



INFLUENCE OF PEER GROUP AND PERSONALITY FACTORS ON CIGARETTE SMOKING BEHAVIOR AMONG UNDERGRADUATES OF THE UNIVERSITY OF IBADAN

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Abstract: *Cigarette smoking as a major problem in the world today is confirmed by several studies and has been seen as the most preventable cause of death globally. Therefore, it is important to understand the reasons why undergraduates engage in cigarette smoking behavior. The study investigated whether peer group and personality factors have any influence on the smoking behavior of undergraduates of the University of Ibadan, Nigeria. Cross-sectional research design was adopted in this study, and the participants were selected using accidental sampling technique. 265 students gave their consent to participate in the study, but only 242 questionnaires were properly filled and useful for the study. The ages of the respondents ranged between 17 and 37 with the mean of 23.29. Three validated research instruments were utilized for data collection measuring peer influence, personality factors and self-esteem. Three hypothesis were formulated and tested at .05 level of significance using multiple regression analysis, t-test for independent samples and Pearson Product Correlation. The result revealed that there is a significant influence of peer group on the smoking behavior of undergraduates ($t(237) = -4.82; P < .05$), It also showed that there is a significant joint influence of personality factors (Conscientiousness, Extraversion, Neuroticism and Self Esteem) on cigarette smoking behavior ($R = .26; R^2 = .07; F(4,20) = 4.20; P < .05$), However for the independent influence, extraversion ($\beta = .19; t = 2.88; P < .01$) and neuroticism ($\beta = .15; t = 1.93; P < .01$) were independently significant. Undergraduates that are extroverted or neurotic in personality will engage in cigarette smoking behavior more. Finally, it was revealed that there exists a significant gender difference in Cigarette smoking behavior ($t(237) = .4.97; P < .05$), showing that males engaged more in cigarette smoking than the females. Personality factors such as extraversion and neuroticism, peer groups and gender are central to undergraduates' smoking behavior. The recommendation of the study is that transmission of information on the danger of cigarette smoking should be done in all educational levels existing in the country, right from primary school to university level. Since all levels are peer oriented, and the danger of taking to the habit must be known by all.*

Keywords: Cigarette Smoking Behavior, Peer Pressure, Personality factors, self-esteem, Undergraduates

Introduction

One in ten deaths around the world is as a result of tobacco use (WHO, 2017). For over a decade, cigarette smoking has been seen as the most preventable cause of death globally. The use of tobacco has killed over five million persons yearly (WHO, 2012), and the death toll has been projected to reach up to 10 million by 2020 (Peto, Lopez, Boreham, Thun & Heath, 1994). Tobacco is consumed by



more than one billion persons in the world, with cigarette smoking as the most consumed. Cigarette smoking as a major problem in the world today is confirmed by several studies, even the Nigerian Tobacco company also confirmed this fact at the end of their advertisement which states that “the federal ministry of health warns that tobacco smoking is dangerous to health, and that smokers are liable to die young”. The United States surgeon general also declared in 1964 that smoking is dangerous to health (DiMatteo, 1991). Tobacco smoked contains various substances which includes irritants, oxidants and carcinogenic. These substances have direct and profound effect on human body and they are direct causes of diseases associated with cigarette smoking. Tobacco smoking has also led to several health challenges to smokers, and this has become a public health challenge globally. Tobacco use has been found to result to serious medical conditions like cardio vascular diseases, coronary heart disease and lung cancer. It is also responsible for low birth weight and sudden death in pregnant women and infants. Fetal tobacco syndrome, a condition characterized by retarded fetal growth resulting in lower birth weight and hyperactivity can occur if a mother smokes as few as five cigarette daily during pregnancy (Neiburg, Marks, McLaren & Remington, 1985). Smoking has also resulted in antisocial behavior among the youths. These youths and the health of these youths is essential for national growth and development.

In spite of the obvious health hazards that come with cigarette smoking, young adults have continued to indulge in cigarette smoking behavior. Youths indulgence on cigarette smoking is on the high side and this has shortened their expectation their expectancy. The tobacco industries’ target is the youths especially those from developing countries, in order for such youths to be retained as tobacco users for life, and this experience will prolong exposure to tobacco and its associated risk factors (Park, Weaver & Rower, 2009). Almost all first use of cigarette occurs in secondary school, and it is common for adolescents to feel social pressure in so many ways ranging from clothing and music to risky behavior such as drugs, sex, and smoking, and they are likely to experiment and try out new things. Alcohol and cigarette are known as gateway drugs because they are usually the first drugs that are used before adolescents or young adults think of giving other drugs a try (Meril, 1994). Most drugs use in Nigeria starts during adolescents and especially for “gateway” drugs, and over time, Nigerian adolescents have been implicated to be involved in the use and abuse of drugs (FMOH, 2000). Cigarette smoking used to be more common among males, but presently, the female’s rate of smoking is almost the same with that of males especially in developed countries (Jha and Peto, 2014) Research on adult revealed that between 80% and 90% of smokers began smoking by 18 years of age (Kesler, Bennette & Witt, 1996).

