

# Academic Performance and Cigarette Smoke: Cyprus International University

Oluseyi Akinola Olagoke<sup>1</sup>, Olusola O. Bamisile<sup>2</sup>, Obasanjo Owoyale<sup>3</sup>

(1) Department of Architecture, Cyprus International University, North Cyprus (corresponding author), (2) Department of Energy Systems Engineering, Cyprus International University, North Cyprus, (3) Department of Architecture, Cyprus International University, North Cyprus

**Abstract**— To smoke is as right as not to. Finding ones way around a lecture room on a busy day with cigarette smoke literally billowing out from all directions could in itself inflict a measure psychological and emotional wound - for some, this is enough a reason for poor overall performance and for all, a sure cause of short life expectancy. Unfortunately, in an environment where uncontrolled smoking is a way of life, the culture shock for foreign individuals who hitherto had neither been active nor passive smokers might be so heavy as to inflict a heavier blow. This study elucidates the possible effects cigarette smoke has on the academic performance of students in Cyprus International University. With data collected for quantitative empirical analysis, conclusions and recommendations are drawn by suggesting the creation of smoking zones for a better outdoor air quality in the institution.

**Index Terms**— Cigarette smoke, addiction and right of space

## 1 INTRODUCTION

Merriam Webster online dictionary defines addiction as a strong or harmful need to regularly have or do something. The list of addictive habits is practically inexhaustible. Observably, different people have different habits and traits to which they become addicted over time. Among such is cigarette smoke. Various researchers have attempted to explain why man has found it nearly impossible to break even from the habit of cigarette smoking (referred to as smoking in this article) and indeed doing that is obviously not within the limit and scope of this research. However, it is important to note that social factors, genetic factors and psychiatric conditions are part of the proven scientific explanations for smoking addiction. According to A. W. Bergen and N. Caporaso 1999 <sup>(1)</sup>, "cigarette smoking is the largest preventable risk factor for morbidity and mortality in developed countries". It is further said to be "the largest single risk factor for premature death also in developed countries" <sup>(1)</sup>. On the other hand though, researches have shown clear undeniable evidences of cigarette having some therapeutic effects on some medical conditions such as ulcerative colitis, Parkinson's disease, endometrial cancer and a host of others on its users. So, on the surface, reasons could be adduced to why there is always a divide and die-hard proponents and opponents of smoking. To unilaterally choose a side and speak for or against isn't desirable here but to examine the effects of its uncontrolled usage in an academic environment is quintessential.

There are minimum but strict standards meant to be observed in any academic environment to achieve optimum student performance. Arguably, a vital part of it is ensuring a conducive atmosphere for every student and faculty member. Whereas conduciveness is in itself relative, catering for the peculiar need of all is paramount. Regardless of the fact that

the habit of smoking in schools and in educational buildings and spaces has been of undisputable, varied and immense effects on students' academic, psychological and emotional performance, it seems as though the basic ethics and principles of intellectual excellence nevertheless appears to being repeatedly winked at.

Like Greece, Cyprus is a country in the Mediterranean east of Europe where the usage of tobacco ranks highest in the world<sup>(2)</sup>. This partly explains why the habit of smoking is a major public health concern. In view of this, this research becomes important due to the apparent inability of Cyprus International University – CIU – to effectively incorporate smoking and non-smoking zones into its building designs coupled with the seeming lack of facilities that guarantee conducive and healthy outdoor (air) quality for its multifarious student population vis-a-vis smoking regulations. In the same vein, attempt is made to limit the focus of this research to the most actively used building spaces (that is the Information Center and Blocks A and B lecture buildings); this is done by examining the smoking and non-smoking spaces provided and by also making quantitative analysis of how these affect the overall wellbeing of their intended users, that is, the students.

The limitation of this work is to the outdoor environmental air quality of the selected buildings as efforts are directed towards focusing on the student users rather than academic and non-academic staff. Methodology includes distribution of questionnaires coupled with verbal but random questioning of few observed regular users of these spaces. Among others, this topic will be considered from the viewpoint of architecture and spatial planning; public health and cigarette smoke; cigarette smoke in CIU and students' performance in respective order.

## 2 ARCHITECTURE AND SPATIAL PLANNING/FACTORS INFLUENCING (UNIVERSITY'S) SPACE ALLOCATION

Whereas this article aims at examining the effects of cigarette smoke in architectural spaces on students' academic performance, it is important to take a quick but brief look at some elementary and basic parameters architects, by virtue of their training, are expected to put into consideration before initiating building designs; such understanding includes that of balance, proportion, unity, emphasis and rhythm. Right from the design stage to the construction stage and through to the use stage, the necessity of architects and other building professionals in ensuring that all important features of sustainability are properly enmeshed and fully incorporated cannot be overstated. Thus explaining why the general concept of environmentally responsive and energy efficient buildings tend to undeniably be a major alternative employed in recent designs especially in commercial, residential, educational and religious building designs.

According to the Space Management Group's report on UK Higher Education Space Management<sup>(3)</sup>, in measuring the efficiency of educational buildings, three factors are considered one of which is time in which the space is used. Also, space efficiency via the building's site and estate is equally of huge importance likewise available resources and cost efficiencies. According to Australasian Association of Higher Education Facilities Officers<sup>(4)</sup>, different spaces required in a university could be grouped into academic space, administrative space, commercial space, general teaching space, library space, students' service space (which includes sports and recreation facilities) and miscellaneous space.

