

SOCIAL FACTORS INFLUENCING TOBACCO CONSUMPTION AMONG ADOLESCENTS IN IKOT EKPENE, AKWA IBOM STATE, NIGERIA

BY

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Abstract

The study examined social factors influencing tobacco consumption among adolescence in Ikot Ekpene, Akwa Ibom State. Specially, the study examined the role of family and peer group members on tobacco consumption among adolescence in Ikot Ekpene. The study adopted survey research design. The population of the study (2245) covered three most populated secondary schools where most of the adolescents were found in cluster for easy sampling. Taro Yamane formula was used to select 340 sample size. The researcher adopted judgmental and cluster sampling techniques, while questionnaire was the major instrument for data collection. The data were analyzed with descriptive statistics such as mean, frequency and percentage. The Hypotheses were tested with a multiple regression model. The descriptive statistics revealed that intake of tobacco products by parents and older siblings, tobacco products availability, exposure in the family and family orientation on consumption structure were the major family conditions that triggered adolescent tobacco consumption in Ikot Ekpene. Also, consumption of tobacco by classmates and gender; consumption of tobacco products by friends in school and consumption of tobacco products by age grade and peer group indices affect adolescence tobacco consumption in Ikot Ekpene. The study recommended that parents and guardians of adolescence should not indulge in tobacco consumption before their children and wards. This will help to streamline adolescence tobacco consumption.

Keywords: *Social Factors, Consumption, Peer Group, Adolescence*

Introduction

Teenage tobacco consumption behaviour is a dynamic process in which a teen progresses from early cigarette trials, to intermittent use, regular use and dependence. Understanding the factors that trigger consumption and continuous use of tobacco are critical to the unending and prevailing tobacco consumption behaviour among teens. Tobacco contains a chemical called nicotine, and if consumed, gives the consumer a

“pleasurable rush and unnecessary reactions. Tobacco is made from the leaves of tobacco plants. It contains nicotine, which is an addictive drug (Sussman & Ames, 2008).

Importantly, the factors that influence early trials with tobacco may be distinct from those that influence progression and persistence. Modern conceptualizations of tobacco consumption development emphasize a social ecological perspective which considers the broader social and environmental context in which youth tobacco use occurs (Cook, 2013). This perspective recognizes that youth and young adults do not exist in isolation; rather, they inhabit a complex system of layered social and environmental contexts, wherein they learn, socialize, and conduct their daily activities (Wilcox, 2013). In these contexts, intrapersonal predictors of tobacco use are “nested” within larger social structures. For example, a person’s family variables function within a set of complex cognitive-related responses and, in turn, operate within a larger context of small social groups (e.g., families, peer groups), that ultimately function within a larger socio-environmental context (e.g. schools, neighborhoods).

Perreau (2013) assert that social factors such as reference groups (friends and family) drive consumer behaviour most, as values and personality are shaped from them. Related to firms, some brands have understood the “social benefits” that their products can create, and directly or indirectly have managed to communicate this to consumers. Family is one of the most important reference groups among others. Children learn consumption skills by observing their parents and older siblings. For newly admitted students in the university, parents function as their role models. Family plays a great role in decision making process and nature of consumption (Reis, 2015). More so, the social role and status appear to be the most significant influencers of buying behaviour, notably the status that is signaled by purchasing consumer goods. The social element of the buyers’ characteristics is highly evident. Most students want to belong to a group and be recognized, furthermore, they want signal status and their needs are hedonistic and most times irrational, where self-recognition and rewarding oneself play significant roles (Reis, 2015).

Numerous factors influence adolescents’ decisions to start smoking or to use other tobacco products. These factors include some individual characteristics such as stress and low self-esteem, but also social characteristics such as having parents, siblings, or friends who smoke. Exposure and susceptibility to tobacco advertising can also affect smoking initiation among adolescents. Adolescence decision to consume tobacco products are often influenced by the family and the society. The influence determines its path of purchase and consumption. In particular, the social environment may influence tobacco consumption by: the use of tobacco and approval of tobacco use by peers or siblings; smoking by parents or guardians; accessibility of tobacco products; exposure to tobacco consumption promotional campaigns; low self-image or self- esteem. Understanding and addressing these factors as intended by this study may be

a key approach in reducing the number of teenagers who consume tobacco products or are exposed to second-hand smoke in Ikot Ekpene, Akwa Ibom State. In effect, this study examined social factors affecting adolescent tobacco consumption in Ikot Ekpene.

Objectives of the Study

The main objective of the study was to examine the social factors influencing tobacco consumption among adolescent in Ikot Ekpene, Akwa Ibom State. However, the specific objectives were to;

- i. examine the influence of family members on tobacco consumption among adolescent; and
- ii. examine of influence of peer group members on tobacco consumption among adolescent.

Research Questions

Key questions of the study were;

- i. how do family members influence tobacco consumption among adolescents in Ikot Ekpene?
- ii. how do peer group members influence tobacco consumption among adolescents in Ikot Ekpene?

Research Hypotheses

Hypotheses of the study were stated in their null form as follows:

H0₁: Family members have no significant influence on tobacco consumption among adolescents in Ikot Ekpene.

H0₂: Peer group members have no significant influence on tobacco consumption among adolescents in Ikot Ekpene

Scope of the Study

The study examined the social factors affecting adolescent tobacco consumption in Ikot Ekpene, Akwa Ibom State. Specifically, the study examined the effect of family members on tobacco consumption among adolescents in Ikot Ekpene; and effect of peer group members on tobacco consumption among adolescent in Ikot Ekpene. Secondary school students within the age of 13 – 17 were the respondents in the study.