Smokers don’t just risk their own health, they also endanger those who live and work around them. A massive study by the United States government concluded in 1993 that secondary smoke causes 20%



of all lung cancer. Babies born to mothers who smoke during and after pregnancy are three times more likely to die of sudden infant death syndrome. It is particularly responsible for smokers who expose young children to secondary smoke (Abramson, 1993). According to Oberg, Jaakkola, Woodward, Perugga & pruss-Ustum (2001), an estimated 600,000 people die from exposure to second-hand smoke annually, 75% of these deaths involves women and children. The consequences of cigarette smoking on health has been made known to the public and if tobacco use is not curbed, it is expected to result to one billion deaths in this century (US Department of Health and Human Services, 2014). Other problem associated with smoking according to Spear and Akers (1998) are failure to fulfill major role in school; repeated absences, expulsion, and neglect of duties according to Spear and Akers (1998), these are major setbacks associated with smoking. Continued smoking and substance use can lead to persistent social or interpersonal problems such as argument with peers and physical fights. Excessive smoking and ingestion of substance can also result in symptoms of disruption of cognition processes, affect or behavior (Treatment Improvement Protocol (TIP) 1999). Study carried out by Alexander, Piazza, Mekos and Valente (2001) using 2,525 participants showed that 40% of the students had some peer network exposure to cigarette smoking while 19% had at least one best friend who was a current smoker. They also reported that having best friends who were smokers resulted in a two-fold increased risk to smoking.

Cigarette smoking has been a major public health issue and the rate of smoking in Nigeria has increased drastically especially among youths. While tobacco consumption is declining in developed countries, it is increasing in developing countries with a rate of 34% per annum (Ngahane, Ekobo & Kuaban, 2015). Research in Africa shows that the prevalence in tobacco smoking among school-going adolescents ranges from 2.5% in Malawi (Muula, Siziya & Rudatsikira, 2008), to 27% in Zambia (Siziya, Rudatsikira & Muula, 2007), while adolescents' use of tobacco is also found as high as 18% in Democratic Republic of Congo (Radatsikiria, Mulla & Siziya, 2010). In Nigeria, the use of tobacco among adolescents and young adults is a very big problem that calls for attention. The 2008 Global Youth Tobacco Survey's result revealed that one in every five students aged 13 to 15 years had experimented with cigarette smoking and one in ten students currently smokes cigarettes (Ekanem, Asuzu, Anunobi, Malami, Jibrin, Ekanem, 2011).

In an effort to understand smoking behavior, researchers have tried to identify the determinants of smoking among young adults. Majority of the research suggests that peer influence is an important factor. A cross-sectional study indicated that there is a significant relationship between smoking behavior of adolescents and smoking behavior of friends (Bauman, Fisher, Bryan, Chenoweth, 1984). Research has also indicated that there is increased risk of cigarette smoking among those whose



friends smoke (Aloise-Young, Graham & Hansen, 1994). Similarly, Khurshid and Ansari (2012) revealed that factors that influence smoking behavior among youths are friends, community members, and media environment. Some studies have examined best friends and friendship network on their smoking behavior (Urberg, Degirmencioglu & Pilgrim, 1997). Though best friends are part of undergraduates' cycle, the degree of contact and closeness that comes with being the best friend may bring about much influence on undergraduates' decision to smoke than that of the large friendship group. Peer pressure exists for all ages. According to Adeyemo (2007), peer pressure influences the prevalence of the use of tobacco. It becomes a problem because as children grow, they see their peers as role model, and peers can be seen as a social institution that modifies adolescents' behaviors thereby making them to indulge in risky behavior like smoking at a very young age. This trend has found its way into our tertiary institutions and among our youths who are the undergraduate students. According to Conrad, Flay and Hill (1992), direct peer pressure may occur in the form of encouragement, dares, or actual offers of the substances. While indirect peer influences can occur when youth associate with peers who drink or smoke, increasing the availability of these substances, providing role models, establishing substance use, and creating the perception that using these substances might increase social acceptance (Conrad, Flay and Hill, 1992). Peer groups provides comfort to children, because it increases self-esteem in children and makes them acceptable (Ukwayi, Eja & Unwanede, 2012).

