the decline in cigarette smoking in the developed countries will impact on the behaviour of tobacco use in Nigeria.</li> </ul>
	<ul> <li>Q: How will you react if you notice tobacco use is no longer in vogue?</li> <li>While many of the participants perceive tobacco use to be harmful to the body and believe the decline in the use of tobacco is as a result of the continuous increase in awareness. The majority of the participants feel that tobacco use is a matter of choice, and people are entitled to make their choice.</li> </ul>

Purpose	Questions
<ol> <li>General knowledge of the pattern of tobacco use.</li> </ol>	<ul> <li>Q: What type of tobacco product(s) do you use</li> <li>The common tobacco product consumed is cigarette.</li> <li>The group consist of both current users and ex tobacco user.</li> </ul>

	• A participant express that tobacco is the cheapest
	<ul> <li>Majority of the participants were not aware of the smokeless tobacco. However, the ones that are aware of it feels it's mostly consumed by either old people or poor and less educated people.</li> <li>Some of the participants expressed their disappointment that marijuana was not part of the research.</li> </ul>
	<ul> <li>Q: When did you start using the tobacco product(s)?</li> <li>All of the participants stated that they started smoking either in their late childhood or early teenage years.</li> </ul>
	<ul> <li>Q: Can you tell us how you started using the tobacco product(s)?</li> <li>Many of the participants expressed they started smoking due to peer pressure, observation of family members or friends that smoke, persuasion by family and friends, or influences from the immediate environment. Others expressed that they picked up tobacco use behaviour out of curiosity.</li> <li>According to one of the participants, he expressed that his urge for smoking started when he was in primary school. He called the period 'The chalk age'. According to him, himself and his friends will grind chalk into dust, roll the dust in paper and inhale the dust. They will then blow out the chalk to have a look-alike feel of smoking a traditional cigarette. He said the first time he properly used cigarette was immediately he got into secondary school. Since then, he has been smoking.</li> <li>Another participant expressed that he started smoking because of his elder brother. According to him, his brother is his role model and because his brother is a smoker, he started smoking too. He mentioned that currently, he smokes more than his brother.</li> </ul>
2. The attitude and perception of tobacco use?	<ul> <li>Q: What does the use of tobacco mean to you?</li> <li>While many of the participants expressed factors that trigger their smoking behaviour (Including overcoming stress, for comforting feeling, to overcome boredom, for leisure, to socialise, due to accessibility to pack of cigarette, exposure to cigarette, and to calm down), others believe cigarette smoking meant nothing to them and do not feel anything whenever they smoke. They expressed that they smoke for the fun of it.</li> </ul>

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	<ul> <li>because there are no distinct factors that trigger their smoking and do not necessarily need a reason to smoke. They believe they smoke whenever and however they feel like it. While few others believe they are social smokers because they have the ability to control their smoking behaviour.</li> <li>One of the participants expressed that he does not have any attachment to smoking. He further expressed that he cannot smoke by himself and that he only smokes whenever he is around his friends or other people that smoke. He mentioned that he is not the type that will go to shops to buy cigarette to use but can sponsor others that wish to smoke, then join them in smoking.</li> <li>Another participant expressed that she is a social smoker. She believes she can control her smoking behaviour, and only smokes whenever she feels like it. She mentioned that she can decide not to smoke even when she finds herself around people that smoke.</li> <li>Majority of the participants that expressed that they do not feel anything from smoking cigarette happened to be ex-users. They argued that their idea of using drugs such as alcohol and tobacco is to change the state of themselves, and that cigarette does not help achieve that purpose.</li> <li>One of the participants expressed that is explains the possible reason it was easy for them to quit tobacco smoking. However, there is evidence that these participants rely on other substances such as marijuana to achieve the purpose.</li> <li>One of the participant expressed that she stopped smoking because she does not like the feel. The same participant expressed to the smoke, she will smoke. She said she is actively making an effort not to smoke cigarette. She tries to stay away from it, but when she smells it she feels like smoking.</li> <li>A participant that that happened to be an ex-user expressed that the appened to be ex-users. The stay are spressed that the pressed that the participant that that participant expressed that if acues of his parents. He further expressed tha</li></ul>
	<ul> <li>Q: Think back to whenever you started using a tobacco product, do you think anything has changed in term of the way you perceive tobacco use?</li> <li>While many of the participants believe there is a change in the image perception of tobacco users, others believe that the perception is still the same.</li> </ul>