Review of Related Literature Concept of Adolescence

Adolescence is the period of social transition from child to young adult. This phase involves body transformations and puberty, and is characterized by significant changes in behaviour, the reorganization of the way of thinking, and the formation of character and personality of youths. In adolescence, external influences, culture, values, responsibilities, and relationships are important causal factors of changes in the identity-building process and may lead to life-changing and health-related choices, such as the use of psychoactive substances (Barenboim, 2010).

The word adolescence derived from Latin word *adolescere* meaning ‘to grow up’ is a transitional stage of physical and psychological development that generally occurs

during the period from puberty to legal adulthood (age of majority) (Abdel et al., 2012). Adolescence is usually associated with the teenage years, but its physical, psychological or cultural expressions may begin earlier and end later. For example, puberty now typically begins during preadolescence, particularly in females, physical growth (particularly in males) and cognitive development can extend into the early twenties. Thus, age provides only a rough marker of adolescence, and scholars have found it difficult to agree upon a precise definition of adolescence (Grotevant, 2009). Adolescence is a period of life with specific health and developmental needs and rights. It is also a time to develop knowledge and skills, learn to manage emotions and relationships, and acquire attributes and abilities that will be important for enjoying the adolescent years and assuming adult roles (Sussman & Ames, 2008). In this study, adolescent is viewed as individuals within the age of 10-19 years age group, while young people cover the age range of 10-24 years (World Health Organization, 2013). A thorough understanding of adolescence in society depends on information from various perspectives, including psychology, biology, history, sociology, education, and anthropology. Within all of these perspectives, adolescence is viewed as a transitional period between childhood and adulthood, whose cultural purpose is the preparation of children for adult roles. It is a period of multiple transitions involving education, training, employment, and unemployment, as well as transitions from one living circumstance to another. The end of adolescence and the beginning of adulthood varies by country (Ries, 2015). Even within a single nation state or culture, there can be different ages at which an individual are considered mature enough for society to entrust them with certain privileges and responsibilities. Such privileges and responsibilities include driving a vehicle, having legal sexual relations, serving in the armed forces or on a jury, purchasing and drinking alcohol, purchase of tobacco products, voting, entering into contracts, finishing certain levels of education, marriage, and accountability for upholding the law (Steinberg, 2011). Adolescence is usually accompanied by an increased independence allowed by the parents or legal guardians, including less supervision as compared to preadolescence.

Adolescent development can be defined biologically, as the physical transition marked by the onset of puberty and the termination of physical growth; cognitively, as changes in the ability to think abstractly and multi-dimensionally; or socially, as a period of preparation for adult roles. Major pubertal and biological involves interdisciplinary collaborations. For example, researchers in neuroscience or bio-behaviour health might focus on pubertal changes in brain structure and its effects on cognition or social relations (Smetana, 2013). Sociologists interested in the adolescence might focus on the acquisition of social roles (e.g., worker or romantic partner) and how this varies across cultures or social conditions. Developmental psychologists might focus on changes in relations to parents and peers as a function of school structure and pubertal status. Some scientists have questioned the universality of adolescence as a developmental phase, arguing that traits often considered typical of adolescents are not in fact inherent to the teenage years (Abdel et al., 2012; Etuk 2021).

Social Factors that Influence Tobacco Consumption

Social factors influencing tobacco consumption among adolescence are as follows:

i. Family

The family as a consuming and decision-making unit is a central phenomenon in marketing and consumer behaviour (Cant et al., 2008). Since an individual would often make the closest contact with family, family members can strongly influence purchase behaviour. For many consumers, the family is the most important social institution that influences buyer behaviour, values, attitudes and self-concept. The family is always responsible towards the children for socialization process in passing down the cultural norms and values. Children automatically learn by observing the consumption patterns of their parents and will have similar consumption behavior in the future (Lamb, 2008). The way children learn to become consumers in our society may be mainly the result of family influence (Cant et al., 2008).

A buyer's behaviour can be influenced by two types of families: family of orientation and family of procreation. In the case of family of orientation, the buyer's parents are responsible for making up the orientation towards the buying behaviour and other several aspects of life. Even if the buyer no longer lives or interacts with his or her parents, what he or she has learned during the stay with them influences his or her buying behaviour later too. The family that have children living with them has more influence on what to buy, quantity and consumption habit than others who do not. Husband-wife involvement differs with product category and the stage in the buying process. Especially in food, clothing and household things, the wife is traditionally the main purchasing agent for the family. Children also play a huge role in influencing the family buying decisions. There are a number of research findings which indicate that children have significant influence in purchasing the products for which they are the primary consumers such as toys, food, clothes and school supplies (Bearden & Etzel, 2012). The family members play different roles during decision making. The first person who has an idea for buying a particular product is the initiator. Influencer is the person who gives ideas and suggestions and influences the decision of the buyer. Decider is the person who ultimately decides of what, where, how and when to buy the product. The buyer makes an actual purchase while the user finally uses or consumes the product or service (Kotler, 2008; Etuk, Glory, & Bassey, 2016).

ii. Peer Group

Social influences are among the most robust and consistent predictors of adolescent smoking. Peer group influences seem to be especially salient, perhaps because adolescence is a time during which school and peer group affiliations take on particular importance (American Psychological Association (2014). Adolescents tend to overestimate the prevalence of smoking among their peers, and perceptions that one's peers smoke consistently predict use of tobacco. Another well-established finding is that adolescents are more likely to smoke if they have friends who smoke