Adolescents are likely going to settle with friends of similar problem and situation and where they know their conditions will be accepted (Kendal, 1985; Urberg, Luo, Pilgrim and Degirmencioglu, 2003). According to Kim, Kwak and Yun, (2010), the feeling of belonging is a very powerful force that can outweigh ties to church, school, family, or community. According to Morello, Duggan, Adger, Anthony and Joffe (2001), tobacco use has medical, psychological and social implications and can lead to substance dependence for many students. University students' encounter many challenges as a result of tobacco use. These students make use of cigarettes for various reasons such as to relieve stress and to raise their morale and self-esteem. Tobacco use normally starts during adolescence, and majority of the first time use takes place before graduation from high school. Substance use among adolescents in tertiary institution is not acceptable because this may have health implications on them as they grow old.

Majority of the student smokers' on campus and elsewhere are made up of persons that ignores normal moral values set by the family and society, but are happy to obey and conform strictly to the values of their peer group. Peer exerts negative attitudes among adolescents and individuals by challenging them to prove their manhood through performing a risky activity such as smoking. In this case, both girls



and boys are made to indulge in risky behaviors such as smoking, taking alcoholic drink and cultism, which they ordinarily would not have been involved, but taking such risky behavior is the only way that they are sure that they have been accepted into the group. Through this, they become addicted to such behavior that has consequences on their personal well being and health. Peer groups exert much influence on adolescents, and no matter how inappropriate their mode of operation may look, being a part of the group makes the young person somehow fulfilled. The practice of risky behaviours such as smoking among smokers can be traced back to their teens and the kind of moral principles accepted by the peer group. This is so because peer groups provide comfort and self-esteem to adolescents. Current smokers on campus might be students that are encouraged to make use of different tobacco products by friends they make on campus, and accepting to smoke is seen as a bond to their friendship. Smoking is a problem because of the short and long-term effects that this unhealthy behaviour would have on the student's cognitive development and personal life during their academic pursuits and after graduation.

Fatiregun and Yisa (2009) carried out a study in Ibadan in the South-West part of Nigeria, and discovered that only 6.3 percent and 10.6 percent of the respondents who are students in military secondary schools show positive attitude towards acceptance of substance. Aina and Olorunshola (2008) in their study found an increasing trend in substance use among adolescents and young adults. Also, Makanjuola, Daramola and Obembe (2007) found substance use to be increasingly widespread in many African countries. Reasons given by them for indulging in substance use include unhealthy family background, high social class, peer-group influence, and desire to remain awake at night, pressure to succeed in academic work, self-reported poor mental health and easy accessibility of drugs. Earlier studies on the peer influence and tobacco use in Nigeria and in other places identify peer pressure as one of the most common factors associated with substance use among adolescent. Adebisi, Faseru, Sangowawa and Owoaje (2010) studied tobacco use amongst out of school adolescents in a Local Government Area in Nigeria. The study showed that peer influence is an important source of introduction to tobacco use while selling of tobacco to adolescents in youth aggregation areas is common. Oshodi, Aina and Onajole (2010) studied the prevalence and associated factors of substance use among selected secondary school students in Lagos. Result obtained show that reasons for alcohol and substance uses included relief from stress self medication to treat illness and to stay awake at night to study. Balogun and Famakinde, (2019) researched on Parental Involvement, Parenting Style and Peer Pressure as Determinants of Adolescents' Attitude Towards Cigarette Smoking in selected secondary schools in Ibadan North local government area. The results revealed that in-school adolescents who reported high peer pressure and exhibited more positive attitude towards cigarette smoking than adolescents who reported low peer pressure. Omokhodion and Faseru (2007) stated that even though



studies examining smoking among youths have been documented in Nigeria, these are skewed towards describing pattern of use amongst in school youths in urban areas. Omokhodion and Faseru further submit that many of the factors associated with adverse health behaviors which may include smoking initiation and persistence are known to be more common amongst out-of-school youth because of their aggregation in areas lacking adult supervision.

Kim et al. (2010) investigated the effects of peer association and parental influence on adolescent substance use in South Korea. The findings supported both social learning theory and social bonding theory, which suggests that both peer and parental influence are significant in predicting the risks of adolescent substance use and that parental influence was slightly greater than peer factors, although the difference was negligible. Akers and Sellers (2004) stated that in the United States, peer factors seem to be a stronger predictor of adolescent substance use than parental influence. They argued that peer influence has strong direct effects on adolescent substance use, more than parental attachment. In New Zealand, Fergusson, Swain-Campbell and Horwood (2002) assessed deviant peer influence on adolescent illegal behaviours and substance use. The study found a significant impact of deviant peers on both psychosocial and criminal outcomes, like violent crime, property crime, and alcohol and other drug abuse. In a study conducted with an Austrian youth sample, Rumpold, Klingseis, Dornauer, Kopp, Doering and Hofer (2006) found that peer group influence was particularly associated with adolescent substance and drug use, as compared to negative family atmosphere, school difficulties, and other individual factors. Kwamanga, Odhiambo and Amukoye (2003) examined the prevalence and risk factors of smoking among secondary school students in Nairobi. Results indicated peer pressure, advertising, type of school and age influenced smoking among the students. Similarly, Franca, Dautzenberg, Falissard and Reynaud (2010) studied peer substance use overestimation among French university students; the result obtained showed that tobacco users are less likely to overestimate peer prevalence of smoking. The results of these studies reveal that peer influence if not properly handled and checked may affect the future life styles of adolescents.

