# CIGARETTE SMOKING AND HABITS (1): SOME STUDIES ON GENDER AND SMOKING PATTERNS AMONG UNIVERSITY OF BRIGHTON BUSINESS STUDENTS

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#### ABSTRACT

Cigarette smoking is an intense growing habit among today youth. A survey using structured questionnaire was carried out among 100 randomly picked second year students of University of Brighton approved by a University of Brighton Ethical Committee. It was tested for reliability to ensure consistency using the Test Re-test method. The population under study was two classes of business students. Out of 100 students, 47 were male and 53, female. Also, from the same 100, 51 were non-smokers, 29 were smokers, and 20, ex-smokers. The number of cigarette smoked per day by smokers was higher than ex-smokers. Major smoking patterns followed trend: When using alcohol (mean=3.16)> When out with friends (mean=2.82)> When stressed (mean=2.80) > After meal (mean=2.15). Main reason for ex-smokers stopping smoking is to improve their health (mean=3.10). The public, school guidance counselors, researchers and medical personnel will benefit from this study.

**Keywords:** Smoking, Cigarette, Smokers, Non-smokers. Ex-smokers.

## INTRODUCTION

Smoking refers to the action of lighting a cigarette, a pipe, a cigar, a water pipe, or any object made from tobacco or materials of similar effects. The object is then sucked on with the lips to extract the smoke. The smoke is inhaled into the lungs and exhaled from the nose or mouth as a thick white smoke (The Qur'an and Sunnah Society, 1999). 'Smoking is currently used to refer to the action of producing this smoke'.

Cigarette packs have warnings such as 'SMOKING KILLS'; 'SMOKING CAUSES FATAL LUNG CANCER'; 'SMOKING IS HIGHLY ADDICTIVE, DO NOT START'; 'STOPPING SMOKING REDUCES THE RISK OF FATAL HEART AND LUNGS DISEASES' & 'SMOKING SERIOUSLY HARMS YOU AND OTHERS AROUND YOU'; boldly written on the front and back sides of the pack but they all fall on deaf ears as people, students included, still buy and smoke cigarettes (Okpala, 2003).

Cigarette smoking is an intense growing habit among today youth. It accompanies drinking alcohol, socializing and for stress relief (Marsh & Mathieson, 1983). The habit as concept becomes complex when discussed amongst a desired population, especially when information is needed to raise problem-solving approaches. No study has been seen or read on university students' attitudes, views and their perspective on smoking in England (Okpala, 2003). This paper dwells on some studies on gender and smoking patterns among randomly picked second year students.

#### MATERIALS AND METHODS

A survey was carried out at Mithras House among 100 students, randomly picked from two classes of the second year of University of Brighton. This is because they have socialized in the university for almost two years. Brighton is a cosmopolitan community with excellent university that attracts a lot of students from home and abroad. The population under study was business students. It included those who smoke/have smoked before/never smoked. Instrument for data collection was structured questionnaire approved by the University of Brighton Ethical Committee. It was tested for reliability to ensure its consistency using the Test Re-test method.

First five questionnaire responses were correlated using Pearson's Product Moment Correlation (PPMC) with Microsoft Excel Package. Normally, correlation coefficient values ranges from -1 through 0 to +1 (Middleton, 2004). Correlation coefficient values for reliability of the questionnaire were 0.9861, 0.9534, 1.0000, 0.9608 and 1.0000. These correlation values which range from 0.9534 to 1.0000 were very high, hence consistent and reliable.

Questionnaires were administered, waited upon to be filled by respondents, collected as soon as completed, on the same day. Data were analyzed statistically using frequency (f), mean, mode, standard deviation, range (maximum and minimum) and t-test. Means were calculated from ratings used, basis on which obtained results were compared.