(WHO, 2013). Young smokers tend to affiliate with other young smokers, and both selection (of friends) and socialization (influences of friends) likely contribute to homogeneity in tobacco use among groups of friends. These processes that lead to homogeneity are not separate from, and are likely nested within a similarity in factors in large social and physical environments such as religion, social stratification, and ethnicity (Smetana, 2013). In short, youth might be guided by those closest to them and by perceived social norms and then select and be influenced by peers to use or not use tobacco products. Social network analyses have demonstrated that peer group structure uniquely contributes to the prediction of youth smoking behaviour. Youth who are able to mix successfully within small social groups are relatively less likely to conform to the tobacco use behavior than others who do not as a result of cognitive accord. Cognitive advances encompass both increment in knowledge and in the ability to think abstractly and to reason more effectively. The study of adolescence development often, who perhaps have fewer social skills or experience a sense of being lower in social status within a group of people who are living in a particular place (Cant *et al.*, 2008).

The fact that popular youths are relatively more likely to smoke in schools that have relatively greater concentrations of smokers suggests that smoking behavior among peer networks is also contingent on school-level norms and attempts to be liked by others in the group. Research on group identification indicates that youth who self-identify as belonging to deviant groups are most likely to be smokers. In addition to these peer-related effects, smoking by parents and older siblings and the quality of family relationships and parenting practices are generally predictive of all levels of smoking among adolescences (Smetana, 2013). However, parental disapproval of smoking is inconsistently related to smoking by their children, and the effects of parental smoking may be mediated by such variables as the degree of monitoring and supervision provided by parents. Evidence from studies (Smetana, 2013; WHO, 2013; Bearden & Etzel, 2012) of young adults indicates there may be a continuing influence of parental smoking on the initiation and progression of smoking, although the studies are few and the findings are not sufficient for a definitive conclusion.

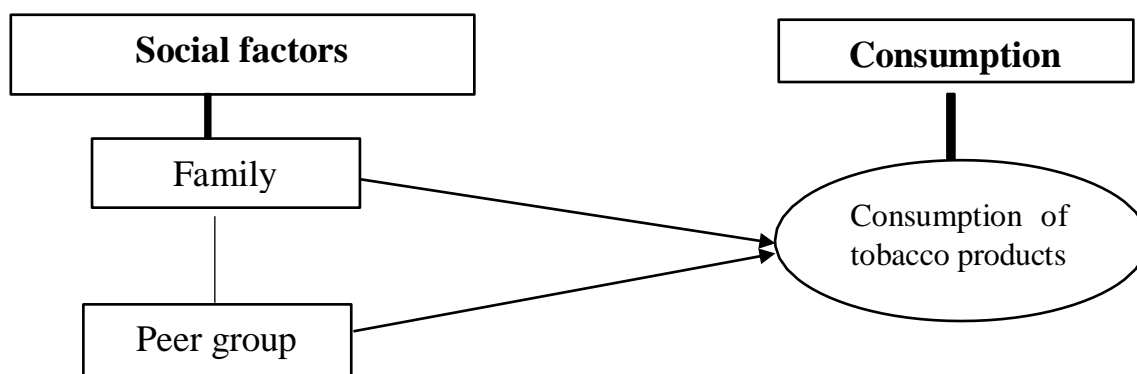
Influence of Social Factors on Tobacco Consumption among Adolescence
Adolescent smoking is a global issue because there is not a single country around the world where teens are not smoking (WHO, 2013). Many adult smokers initiate the smoking habit during adolescence or as young adults. 10.4% were current cigarette smoking among 13 to 15 years old. American Psychological Association (2014) reported that non-depressed teens who smoked in the prior month faced approximately a four times greater risk of developing depression than non-smoking teens. WHO (2013) stated that the current smoking prevalence of girls is 2%, but about 13.2% of the smokers never express their willingness to initiate smoking within the next one year. Between the ages of 14 to 18 years, a person is most likely to be attracted towards the smoking habit and become an addict for the rest of his or her life. This age represents the growth of maturity where teens make choices for their lifestyle and plan

where they want to see themselves in the future. This is the age where the inspiration is at the maximum level and adolescents are more conscious of their personality, styles and making up their role models.

Different factors like stress, attention disorder, psychological pressures and conflicts from parents play an important role in impacting the individual personality and most of the teens are seen fighting with these kinds of problems due to lack of parental interest or sometimes over protectiveness of parents (Centers for Disease Control and Prevention (CDC, 2011 as cited in Uford, Effiong & Charles, 2023). Tobacco use is the leading cause of preventable death and disease worldwide and is estimated to kill more than 5 million people each year. Tobacco smoking is a leading modifiable global disease risk factor, with nearly 6 million premature deaths, 6.90% of years of life lost and 5.5% disability-adjusted life- years (DALYs) in 2010 (American Psychological Association, 2014). Tobacco use in adolescents has been called a “pediatric epidemic” because of increasing level of its use and dire public health implications.

Centers for Disease Control and Prevention (CDC, 2011) stated that the teen smoking still affects 54% of high school students and one in three who start smoking as a teen will die later of smoking related causes. Smoking among adolescents is a major concern because long term smoking poses many health hazards. Most of all adolescents know the long-term effects of smoking are and many do not care, because they are not concerned with what might happen to them forty or fifty years down the road. If smoking continues at the current rate among youth 5.6 million of today’s Americans younger than 18 will die early from a smoking-related illness.