This study also anchors firmly on the social learning theory. The theory sees family and peer relationships to exert significant influence on adolescent alcohol use as they constitute the primary institutions where good morals are learned. The theory postulates that an individual learns to take alcohol or drugs in small and informal groups (Bahr, Marcos and Maughan, 2005; Akers and Sellers, 2004). Indeed, it is in these formal groups that adolescents taught favorable or unfavorable behavior of alcohol use (Akers and Jensen, 2005). The main principle remains that the learning process may conform to societal ethic or show deviant behaviour. The theory therefore tells us how good and bad behaviours are learned and the major players influencing any of the behaviours.



The focus of many social learning theorists is on peers as a result of the importance children or adolescents place on their friends as they grow into adulthoods and gradually gain freedom from their parents. This theory constitutes a powerful stream for research on peers as a source of influence and support for smoking behavior. For example, Mosbach and Leventhal (1988) revealed that cigarette smoking was the best discriminator of social group affiliations. Adebisi et al. (2010) in their study showed that peer influence is an important source of introduction to tobacco use, while Kim et al. (2010) noted that both peer and parental influence are significant in predicting the risks of adolescent substance use. The implication of this theory to the present study is that peer influence increases during adolescence and have vital effects on their attitudes and behaviors, mostly on the current incidence of tobacco use among undergraduate students in tertiary institutions. It is not uncommon to find most students displaying deviant behaviors different from what is learnt at home immediately they begin to gain freedom. Students who do not smoke or take tobacco in their homes are influenced to do so by peers as sign of maturity and awareness. Exposure to deviant attitudes and behaviors increases the likelihood that individuals will hold such attitudes for themselves. It is no news that some students while with their parents tend to be innocent and decent in their act, but immediately they leave their homes to school where they meet with friends; exhibit all forms of risky behaviors such as tobacco smoking.

The social influence theories states that conformity to group norms is an important criteria for explaining individual behavior. The theory explains that the main desire of young adults is to belong to a group and this brings about the effect of social norms on a person's attitudes, values and behavior. If the social norms of the group of friends is to smoke cigarette, popularity and social prestige will be in line with cigarette smoking. For a student to be popular, the student must show willingness to conform with the norms of the larger group, even if it means engaging in health-risking behavior. Adolescents and young adults do not try cigarettes in a vacuum, significant others such as friends and classmates are most important factors influencing smoking behavior among adolescents and young adults in the society. Karen, Bryan & David (1992) reviewed findings from 27 prospective studies of the onset of cigarette smoking conducted in 1980, the result revealed that social bonding variables, especially peer smoking is among the factors that influence cigarette smoking behavior. Simons-Morton, Haynie, crump, Eitel, Saylor (2001) revealed in their survey that social influences can promote or discourage adolescent substance use. They revealed that positive associations with smoking and drinking were found for peer pressure and association with problem behaving friends.

Personality factors have also been put forward as determinant for smoking behavior among undergraduates. It is important to identify individual difference variables particularly personality traits