### RESULTS

Out of 100 students, 47 were male and 53 female. Also, out of same 100 students, 51 were non-smokers, 29 were smokers, and 20 were exsmokers. Personal data and background collected included age range, ethnicity, religion, nationality, and smoking status. Age range showed: 21 years (f=50), 22-25 years (f=36), 26-30(f=11), and >30 years (f=3). Ethnicity Bangladeshi (f=1), Black-African showed: (f=11), Black-Caribbean (f=3), Indian (f=3), Pakistani (f=2), Chinese (f=7), Asian-other (f=6), White (f=64), Arabs (f=21) and Mixed (f=1). Religion showed: Buddhism (f=4), Christianity (f=48), Hindu (f=3), Muslim (f=10), and None (f=35). Nationality showed: Bulgaria (f=1), Bahamas (f=1), Malaysia (f=1), Finland (f=1), Tanzania (f=1), New Zealand (f=1), Spain (f=1), Syria (f=1), Thailand (f=1), Iran (f=1), France (f=2), Rwanda (f=2), Nigeria (f=2), Kenya (f=2), Sri Lanka (f=2), Italy (f=2), Ireland (f=3), Germany (f=4), Taiwan (f=4), and Sweden (f=4).

Number of cigarettes smoked per day by smokers and ex-smokers, and when they are likely to smoke are shown in Tables 1 and 2. From Table 1. overall, smokers and ex-smokers have smoked cigarette 382 times per day, mean per day is 7.80, maximum as 25 and minimum as 1. Looking at the pattern by smokers and ex-smokers, 29 smokers smoke 233 cigarettes in a day with the majority smoking 10 cigarettes per day. Also, 20 ex-smokers smoked about 149 cigarettes per day, with a majority smoking 1 cigarette per day, with 25 as maximum. Considering the result by gender, the mean cigarettes smoked are 8.31 by males and 7.22 by females per day. The mode for males and females is 10. Maximum smoked by males and females is 25 and 20 respectively while the minimum is 1 for each group.

Table1: Number of cigarettes smoked per day by smokers, ex-smokers and gender

Statistics	Smokers n=29	Ex-Smokers n=20	Male n=26	Female n=23	All n=49
Total per day	233	149	216	166	382
Mean	8.03	7.45	8.31	7.22	7.80
Mode	10	1	10	10	10
Standard Deviation	4.77	7.19	6.62	4.83	5.82
Range	19	24	24	19	25
Maximum	20	25	25	20	25
Minimum	1	1	1	1	1

Source: Okpala (2003)

From Table 2, it can be seen that the major times when students are likely to smoke are when using alcohol (mean=3.16), when out with friends (mean=2.82), when stressed (mean=2.80), and after a meal (mean=2.51). These are the major smoking p atterns of students. The overall t-test

performed on the mean ratings on when students were likely to smoke gave a probability (P) value of 0.805088. This value means that there is an 80% chance that the differences in the mean values occurred by chance. The individual t-values for each item are found in Table 2.

Table2: Mean rating on when students are likely to smoke

Statements	Smokers (n=29)	Ex-smokers (n=20)	Mean (n=49)	<b>t-value</b> 0.422	
1. When out with friends	2.90*	2.70*	2.82*		
<ul><li>2. While watching TV</li><li>3. While alone</li></ul>	1.51 1.91	1.60 1.90	1.55 1.92	0.206 0.075	
4. When hungry	1.41	1.30	1.37	0.314	
5. Before sex	0.69	0.80	0.73	0.480	
6. Unreleased sexual urge	0.48	0.85	0.63	1.587	
7. First thing in the morning	1.14	1.40	1.24	0.717	
8. When using alcohol	3.34*	2.90*	3.16*	0.094	
9. While studying	2.00	1.75	1.90	0.590	
10. When bored	2.03	2.05	2.04	0.038	
11 When hung-over	1.03	1.20	1.10	0.495	
12. After sex	1.97	1.70	1.86	0.599	
13. After meal	2.83*	2.05	2.51*	1.881	
14. When stressed	2.79*	2.80*	2.80*	0.320	

<sup>\*</sup>Major times when likely to smoke(mean=2.50).

Source: Okpala (2003)

Table 3: Main Reasons for Ex-Smokers stopping smoking

Reasons	SA	A	D	SD	DK	Mean
To improve my health	13	3	0	1	3	3.10
To save money	6	6	2	1	5	1.60
Because my family does not like it	3	5	2	2	8	1.60
Because my friends do not like it	0	6	5	3	6	1.23
Not applicable	1	0	1	1	17	0.98

SA = Strongly Agree;

A = Agree;

D = Disagree;

SD = Strongly Disagree; DK = Don't Know

Source: Okpala (2003)

None of these is significant at 0.05 level. This implies that there is no significant difference between smoker and non-smokers on when they are likely to smoke.