Figure 1: Operational conceptual framework showing the relationship between social factors and adolescence tobacco consumption.



{Independent variables}

Source: (Researchers Concept, 2021).

{Dependent variable}

Theoretical Framework

Two (2) major theories are considered relevant to the study.

Theory of Planned Behaviour/Reasoned Action

The theory of reasoned action was developed by Fishbein & Ajzen (1975). Fishbein and Ajzen (1975) derived from previous research that started out as the theory of attitude, which led to

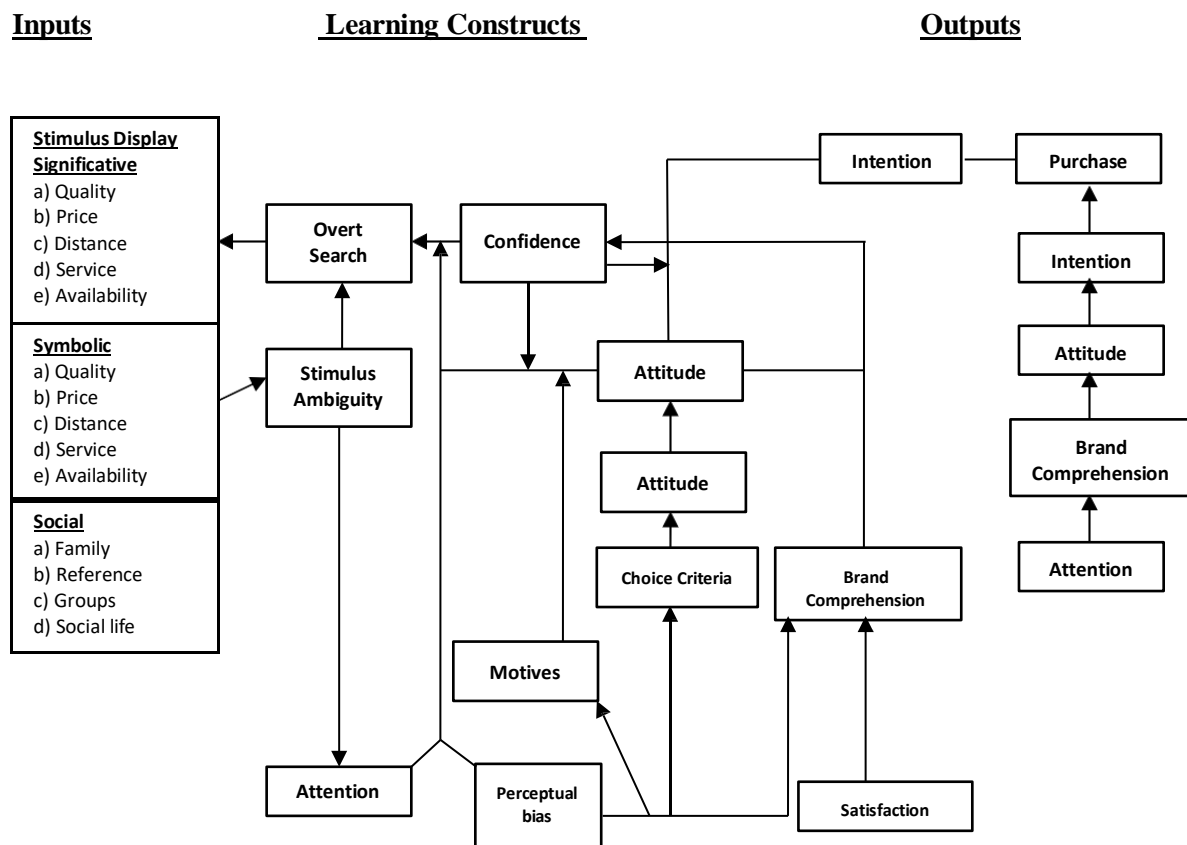
the study of attitude and behaviour. The theory was “largely born out of frustration with traditional attitude behaviour research, much of which found weak correlations between attitude measures and performance of volitional behaviours. The theory of reasoned action is a model for the prediction of behavioural intention, spanning predictions of attitude and predictions of behaviour. According to the theory, behaviour is determined by the behavioural intentions to emit the behaviour. There are two major factors that determine behavioural intentions: a personal or “attitudinal” factor and a social or “normative” factor. In accordance with an expectancy-value formulation, the first component (the person’s attitude toward a specific behaviour) is proposed to be a function of the salient (behavioural) beliefs about the perceived consequences of performing the behaviour and the person’s (outcome) evaluation of these consequences. The second component, subjective norms, consists of an actor’s perceptions of what important specific referent individuals or groups think he or she should do. Subjective norms are a function of the person’s (normative) beliefs regarding what each referent thinks he or she should do and the motivation to comply with these referents. The relative importance of the attitudinal and normative components in determining intention is expected to vary according to the behaviour, the situation, and individual differences of the actor (Fishbein and Ajzen, 1975; Etuk *et al* 2022).

The theory of reasoned action has received considerable (and for the most part) justifiable attention within the field of consumer behavior. Not only does the model appear to predict consumer intentions and behaviour quite well, it also provides a relatively simple basis for identifying where and how to target consumers’ behavioural change attempts. In this study, variables external to the theory of reasoned action were included in other to predict adolescence behavioural intention to patronize tobacco products.