that increase the risk for cigarette smoking. Personality refers to individual differences in characteristic pattern of behavior, cognition (thinking), and emotion (feeling). Personality traits are enduring dispositions (McCrae & Costa 2003) and major determinants of behavior (Paunonen 2003). The five basic dimensions of personality is referred to the Five Factor Model (FFM). The Five Factor Model is a hierarchical model that organizes personality traits into five broad factors of Neuroticism (Sadness, moodiness, emotional instability and tendency to experience), Extraversion (sociability and assertiveness), Openness to Experience (creativity, adventurousness and receptivity to new ideas), Agreeableness (degree to which behavior is generally considered compliant and cooperative), and Conscientiousness (self-discipline and organization). A large number of studies have examined the relationships between personality traits and cigarette smoking variables. Although the personality differences between smokers and non-smokers are usually small, they are important considering the large number of people who smoke (World Health Organization 2002). Smith reviewed the empirical literature in 1970, and concluded that smokers were more extraverted, externally oriented, impulsive, and showed more anti-social tendencies/disagreeableness and poorer mental health than non-smokers. Eysenck (1980) argued that individuals high in Extraversion would smoke in search of stimulation, whereas individuals high in Neuroticism would smoke to reduce tension and anxiety. Smoking is regarded as antisocial (Eysenck 1980). Similarly Munafo & Black (2007) in their cross-sectional study found that smokers scored higher on neuroticism and extraversion than non-smokers. Smith (1967) found that smokers were rated by their peers as being low on Agreeableness. Smokers scored higher on neuroticism and extraversion and lower on conscientiousness than non-smokers (Hakulinen et al, 2015). Increased neuroticism is associated with a higher rate of smoking as a means of managing negative mood (Gonzalez et al, 2008). There is evidence that low Conscientiousness is related to health risk behaviors (Booth-Kewley & Vickers 1994, Vollrath et al. 1999, Trobst et al. 2000, Vollrath & Torgersen 2002). A 24-year follow-up study (Kubicka et al. 2001) showed that low Conscientiousness in children was a predictor of smoking in adulthood. For example, Whiteside and Lynam (2001) point out that four facets from three factors or domains of the Revised NEO Personality Inventory (NEO-PI-R, Costa & McCrae 1992) define the multi-faceted construct of impulsivity: Impulsiveness, one of the six facets of Neuroticism, refers to the inability to resist cravings and urges; Excitement Seeking, a facet of Extraversion, refers to the tendency to seek excitement and stimulation; low Self-Discipline, a facet of Conscientiousness, refers to the inability to begin and complete a task in the face of boredom and other distractions; and low Deliberation, another facet of Conscientiousness, refers to the tendency to act without considering the consequences (Costa & McCrae 1992). These facets might likely play a



role in smoking initiation and maintenance. Vollrath and Torgersen (2002) found that individuals both high in Neuroticism and low in Conscientiousness were likely to be smokers.

The health behavior model of personality is a theory that addresses the role of personality in determining an individual's health (Smith, 2006). The model postulated that certain personality traits such as conscientiousness and neuroticism are associated with either health promoting or health debilitating behaviors like smoking, drinking and drug use, thereby determining health outcomes (Turiano et al, 2013).

Weaker self-esteem is a sign of vulnerability when it comes to affective disorder. Smokers often have weaker self esteem and those with weaker self esteem are likely to smoke. Camp, Klesges & Relyea (1993) stated that male adolescents see more ways to project the image of maturity, independence and toughness. Faraday, Elliot and Grumbery (2001) reported that most smokers report measured self-esteem following smoking.

Although smoking behavior has been studied at length in development countries, it is also important to find out what the situation is in other parts of the world especially in Africa and Nigeria in particular, thereby justifying the importance of the study. Most studies on cigarette smoking behavior in Nigeria have been centered on adolescents, leaving a gap in knowledge of the magnitude of the problem among undergraduates (young adults). Few studies have been carried out in some regions of the country on undergraduates cigarette smoking behavior but so far, the researcher have not discovered any study that has been carried out on cigarette smoking behavior among undergraduate students of the University of Ibadan.

It is hypothesized here that (i) there will be significant positive relationship of peer group influence on cigarette smoking behavior.(ii) There will be significant main and joint influence of personality factors on cigarette smoking behavior. (iii) Males would significantly engage in cigarette smoking behavior than females.

Method

Study design and Participants

A cross sectional design was used to study undergraduates' smoking behavior. The sample size was calculated using the formula for evaluating the sample size population, Araoye M.O. (2003). The questionnaire was designed to capture demographic data, smoking behavior, and factors that influenced cigarette smoking such as peer group and personality factors. Two-hundred and sixty-five (265) undergraduates took part in the study, only 242 questionnaires were useful for the study, this is



as a result of the fact that only 242 questionnaires were properly filled, and those that were not properly filled were discarded. The distribution revealed that 200 (83.5%) indicated to be male while 39 (16.5%) were females. Respondents age ranged between 17 and 37 with a mean of 23.29, and a standard deviation of 3.090. With regards to their use of cigarette, 150 (62%) reported that they smoke cigarette, 89 (36.8%) reported that they have never smoked cigarette, while 3 (1.2%) did not respond to the question. As for If they smoke whenever they are with friends, 127 (52.5%) reported that they do, while 112 (46.3%) reported that they do not at all.

Procedure and measures

Data collected from the research work started with a pilot study of 40 participants. The purpose of the pilot study was to establish the psychometric properties and also to familiarize the researcher with difficulties that might arise in the course of the main investigation. A sample of 265 participants were drawn through accidental sampling technique, but 242 were useful for this study. The consent of each participants were obtained verbally before the instrument was administered, detailed explanation of what the study was about was made know to the participants. They were also made to understand that they could discontinue with the research at any point they felt uncomfortable with the arrangement, after which the questionnaires were distributed to the participants.