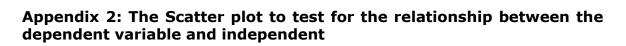
<ul> <li>of the world and now made its sales global (western imperialism).</li> <li>Q: If I tell you are told tobacco kills more people in the world than malaria and HIV put together, will it stop you from using it?</li> <li>Many of the participants are aware of the warning that tobacco use is dangerous to health. The expressed that they see and hear that tobacco kills but not all of the participants are convinced that i actually kills. According to one of the participants she asked a rhetorical question that 'How mame elderly people she knows smokes and they are sti alive. Another participant asked a question 'How long does it take tobacco to kill you? One other participant expressed that she feels too much o everything can kill, and why single out tobacco?</li> <li>There was a lack of consensus on whether there believe tobacco smoke kills or not, but there were a couple of noteworthy response by the participants</li> <li>Some believe the rate at which tobacco kill depends on individual body system is resilient.</li> <li>Some believe tobacco does not kill, that a person's lifestyle kill.</li> <li>Some believe tobacco does not kill, as the way media portrays it and that he believe tobacco companies competitor and media an responsible for the propaganda.</li> <li>Some believe our body is not made for consuming too much foreign product, and that some believe that tobacco is a foreign product, and that some believes have wared that tobacco kills and the some companies to know that since tobacco is a foreign product, to much consumption of it is harmful to the health</li> </ul>
<ul> <li>world than malaria and HIV put together, will it stop you from using it?</li> <li>Many of the participants are aware of the warning that tobacco use is dangerous to health. The expressed that they see and hear that tobacco kills but not all of the participants are convinced that i actually kills. According to one of the participants she asked a rhetorical question that 'How man elderly people she knows smokes and they are sti alive. Another participant asked a question 'How long does it take tobacco to kill you? One othe participant expressed that she feels too much o everything can kill, and why single out tobacco?</li> <li>There was a lack of consensus on whether the believe tobacco smoke kills or not, but there were a couple of noteworthy response by the participants</li> <li>Some believe the rate at which tobacco kill depends on individual diet and lifestyle.</li> <li>Some believe tobacco use does not kill, that a person's lifestyle kill.</li> <li>Some believe twill.</li> <li>Some believe that tobacco does not kill as the way media portrays it and that he believe tobacco companies competitor and media are responsible for the propagnda.</li> <li>Some believe our body is not made for consuming too much foreign product, and tha since tobacco is a foreign product, too much consumption of it is harmful to the health.</li> </ul>
<ul> <li>that they do not think anyone in the right sense to go against such warnings.</li> <li>Some do not believe in the scientifical findings that tobacco use kills.</li> <li>Some believe there are other of our daily lifestyle that is more harmful than tobacco use itself, and since that has not killed them, they do not think tobacco use is a choice thing irrespective of the fears and warnings.</li> </ul>