Howard Sheth Theory

Howard Sheth (1969) theory of buyer behaviour is like the Engel, Kollat and Blackwell model which attempts to show the relationship existing between economic and behavioural factors in most consumer buying decision. The Howard Sheth model evaluates how economic, socio-cultural and psychological variables do act on the consumer which will result to either a decision to buy or not to buy the product. This model believes that buying is not an irrational exercise. That information in the form of inputs about all competing brand of a product in the market, acts as a stimulus which finally result to purchase or non-purchase of the product (Sheth, 1969). In summary, Howard Sheth model towards explaining consumer buying decision sees how stimulus-input variables (motive, attitude, experience and perception) of the buyer- being acted upon by package protection, information and re-use to finally shape a consumer decision towards purchase or non-purchase of a product.

Perceptual constructs



Solid lines show flow of info. –Dashed lines indicate feedback effect.

Fig 2.2.1 Howard Sheth Model

Source: Sheth (1969)

Review of Empirical Studies

Maghran (2018) examined social factors influencing tobacco use among school students in Al-Quwayiyah Governorate. The objective was to determine the prevalence and risk factors for smoking among secondary and higher secondary students aged 12-19 years in different locations at Al-Quwayiyah, Saudi Arabia. Using a sample of 300 students, the researcher evaluated the prevalence and factors associated with smoking. Out of Seventy-nine (26.33%) of total smokers, only 31 (39.24%) respondents were current tobacco smokers, while the remaining 48 (60.75%) were even smokers. But majority of the students (152, that is 50.66%) are reported to have tried smoking cigarettes or any form of tobacco. Overall, a high proportion of secondary school students (27.36%) are smokers as compared to higher secondary students (24.54 %). The main social influences that lead the students to initiate smoking reported in this study were friends (43.03%), parents (29.11%), siblings (13.92%) and media/advertisement (13.92%) respectively. Interestingly, 86.53% of secondary school and 77.77% of higher secondary students are ready to quit smoking. At the same time, both secondary (73.68%) and higher secondary school students (81.82%) believe that “Shisha” smoking is not injurious to health. These findings suggest that the current health promotion interventions do not target the contemporary social and environmental contexts of students in

Al-Quwayiyah. To address parental influence on smoking behavior, it is necessary to initiate smoking cessation programs for parents and guardians.

Hossain et al (2015) examined the factors influencing the teens to initiate smoking in south-west region of Bangladesh. A number of 408 students were interviewed using a semi-structured questionnaire between February-November, 2014. The curiosity of the teen, and 'to get rid of frustration' are the two main reasons for initiating smoking. Some other acknowledged reasons are peer pressure; desire to fit with friends, fun making, copying parent or elderly, and to relief from mental stress. More than half of the teens smoke to overcome psychological stress. Some others are smoking to keep relaxed from study load, to keep away family problem as well as for outlook and personality. Many of the teen smokers used to smoke because of reasonably price of cigarette and easy to obtain. The researchers recommended that to overcome the situation, academic institutes can arrange workshop or seminar regarding the consequences of smoking on health. Health effects of smoking can also be added in the curriculum so that the teen can understand and re-think about their harmful habit. Teixeira et al (2017) conducted a study on factors associated with smoking initiation among school-aged adolescents. This was a cross-sectional study conducted in 2014 with 864 adolescents at a secondary school in southern Brazil.

Data were collected using an instrument with socio-demographic questions, application of the Fagerström Nicotine Dependence Scale, and Beck Depression Inventory, and analyzed using descriptive statistics, Fisher's Exact test, Chi-square test, Mann-Whitney's test, and the Poisson Regression test. Fifty-four of the adolescents started smoking, of which 35 continued smoking and exhibited high nicotine dependence. Smoking was associated with brown skin ($p = 0.020$), single-parent household ($p = 0.006$), a fair family relationship ($p = 0.003$), and drug users in the family ($p = 0.04$). A significantly higher prevalence ratio was detected for boys ($p = 0.038$), higher family income ($p > 0.001$), living with one family member ($p > 0.001$), and a fair family relationship ($p > 0.001$). Factors associated with smoking initiation were identified, revealing the importance of supporting health education strategies to change this reality.

Rogacheva (2008) conducted a study to investigate the changes in tobacco consumption associated with social factors and existing health policies among adolescents in Russia from 1995 to 2004. A confidential questionnaire was distributed to every 9th grade student of all 10 comprehensive schools of the Pitkäranta in Republic of Karelia, Russia. In 1995, 385 children participated in the survey (response rate - 95%) and 395 children (response rate - 85%) in 2004. Twenty-nine percent of boys smoked daily in 1995 and 31% in 2004. Daily smoking doubled from 7% to 15% for girls. Smoking in the schoolyard increased among girls. The proportion of girls who were reported smoking at home with their parents' knowledge increased. Both genders cited the ease of purchasing tobacco as a minor. Knowledge about the fast development of tobacco addiction increased statistically significant among boys. Fewer numbers of respondents of either gender thought that young smokers look 'cool' and more grown up. Having a best friend who smoked was the strongest predictor for smoking for both genders. Smoking increased among girls; social environment is a predisposing factor; anti-smoking legislation was implemented weakly; minors purchase tobacco relatively easily, knowledge about tobacco's harmfulness has somewhat increased but is not sufficient to deter

starting smoking, especially among non-smoking girls. It was recommended that adequate education of adolescents on the hazards of tobacco consumption is needed, accompanied by a more determined enforcement of health policies. The potent influence of peers should be considered when planning preventive interventions.