A self constructed questionnaire titled Peer Influence Scale (PIS) was used to collect data. This instrument was standardized through a pilot study. The instrument used was divided into four sections. Section A elicits response on demographic information and information on use of cigarette. Section B determined peer group influence with coefficient alpha of .75 from pilot study, while item total correlation ranged from .18 to .61. For the main study, the coefficient alpha was .84 and the split half reliability was .77. Section C presents questions on The five factor personality scale was developed by Coasta and McCrae (1992). It is a 27 item self report scale that measures domains of Conscientiousness, Extraversion, and Neuroticism. For conscientiousness, the coefficient alpha is .77, the item correlation ranges from .20 to .64, while the split half is .77. The coefficient alpha for the extraversion dimension of the scale is .78, while total item correlation ranges from .29 to .55 and the split half reliability was .61. for neuroticism, the coefficient was .83 with item total correlation ranging from .45 to .75. out of 9 items in this subscale, only 6 items were reliable. The split half reliability was .80. Section D measures the Self-Esteem scale was developed by Adanijo and Oyefesor (1986) and respondents were meant to respond to five point Likert formart. A sample item in this section includes "I think I am confident enough to speak in a group". This scale has a split half reliability of .66, and a



coefficient alpha of .77 with item total correlation ranging from .24 to .61. Participants were meant to respond to a 5 point Likert format ranging from Strongly agree (5) to strongly disagree (1).

Data collected was analysed using multiple regression analysis, t-test for independent samples and pearson product correlation. All hypothesis were tested at .05 level of significance.

Result

Table 1: Summary of Pearson Correlation showing how all the variables were correlated against cigarette smoking behavior

	Variables	1	2	3	4	5	6
1	Peer Influence						
2	Conscientiousness	.284					
3	Extraversion	.379	.074				
4	Neuroticism	.346	-.304	.099			
5	Self-Esteem	-.053	.229	.202	-.457		
6	Cigarette Smoking	.256	-.077	.205	.173	-.024	

The result in table 1 shows the weight of peer influence on cigarette smoking behavior is $r = .26$, $df = 240$, $P < .05$. Peer influence had a positive significant relationship with cigarette smoking behavior. There was a negative relationship between conscientiousness and cigarette smoking behavior, $r = -.077$, $df = 240$, $P > .05$. The relationship between conscientiousness and cigarette smoking behavior was not significant. Also, there was a positive significant relationship between extraversion and cigarette smoking behavior $r = .205$, $df = 240$, $P < .05$. This means that the more extraverted a person is, the more likely the person will engage in cigarette smoking behavior. Furthermore, there was positive significant relationship between neuroticism and cigarette smoking behaviour. The result is $r = .173$, $df = 240$, $P < .05$, meaning that the more neurotic an undergraduate is, the more likely the student will engage in cigarette smoking behavior.

Table 2: T-test for Independent Samples showing Peer Influence on Cigarette Smoking Behavior Among Undergraduates

	Peer	N	Mean	Standard Deviation	Df	T	P
Cigarette Smoking	Low	124	2.52	.153	237	-4.82	<.05
	High	115	3.56	.149			



The result from table 2 shows that participants were grouped into low peer influence (2.52) and high peer influence (3.56). Result revealed that peer group has significant influence on cigarette smoking behavior ($t(237) = -4.82; P < .05$). This shows that undergraduates with high peer group influence ($X=3.56$) will engage in cigarette smoking behavior, meaning that peer group influence play a large role in cigarette smoking behavior among the respondents.

Table 3: Multiple Regression summary table showing independent and joint influence of Personality Factors (Conscientiousness, Extraversion, Neuroticism and Self Esteem) on Cigarette Smoking behavior among undergraduates of the University of Ibadan.

Variables	R	r ²	B	T	P	F	P < .05
Conscientiousness	.26	.07	-.05	-6.9	> .05	4.20	.488
Extraversion			.19	2.88	< .05		.004
Neuroticism			.15	1.93	<.05		.055
Self Esteem			.01	0.19	> .05		.851

The result in table 3 shows that personality factors (Conscientiousness, Extraversion, Neuroticism and Self Esteem) had significant joint influence on cigarette smoking behavior ($R = .26; R^2 = .07; F(4.20) = 4.20; P < .05$). When combined, Joint personality traits (Conscientiousness, Extraversion, Neuroticism and Self Esteem) accounted for about 7% variance in cigarette smoking behavior. However, Extraversion ($\beta = .19; t = 2.88; P < .01$) and Neuroticism($\beta = .15; t = 1.93; P < .01$) were independently significant. This means that these two personality factors had independent influence cigarette smoking behavior.

Table 4: T-test for Independent Samples showing Gender differences on Cigarette Smoking Behavior among undergraduates

Dependent	Gender	N	Mean	SD	Std error meant	dfP
Cigarette Smoking	Male	200	3.26	1.707.121		
	Female	39	1.82	1.315.211		
					4.97	237 <.05

Result in Table 3 shows that there exists a significant gender difference in Cigarette smoking behavior ($t(237) = .4.97; P < .05$). This shows that the hypothesis was supported in this study. This implies that



there is a direct relationship between gender and cigarette smoking behavior. It therefore means that males engage significantly in cigarette smoking behavior than their female counterparts.