From Table 3, the main reason for ex-smokers stopping smoking is to improve their health (Mean=3.10). It can be seen that the response of Don't Know (DK) is quite low.

# DISCUSSION

Students tend to smoke when they are out with friends, drinking alcohol, when stressed and after meal. These are the situations when smoking is most likely to happen. They are less likely to smoke when bored, while studying, after sex and when alone. The smoking pattern obtained from the study corresponds to Okpala (2003) which states that smoking accompanies drinking alcohol, socializing and for stress relief. The ttest shows that there is no significant difference between the responses given by smokers and exsmokers. The fact that ex-smokers were smoking before they decided to quit explains the above result. Some of the ex-smokers were occasional smokers i.e. they did not smoke lots of cigarettes a day, just one or two. Both the smokers and exsmokers do have similar patterns when it comes to when they are likely to smoke.

It is a known fact that when smoking becomes a habit, the body has become used to the nicotine intake through cigarettes. The main part of the body where the nicotine affects in order to give the pleasure and good feeling is the brain. Nicotine being an addictive drug would exhibit two characteristics. Firstly, it would elicit effects within the brain which are pleasant or rewarding, and which reinforce self-administration of the drug. Secondly, following a period of chronic exposure, withdrawal of the drug may elicit an abstinence syndrome that the smoker may seek to avoid by continuing smoking (Okpala, 2003).

Some researchers (http://magazine. uchicago. edu/0010/research/invest-enough.htm) have discovered that nicotine uses a mechanism responsible for learning and memory to enhance the connections between one set of nerve cells that are sensitive to the drug and other nerve cells that register pleasure. They also demonstrated that the first exposure to nicotine could induce an enduring "memory trace", amplifying the drug's pleasing effects and boosting the desire to repeat the exposure. The reinforcing effect of nicotine is primary reason people cannot quit smoking despite widespread awareness that smoking causes cancer, heart disease, stroke, emphysema, bronchitis, vascular disease, cataracts, impotence, and many other health problems. The brain reward areas serve to acknowledge and reinforce beneficial behaviour for example, eating when you are hungry. The system

encourages the body to pleasing behaviour by releasing dopamine, the neurotransmitter associated with the pleasant feelings in the reward areas. "That was good", is the basic message of increased dopamine levels, less "Do again" (Okpala, 2003). Nicotine alters neuron connections using a process similar to the cellular mechanisms underlying the creation of memory. Nicotine appears to cause addiction by strengthening the excitatory connections on the neurons that synthesize dopamine, which are found in the Ventral Tegmental Area (VTA) of the brain reward centre. At the more excited state, the neurons release more dopamine in the reward areas. This cellular locus of addiction is farther "upstream" in the reward pathway than anticipated (Okpala, 2003).

Researchers found that nicotine's lasting effects results from the drug's interaction with the receptor on the synaptic endings, the part of the cell that sends the signals. When these endings are exposed to the nicotine, there is direct increase in the excitatory signal transmitted onto the dopamine neurons, which then increases dopamine release. Nicotine stimulates neurons by binding to specific structure on the neuron, called the nicotine acetylcholine receptors containing the  $\alpha\text{--}7$  submit, and therefore makes it a potential target for medications that could help smokers kick the habit (<a href="http://magazine.uchi.cago.edu/0010/research/invest-enough.htm">http://magazine.uchi.cago.edu/0010/research/invest-enough.htm</a>).

## CONCLUSION

The findings confirm that men dominate in cigarette smoking even though females dominated the population of students studied. The prevalence of smoking cuts across ages whether young, a dolescent and a dult. Ethnicity, religion and nationality are also included. Major smoking pattern deduced followed trend: When using alcohol> When out with friends> When stressed> After meal. Other smoking pattern deduced from the population followed trend: When bored> While alone> While studying>

After sex> While watching TV> When hungry> First thing in the morning> When hung over> Before sex> Unreleased sexual urge. There was no significant difference between smoker and non-smokers on when they are likely to smoke. Ex-smokers stopped smoking because their health needed i mprovement. This study will be invaluable to the public, school guidance counselors, researchers, and medical personnel, including pharmacists.

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