Tercyak (2006) carried out a study on how social risk factors predict cigarette smoking progression among adolescents with asthma in Departments of Oncology and Pediatrics and Lombardi Comprehensive Cancer Center, Georgetown University Medical Center. Participants were 1,507 adolescents with asthma and 1,507 healthy matched controls from Waves I and II of the Add Health Project assessed at baseline and again 1 to 2 years later at follow-up. Three levels of smoking progression (defined as smoking more frequently and/or intensely over time) were identified: (a) Late experimenters (never smokers at baseline, ever smokers at follow-up), (b) Early experimenters (ever smokers at baseline, current or frequent smokers at follow-up), and (c) Early smokers (current smokers at baseline, current frequent smokers at follow-up). Twenty percent of adolescents experienced progression in their smoking behavior; those with and without asthma were equally likely to progress. Among adolescents who progressed, 37% were late experimenters, 42% were early experimenters, and 21% were early smokers. Exposure to friends who smoked was a consistent and powerful social risk factor for smoking progression among adolescents with asthma-more so than among adolescents without asthma. This effect was intensified among late experimenters by the presence of a positive history of parent smoking. Findings underscore the importance of addressing cigarette smoking behavior and its social risk factors among adolescents with asthma in both clinical and public health contexts during early adolescence.

Methodology

The study adopted survey research design as it permits investigating description and recording of information in their natural setting, as suggested by (Uford, Charles & Etuk, 2022). This design was adopted because the research examined the concept of the study through opinion survey, without manipulating the variables. The data for the study was sourced through the administration of structured questionnaire to secondary school students within senior secondary 1 to senior secondary 3 in selected secondary schools. More so, the data was analyzed using both multiple regression models. The study was conducted in Ikot Ekpene, Akwa Ibom State. Ikot Ekpene also known as “the Raffia City, is a historic town in south-southern state of Akwa Ibom. It is the political and cultural capital of the Annang ethnic group in Nigeria. The town is located on the A342 highway that parallels the coast, between Calabar to the south east and Aba to the west, with the State capital, Uyo, on this road, just to the east. Umuahia is the next major town to the north. Ikot Ekpene is known as a regional centre of commerce, with notable exports of palm products, especially palm, kernel, Raffia products including raffia fibers and its wine, and ground crops of yams, cassava, taro, and corn. The population is made up primarily of the Annang people with a small number of Igbo traders and Hausa Suya vendors. Significant exports also include basket weaving, sculpture, and, most notably, raffia cane furniture (hence the colloquial name of the town). WHO (2013) defines adolescents as individuals in the 10-19 years age group, while young people covers the age range 10-24 years. In effect, the population of the study comprised senior secondary school students (SS1 – SS3) in 3 most populated Secondary Schools in Ikot Ekpene, Akwa Ibom

State. This set of people basically is within the adolescents group who defined the scope of the study.

Table 3.1: Population of the study

Schools	Population
State College, Ikot Ekpene	826
State Secondary Commercial School, Okop Eto	775
Community Secondary Commercial School, Ikot Abia Idem/Ikot Enwang	644
Total	2,245

Source: Academic Unit of the Schools studied (2019/2020 session).

The sample size was derived statistically by using the Taro Yamane (1964) sample determination formula stated as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

N is the total population of the study, e is the error term, n is sample size

$$n = \frac{2245}{1 + 2245(0.05)^2} \quad n = \frac{2245}{1 + 2245(0.0025)} \quad n = \frac{2245}{1 + 5.6125} \quad n = \frac{2245}{6.6125} \quad n = 339.51$$

$$n \approx 340$$

So, 340 constitute the sample size of the study.

Judgmental and cluster sampling techniques were adopted for this study. Cluster sampling is a specific type of probability sampling method that relies on data collected from a common group of population, whose members have common values and attitude. Judgmental sampling technique helped the researcher to gather data among students (adolescents) who consumed tobacco products in the study area.

From each of the selected secondary schools, the sample was selected based on the proportion of the population. Thus, Bowley (1972) proportional formula was adopted as follows:

$$\text{State College:} \quad \frac{826}{2245} \times \frac{340}{1} = 125$$

$$\text{State secondary commercial school:} \quad \frac{775}{2245} \times \frac{340}{1} = 117$$

$$\text{Community secondary commercial school:} \quad \frac{644}{2245} \times \frac{340}{1} = 98$$

This technique helped the researcher to allocate appropriate copies of the questionnaire to specific clusters of adolescents in the study area. The questionnaire was structured in both open ended type and 4-point scale as follows: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD). The questionnaire was designed in two sections A and B. Section A consisted of the socioeconomic characteristics of the respondents; while section B was structured based on the specific objectives of the study. The study adopted the regression technique to analyse the variables under study. The SSPS Software was also used to aid data analysis.

The model specification for multiple regression adopted in the study is specified thus: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + e_i$3.1

Where;

Y is the dependent variable – Consumption of tobacco

X is the independent variables – family member & peer group, e = error term
(5% = 0.05)

β_0 is the Intercept β_1 to β_2 = Coefficient of the variable to be estimated.