Discussion

The result revealed that peer influence plays a significant role in cigarette smoking behavior of the participants. The significance of peer pressure in influencing cigarette smoking shows that peer pressure exerted significant influence on smokers' cigarette use. This means that peer pressure directly influences smokers' cigarette use, as an increase in peer pressure would have a resultant effect on undergraduates' cigarette smoking. This is in line with the study of Ukwayi, Ejah & Unwanede (2012) which shows that out of the respondents that had used tobacco, 76.7% were introduced or initiated into tobacco use by their friends. This indicates that majority of the respondents are introduced into tobacco use by their peers/friends. In the same manner, Akers and Sellers (2004) contend that in all, peer factors seem to be a stronger predictor of adolescent substance use than parental influence. They argue that peer influence has strong direct effects on adolescent substance use, superior to parental attachment. Supporting this proposition, empirical research evidence verifies the importance of peer association and delinquent peer influence over the importance of parental influence. This implies that tobacco use is significantly influenced by peer pressure. This shows that there is high association between peer pressure and tobacco use, indicating that peer pressure exerts significant influence on smokers' tobacco use directly or indirectly. Indeed, peer pressure is one the commonest factor associated with adolescent tobacco use. The result also conforms with the study of Flay and Miller (1995), which opines that both girls and boys are likely to take risks that they do not want to take because they believe the risky behavior (smoking) will increase their standing in the eyes of their peers and assure their acceptance in the group. Hawkins (1996) also supported that peer groups have so much influence, especially with adolescents, this is so because, no matter how inappropriate it seems to adults, belonging to a group really gives something significant to the young person.

The result also showed that personality variables such as conscientiousness, extraversion neuroticism, and self esteem jointly predicted cigarette smoking behavior. This is consistent with the findings of Vollrath and Torgersen (2002), they reported that the Impulsive and Insecure personality types, which are both characterized by low Conscientiousness and high Neuroticism, are more likely to be current-smokers. Combinations of personality traits have been related to smoking. The result of the independent prediction of the personality factors on cigarette smoking behavior showed that extraversion and neuroticism are statistically significant, that is the more extraverted a person is, the more he is more likely to engage in cigarette smoking, suggesting that extraversion may play a role in



cigarette smoking behavior. The extroversion factor comprises characteristics such as sociability, fondness, and excitement-seeking, as well as being talkative, active, warm, and not a loner. The individual with high scores in the factor of being open to new experiences can be described as being original, imaginative, creative, curious, courageous, independent, liberal, and nontraditional, as well as having broad interests and preferring variety (McCrae, and Costa Jr, 1987). Extraversion is Excitement-Seeking and current smokers scoring high because the role of Excitement-Seeking is particularly relevant in light of the stimulating effect of nicotine. This is in line with Eysenk (1952) who conducted a study on heavy smokers, pipe smokers, ex-smokers and non-smokers. The result showed a positive correlation between smoking and extraversion. It is also revealed that neuroticism is independently significant, meaning that neuroticism has a role to play in cigarette smoking, and individuals who score high on neuroticism scale are more likely to smoke. This result is consistent with previous research that suggests greater curiosity and neuroticism may each individually be related to smoking (Smith, 1970). Also it is likely that neuroticism maybe related to emotion regulation through smoking behavior in so far as individual effort to cope with negative affect or distress (Kassal, et al, 2003). The neuroticism dimension comprises sub-dimensions of personality, such as anxiety, depression, psychological vulnerability, hostility, and anger. The neurotic individual presents high frequency and intensity of negative affection, resulting from an inefficient self-regulating mechanism for affection and modulation of excitation and, therefore, uses the cigarette to facilitate internal homeostasis. It can be assumed that smoking enables the reduction of negative affection in these individuals (Gilbert, McClernon, and Gilbert, 1997), and highly neurotic people would receive greater reinforcement through smoking in stressful situations, due to stress-reducing effects provided by smoking. Terracciano and Costa Jr, (2004) in their study revealed that current-smokers compared to non-smokers scored significantly higher on Neuroticism. Vollrath and Torgersen (2002) examine configurations of personality traits in regard to health risk behaviors. They found that individuals high in Neuroticism were disproportionately likely to be smokers. Conscientiousness and self-esteem did not independently influence cigarette smoking behavior, meaning that Conscientiousness and self-esteem may not play a role in cigarette smoking behavior among undergraduates. Terraccino and Costa Jr (2004) in their study found that current-smokers scored significantly lower on Agreeableness and Conscientiousness. This may be as a result of the fact that individual with high scores in the conscientiousness factor can be characterized as careful, reliable, willing, well-organized, meticulous, scrupulous, self-disciplined, tidy/neat, punctual, practical, energetic, connected to work/business, informed, perseverant, and involves high level of thoughtfulness; they have the tendency to think and consider the consequences of the behavior before taking action. Cigarette smoking is associated with



lots of negative consequences like lung cancer, therefore being conscientious may play a role in the negative relationship that exist between conscientiousness and cigarette smoking.