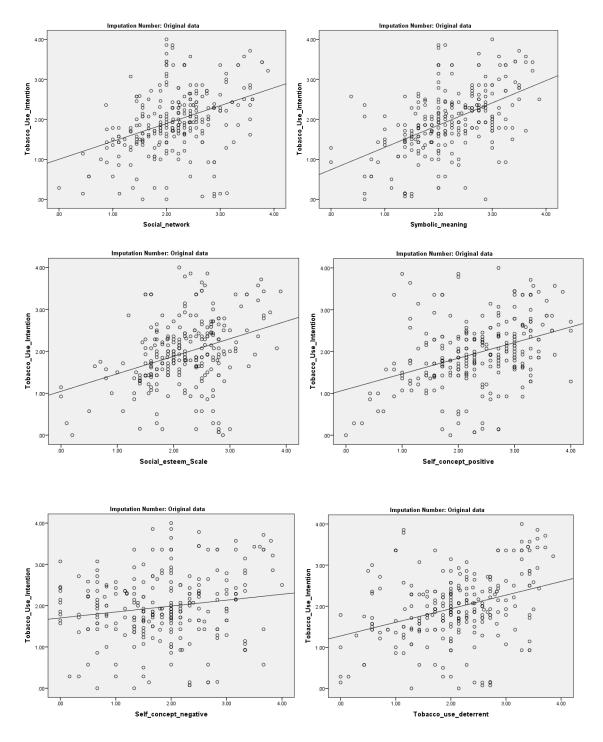
3. Awareness	of	
tobacco control		<b>Q:</b> Are you aware of any existing law related to control of tobacco use?
		<ul> <li>Not many of the participants are aware of any existing law against tobacco use. However, the few ones they are aware of such as the ban on tobacco use in public and ban of tobacco sales to minors are not well enacted.</li> <li>One of the participants mentioned that he is aware of the ban on smoking in some bars, restaurants, offices and private residential areas. He said he is aware that some of these areas have designated area for smoking, and that even though the smoking law is not common, the fact they make provision for smokers indicates there is a form of control of tobacco use in that area. These sounded strange to some of the participants that were yet to witness such. Some were asking if such law was Federal law or State law or even individual authority law.</li> <li>There was a heated argument on areas with the law that outrightly prohibits the use of tobacco inside and around the environment of the establishment such as clubs and bars. While some argued that it would lead to the reduction in sales and people patronising these places because they believe tobacco use is synonymous to this places and such move is perceived as infringing on people's right, others argued that people's minds are rapidly changing, and more people are becoming more conscious of a clean environment. A participant gave an example of a big bar that implemented such a measure. Initially, it was expected that it will impact negatively on the number of their customer and sale, but according to the participant, this has made the bar a more popular place for people to go for leisure.</li> </ul>
		<ul> <li>Q: What is your opinion on the government's effort to control tobacco use?</li> <li>All the participants agreed that there are no significant regulatory measures put in place by the government to check the use of tobacco and that the few existing ones are not well enacted. One of the participants referred to tobacco packaging in developed countries. According to him, he mentioned that if the government can adopt that style of packing (i.e. plain packaging with prominent warnings and disturbing picture), that will go a long way in driving down the prevalence of tobacco use in Nigeria.</li> <li>While some of the participants believe that it is the government's responsibility as well as the</li> </ul>
		individual to control tobacco use few of them

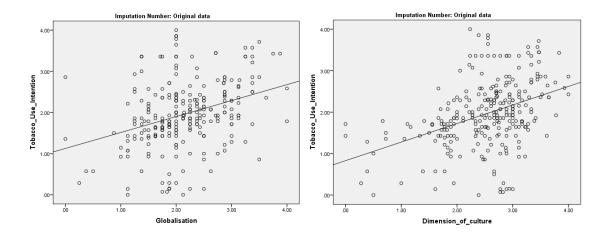
	<ul> <li>believe it is solely the users responsibly to control his or her tobacco use behaviour. According to a participant, it does not matter whatever intervention put in place, some smokers will still smoke, and that a smoker can only stop to smoke if he decides to. He further expressed that effort by the government to limit tobacco will only result to illegal use of tobacco because he believes many smokers including himself started smoking as a result of curiosity, and asking such to stop will only increase such behaviour. He further added nothing will stop a curious tobacco user even if it means spending his last savings to smoke.</li> <li>A participant, however, argued that the government need to take an active step to be to control tobacco use behaviour. According to him, the corner shop in Nigeria still sell tobacco product without displaying warnings or conducting age verification before selling cigarette to buyers. He further expressed that many of these shops are commonly located in front of primary schools where children visit to purchase confectionary, thereby increasing their exposure to tobacco at an early age. He expressed that enforcing law such as point of sales warning, ban on sales and use of cigarette around Kiosk and primary school environment, and ban of sales to minor and age verification will reduce the chances of minor being exposed to tobacco at their tender age.</li> <li>Another participant believes it's the government responsibility to control tobacco use because they have more insight into the tobacco companies' activities, and are aware of the impact of these and tobacco use is on the economy of the country.</li> </ul>
	<b>Q:</b> What was the last anti-tobacco advert or campaign you saw and where did you see it?
<ol> <li>Influence of microenvironmental factors on the behaviour of tobacco use.</li> </ol>	<ul> <li>Q: How comfortable are you using tobacco products around your family or your immediate environment?</li> <li>Many of the participants expressed that they are not comfortable using tobacco products such as tobacco around their family and immediate environment. They believe that their environment is less tolerant of such behaviour thus do not encourage such behaviour. Some of the factors they mentioned contribute to that include tribe, culture, belief, and respect for elders. According to one of the participants, his father didn't speak to</li> </ul>