Model Specification

For stated Hypotheses, we specify multiple regression model, thus $Y = f(X_1, X_2)$ 3.2

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + e_i$3.3

Where;

Y - is the dependent variable - Consumption of tobacco

X_1 - is the family members, X_2 - is the peer group, β_0 - is the Intercept β_1
– β_2 are the population parameters, e - is the error term (5%) coefficients

Results and Discussion

The results of both descriptive and empirical analysis are presented in this section with interpretations. The section was divided into three sections: section 4.1 shows the rate of return of questionnaire and demographic characteristics of the respondents; section 4.2 presents the detailed descriptive analysis of the questionnaire items; section 4.3 shows the result of test of hypothesis and discussions.

Questionnaire Administration

Table 4.1: Questionnaire Administration

Respondents	No. administered Questionnaire	of	%	No. Returned Questionnaire	of	%
State college	125		36.8	120		35.3
State secondary school	117	commercial	34.4	108		31.8

Community commercial	secondary	98	28. 8	93	27.3
Total		340	100	321	94.4

Source: Field Survey, 2023

Table 4.1 addressed questionnaire administration, from 340 copies of questionnaire administered to respondents in Ikot Ekpene, Akwa Ibom State to examine the influence of social factors on consumption of tobacco. 321 copies of the questionnaire were completed and retrieved, implying that 19 copies of the questionnaire were lost in the process. In effect, 321 which represents (94.4%) of the respondents, constituted the sample of the study.

Demographic Characteristics of the Respondents

Table 4.2: Demographic Characteristics of the Respondents

Variables	Categories	Frequency	Percentage
Age (years)	10 – 14	54	16.8
	15 – 17	227	70.7
	18 – 20	40	12.5
	Total	321	100
Gender	Male	258	80.4
	Female	63	19.6
	Total	321	100
Class in school	SS1	89	27.7
	SS2	130	40.5
	SS3	102	31.8
	Total	321	100

Source: Field Survey, 2023

The demographic characteristics of the respondents were addressed in Table 4.2. The result revealed that, 70.7% of the respondents were within 15 – 17years of age, followed by 16.8% and 12.5% who fell between 10 – 14 years of age and 18 – 20 years of age respectively. The limited age bracket was based on the scope of the study which targeted only adolescence in the study area.

As shown in Table 4.2, 80.4% of the respondents were male as against 19.6% of the respondents who were female. The variation in gender was because most of female adolescents did not want to come close to the researcher and the few that came close denied that they consumed tobacco product. Thus, it was only 19.6% of the female sample that were not biased on their argument. From the class in school or level of education, 40.5% of the respondents were in senior secondary 2, followed by 31.8% of the respondents who were in senior secondary 3. The least were 27.7 of the respondents who were in senior secondary 1.

Effect of family members on adolescent tobacco consumption Table 4.3: Family members and adolescent tobacco consumption

Statement	SA	A	D	SD	Mean	Std
1. Intake of tobacco products by parents and older siblings influence consumption of tobacco Products	181 56.4 %	88 27.4 %	21 6.5 %	31 9.7 %	3.30 5	0.9 62
2. Family orientation on consumption structure inspires my decision on consume tobacco products	89 27.7 %	78 24.3 %	88 27.4 %	66 20.6 %	2.59 2	1.1 00
3. Tobacco products availability and exposure in the family leads to tobacco consumption	176 54.8 %	87 27.1 %	35 10.9 %	23 7.2 %	3.29 6	0.9 27

Source: Field Survey, 2023

Table 4.3 addressed the linkage of family members and adolescence tobacco consumption in Ikot Ekpene. From the result, use of tobacco products by parents and older siblings has a mean value of 3.305 which is greater than 2.5, followed by tobacco products availability and exposure in the family with a mean value of 3.296 > 2.5 decision rule, and family orientation on consumption structure with a mean value of 2.592 > 2.5 decision rule. Based on the decision rule that a mean value > 2.5 is accepted while a mean < 2.5 is rejected, we conclude that use of tobacco products by parents and older siblings, tobacco products availability and exposure in the family and family orientation on consumption structure are the major family conditions that triggered adolescent tobacco consumption in Ikot Ekpene, Akwa Ibom State.

Effect of peer group members on tobacco consumption among adolescent in Ikot Ekpene**Table 4.4: Effect of peer group members on tobacco consumption among adolescents**

	SA	A	D	SD	Mean	Std
1. Consumption of tobacco products by my friends in school influences my decision to consume tobacco	184 57.1 %	64 19.9 %	43 13.4 %	31 9.6%	3.24 5	1.01 6
2. Consumption of tobacco products by age grade influence my decision to consume of tobacco products	106 32.9 %	107 33.2 %	43 13.4 %	66 20.5 %	2.78 5	1.11 4

3. Consumption of tobacco by my classmates and my gender impel me to consume of tobacco products	203	53	32	34	3.31	1.02
	63.0	16.5	9.9	10.6	9	6
	%	%	%	%		

Source: Field Survey, 2023

In Table 4.4, the result revealed that the consumption of tobacco by classmates and gender has a mean value of 3.319 which is greater than 2.5, followed by consumption of tobacco products by friends in school, with a mean value of 3.245 > 2.5 decision rule, and consumption of tobacco products by age grade with a mean value of 2.785 > 2.5 decision rule. Based on the decision rule that a mean value > 2.5 is accepted while a mean < 2.5 is rejected, we conclude that consumption of tobacco by classmates and gender; consumption of tobacco products by friends in school and consumption of tobacco products by age grade as peer group indices affect adolescent tobacco consumption in Ikot Ekpene, Akwa Ibom State.