Furthermore, the results indicated that males engage significantly in cigarette smoking behavior than their female counterparts. The result is consistent with what was found in literature. For instance Ferrence and Jackson (1996) who revealed that male individuals tend to be more involved in substance abuse than females. Similarly, Camp, Kleges and Relyea (1993) reported that male adolescents smoke as a way of projecting image of maturity, independence and toughness. This indeed is apparent as there is higher frequency of tobacco use in males than females, males are more exposed to risk and situations that leads to the use of tobacco as a depressant or stimulant when under intense condition or stress. Conventionally, the prevalence of tobacco use and abuse is more widespread among males than females; a visit to drinking bars or restaurants will clearly show that out of 10 smokers that will be encountered, either one or none will be female. This therefore implies that tobacco use is more prevalent among males than females (Ukwayi, Eja & Unwanede, 2012). This result also agrees with the findings of Adebisi et al., (2010) when they observed in their study of tobacco use that males accounted for 60% of current tobacco users compared to 40% amongst females. Owonaro and Eniojukan, (2015) in their study of who are the smokers and factors influencing smoking, were of the view that male to female prevalence of smoking put male rate of smoking higher than females.

Conclusion

From these findings, it can be seen that peer group and personality factors are very central to undergraduates' cigarette smoking behavior. Over involvement with peer group, and the influence exerted by peer pressure can be seen to be a major influence on cigarette smoking behavior among undergraduates. Therefore, parents/guardian, teachers and the media should educate the young ones from an early age about the negative consequences of smoking. This is because it has been discovered that the probability of changing or leaving the habit becomes difficult at later adulthood, this also depends on the extent to which the habit has eaten in the psychic of the individual. From all these, it can be concluded that antisocial propaganda would be more effective from teen age to adolescent age than later in life. That propaganda before taking to the habit is more effective than after one has taken to the habit already. Hence, more anti-smoking campaign should be concentrated on the youth who are yet to take to cigarette smoking behavior, that is prevention is better than cure. Self esteem and independence should be inculcated in these children to avoid the menace of being pressured by peers into cigarette smoking in higher institution. Focus and attention should be paid on individual differences in personality traits.



Recommendations

The major problem of smokers is their state of ignorant at the starting point of the habit. Most young person's do not know much at the starting point about the negative consequences of the cigarette smoking maybe if they had known, they would have handled smoking with a difference. In Nigeria, information about the negative consequences of smoking is mostly known by those in higher institutions of learning, and most have taken to the habit before they entered the university and found it difficult dropping such habit;

- (i) Therefore, adequate information, fact finding and research work on cigarette smoking at the national level is highly recommended. Transmission of this information should be done through the educational levels existing in the country, right from primary school to university level. Since all levels are peer oriented, and the danger of taking to the habit must be known by all. Most information on cigarette smoking on radio, television, and social media majors mainly on mobilizing youths to engage in the habit with little or less information on its effect on health. It is therefore recommended that government should provide necessary information on the subject for public consumption. This is not saying that advert on smoking should be banned, but it should go along with its problems to allow for good and rational choice.
- (ii) Information on cigarette smoking should be more effective through peer group, it should not be directed towards individuals, because smokers see themselves as a group than as individuals.
- (iii) As regards to gender, males are often used in the campaign against cigarette smoking. This should be changed to both gender. Both gender engage in cigarette smoking.
- (iv) Newspaper, mass media and the social media platforms should be made to take the topic seriously and be used as subject of discussion as often as possible. Laws should be made by government in protecting the interest as well as the health of the people, though cigarette can be produced in Nigeria, but the manufacturers should abide by the law so as to protect the interest of the government in protecting the people.
- (v) Personality research can lead to deeper understanding of cigarette smoking and can potentially contribute to policies and programs of smoking prevention and cessation. Based on personality traits, individualized treatment approach should be adopted for smoking cessation through modifying health behaviors. Further research is important to clarify the relationship between personality traits and smoking behaviors. Evidence that smokers are not a homogeneous group suggests that a diversity of treatment modalities is



necessary. For example, smokers high on Neuroticism might benefit from psychotherapy or antidepressant treatment. A combination of public policy and treatment strategies tailored to the needs of individual smokers is required to reduce the prevalence of cigarette smoking

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