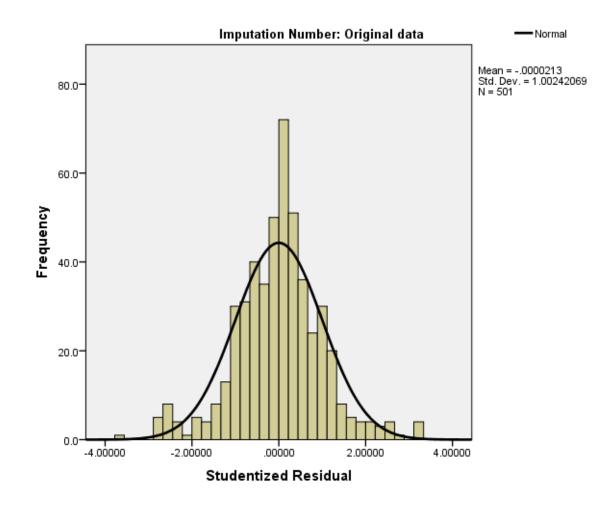
	him for more than a year the day he first saw him
	him for more than a year the day he first saw him smoking.
	<ul> <li>Q: Do you think that your environment has an impact on your attitude towards tobacco use?</li> <li>Very few of the participants believe that the environment does not impact on their attitude towards tobacco use. Others believe their immediate environment plays a significant role in shape their attitude and use of tobacco. One of the participants recounts the experience of his friend that used to smoke heavily. According to this participant, his friend had to stop smoking temporarily because of his Aunty that came to visit for 30days. He, however, went back smoking when his Aunty left.</li> </ul>
	<ul> <li>Q: Have you ever noticed any changes in the attitude towards tobacco use in your environment?</li> <li>While some of the participants believe there is a change in the way the behaviour of tobacco use is currently perceived in their immediate environment mainly due to rapid increase in acceptance of technology and internet, they feel many people still hold on to their cultural beliefs thus making the attitude towards tobacco to remain the same.</li> <li>A participant argued that this is a generation case. According to her, she believes the younger the generation, the more the attitude towards tobacco use changes. She mentioned that the younger generation is likely to change their attitude easily compared to the older generation. Base on this argument she believes younger generations have changed their attitude towards tobacco use while the older generations still hold to their beliefs.</li> </ul>
5. Influence of macro- environmental factors on the behaviour of tobacco use.	<ul> <li>Q: Are you aware of the decline in tobacco in other countries?</li> <li>While some of the participants expressed their ignorance on the decrease in tobacco consumption in many developed countries, few of the participant expressed their awareness of the decline in tobacco use in many developed countries. A participant expressed her knowledge of decrease in tobacco use in developed countries, particularly among the younger generation. She mentioned that people are moving towards an organic lifestyle, and the lifestyle favours marijuana over tobacco.</li> </ul>
	<b>Q:</b> Do you feel this has impacted on the current attitude toward tobacco use in your environment?

<ul> <li>One of the participants expressed that one thing he believes matter to a smoker is, how to get the cigarette regardless of the location, price or whatever is going on. He further expressed that he believes that the decline in tobacco use in developed countries can impact immediately on the attitude of none established smokers towards tobacco use. But such an impact might not be noticed immediately on established smokers.</li> <li>Another participant thinks there is nothing that can change his attitude towards smoking. He explained that he is a chain smoker and is already aware of the danger caused by tobacco use and that he does not believe the decline in tobacco consumption in developed countries will have any significant change on him.</li> </ul>
<ul> <li>Q: How will you react if you notice tobacco use is no longer in vogue?</li> <li>While the majority of the participants believe the behaviour of tobacco use is a lifestyle, they were unsure what impact tobacco use being out of vogue will be on them.</li> </ul>









Appendix 3: The variance of the residuals