Test of Hypotheses Test of Hypotheses 1

H0: Family members and peer group have no significant influence on tobacco consumption among adolescents in Ikot Ekpene

Table 4.5: Multiple linear regression model analysis of social factors and tobacco consumption among adolescent

Variable	Parameters	Coefficien t	Std error	Tcal value
Constant	β_0	418.522	311.011	1.346
Family members (X ₁)	β_1	0.131	0.057	2.298**
Peer group (X ₂)	β_2	1.306	0.078	16.692***
R-Square (R²)		0.517		
Adjusted R – Square (R⁻²)		0.514		
F – Statistics		170.127		
F – probability		0.000		

***, **, and * denotes significance of coefficient at 1%, 5%, and 10% level respectively P= 0.05, Df = 318, T-table value =1.972

Source: SPSS Version 22 Computation

The coefficient of family members (X₁) was statistically significant and positively related to adolescence tobacco consumption at 5 percent level. This implies that when members of the family that consume tobacco products increase, consumption of tobacco products among adolescents also increases. Thus, adolescent tobacco consumption is an increasing function of family members. From the result, the t- calculated value of family members was 2.298 and the t-tabulated value of 1.972 at 5% level of significance. Since the t-calculated value (2.298) is greater than t-tabulated value (1.972) in absolute terms, the null hypothesis was rejected in favour of alternative hence, family members has significant effect on adolescence tobacco consumption in Ikot Ekpene, Nigeria.

The estimate value of peer group (X₂) was statistically significant and positively related to adolescent tobacco consumption at 1percent level. This implies that increase in peer group members that consume tobacco products leads to increase in adolescent tobacco consumption. From the result, the t-calculated value of peer group was 16.692 and

the t-tabulated value of 1.972 at 5% level of significance. Since the t-calculated value (16.692) is greater than t-tabulated value (1.972) in absolute terms, the null hypothesis was rejected in favour of alternative thus, peer group has significant influence on adolescent tobacco consumption in Ikot Ekpene, Nigeria.

The R^2 coefficient of multiple determinations was 0.517, which indicates that 51.7% changes in dependent variable can be explained by the changes in the independent variable, while 48.3% can be explained by the stochastic terms in model. This implies that, the independent variable (family member and peer group) can only explain 51.7percent changes in adolescent tobacco consumption, leaving 48.3 percent unexplained. F-statistics value of 170.127 and F-probability value of 0.000 was observed from the analysis which is less than 0.05, indicating that the estimated regression model adopted in this study is statistically significant at 5% significant level. With this, the researcher rejected the null hypothesis and accept alternative hypothesis which states that, family member and peer group have significant effect on adolescent tobacco consumption in Ikot Ekpene, Akwa Ibom State.

Discussion of Findings

The coefficient of family members (X_1) was statistically significant and positively related to adolescence tobacco consumption at 5 percent level. This implies that when members of the family that consume tobacco products increase, consumption of tobacco products among adolescence also increases. Thus, adolescent tobacco consumption is an increasing function of family members. The result agrees with the findings of Teixeira *et al.*, (2017) who found that single-parent household and family relationship significantly have higher prevalence on adolescent tobacco consumption at a secondary school in southern Brazil.

The estimate value of peer group (X_2) was statistically significant and positively related to adolescent tobacco consumption at 1percent level. This implies that increase in peer group members that consume tobacco products leads to increase in adolescent tobacco consumption. Thus, peer group has significant influence on adolescent tobacco consumption. The result conforms to the findings of Maghram (2018) who examined social factors influencing tobacco use among school students in Al- Quwayiyah Governorate and found that majority of the students 152 (50.66%) were reported to have tried smoking cigarettes or any form of tobacco in Al-Quwayiyah Governorate. Maghram (2018) also stated that a high proportion of secondary school students (27.36%) are smokers as compared to higher secondary (24.54 %). The main social influences that lead the students to initiate to smoking reported in this study were friends (43.03%), parents (29.11%), siblings (13.92%) and media/advertisement (13.92%), respectively.

Summary of Findings

The objective questions revealed that, intake of tobacco products by parents and older siblings, tobacco products availability and exposure in the family and family orientation on consumption structure are the major family conditions that triggered adolescent

tobacco consumption in Ikot Ekpene, Akwa Ibom State; consumption of tobacco by classmates and gender, consumption of tobacco products by friends in school and consumption of tobacco products by age grade as peer group indices affect adolescent tobacco consumption in Ikot Ekpene, Akwa Ibom State. The empirical result showed that family members and peer group have significant effect on adolescent tobacco consumption in Ikot Ekpene, Akwa Ibom State.

Conclusion

Tobacco consumption is rapidly increasing among adolescents in developing countries such as Nigeria. The family and peer groups are the two most important small social groups in the development of young people. From the findings of the study, numerous factors influence adolescents' decisions to consume tobacco products. These factors include social characteristics, such as parents, siblings, or friends who smoke or consume these products. Tobacco consumption is well recognized as a preventable risk factor for early morbidity and mortality.

Recommendations

Based on the empirical findings, the researcher recommends the following:

- i. There is need for parents to closely monitor the kind of friends their wards keep, both in school and at home. Parents should also create time to visit their children in schools, especially those in boarding facilities, as this will help them to understand the character their children exhibit and the friends they kept.
- ii. Parents and guardians of adolescents should not indulge in tobacco consumption before their children and wards. This will help to streamline adolescence tobacco consumption.

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