Smoking zone could then, by extension, be said to be part of the students' service space. Here, a student goes on purpose if and when she/he wants to smoke cigarette. As a matter of fact, it is an essential facility that is assumedly needed in any particular society where smoking is not a crime.

## 3 AIR POLLUTION

There are varied definitions of air pollution but one common denominator suggests that it started when humans began burning fuels. By this, it means that in other words, all emissions into the air qualify to be described as air pollution, simply because they alter the chemical composition of the natural atmosphere<sup>(5)</sup>. This surely isn't to the exclusion of cigarette smoke which apart from contributing largely to environmental pollution has been ascertained to cause several health conditions.

### 3.1 BRIEF HISTORY OF CIGARETTE

Tobacco, the major component of cigarette was first used by

the peoples of the pre-Columbian Americas. Native Americans apparently cultivated the plant and smoked it in pipes for assumed medicinal and obvious ceremonial purposes. However, during his voyage, Christopher Columbus was credited with the importation of tobacco to Europe while its wide circulation was not until mid-16<sup>th</sup> century. Once cigarette had been integrated into the society over a period of about six centuries, it was *assumed* that majority of people was favorably disposed to it so much that individuals had right and freedom to exercise their liberty to smoke anywhere and at any time. Consequently, rather than having smoking zones planned into a building or urban design as is currently the standard practice in developed countries, integration of non-smoking zones was the first reaction of essential public service providers to cater for the 'special' needs of those that detest cigarette smoke.

### 3.2 ENVIRONMENTAL IMPACT OF CIGARETTE SMOKE

Apart from the common knowledge of the impact cigarette smoke has on human health; its effects on the larger atmosphere have been proven and established over the years. Such range from ground and waterway littering of cigarette butts to serious ecological effects. More important are its effects on deforestation, its causative role in fire outbreak, and industrial toxic production. These toxic elements include hydrochloric acid, ammonia, nicotine and methanol which are often poisonous and deadly especially in the animal kingdom<sup>(6)</sup>. Tobacco cultivation is also responsible for biodiversity losses, land pollution through the use of pesticides, as well as soil degradation, deforestation and water pollution<sup>(7)</sup>.

Needful to state here that in cultivating tobacco plants, a higher amount of nutrients than *in* most crops is consumed. Also, in its manufacturing process, huge amount of paper is used for packaging apart from the fact that other creatures such as fish and birds are also affected. The total land space globally used for tobacco plantation is estimated to be less than 1 percent while the equivalent impact of same tobacco on deforestation is put at between 2 and 4 percent<sup>(8)</sup>.

### 3.2 GOVERNMENT'S PERSPECTIVE ON PUBLIC SMOKE

According to a World Health Organization's report on European Strategy for Smoking Cessation (2004)<sup>(9)</sup>, "the European Strategy for Tobacco Control has categorized the tobacco control approaches of member states according to their comprehensiveness, sustainability, progressiveness, length and history of implementation and impact on reducing smoking prevalence". Whereas Northern Cyprus is not a member state of the EU, this study still considers the response of its government to cigarette smoke with the afore-mentioned

criteria as a common benchmark that could be used in all countries (especially in Europe).

In his article on Indoor Smoking Bans in Bulgaria, Croatia, Northern Cyprus, Romania and Turkey, JL Muilenburg et al (2010)<sup>(9)</sup> concluded that “policy implications suggest that government and the media must disseminate accurate information about the harm of smoking to broader segments of the population to gain support for policies that affect the health of Second Hand Smoke (SHS) in these nations”.

#### 4 CIGARETTE SMOKE IN CYPRUS INTERNATIONAL UNIVERSITY

Questionnaires were distributed randomly to seventy students representing about one percentage of the entire student population of 7948 <sup>(10)</sup> to sample their respective opinion regarding; their perceived effect of cigarette smoke on academic performance, smoke free designated areas and smoking areas within the campus, cigarette user and non-user reactions among students and possible impacts of cigarette smoke on students’ academic performance.

27.1% of the responders are active first hand smokers while 72.9% are second hand smokers. 68.6% of both smokers and non-smokers suggest the creation of smoking zones in the school while 31.4% opines otherwise. Also, it could be inferred that for as long as the status quo remains, passive smokers would not mind the long term effects of sharing both public and private spaces with active smokers. Observably, it appears that a good percentage of the responders seem to have either consciously or subconsciously gotten used to the atmosphere of cigarette smoke.

#### 4.1 SMOKE-FREE DESIGNATED AREAS AND SMOKING AREAS WITHIN CIU CAMPUS

Furthermore, whereas there is no architectural space like smoking zones created for smoking, there is provision of ashtray at all entrances to blocks A and B which technically makes these spaces designated smoking areas neglecting the fact there are no alternative entrances for non smokers or those who have allergies to cigarette smoke. Also, the response obtained from the questionnaires suggests that the majority of non-smokers are not comfortable as it predisposes them to loss of concentration. Also, the courtyard normally meant for relaxation are hardly visited by non-smokers as its function has been converted to a smoking zone which deprives others literally of the same privilege of an open relaxation space and proximity to lecture rooms.

Questions	Response (%)		Observation
	FHS	SHS	
Population of Cigarette users in CIU	27.1	72.9	Observably, much fewer students are active first hand smokers. Notwithstanding however, it could be argued that the SHS would have naturally preferred a cleaner outdoor air quality; this is evident by the wish of most students to have clearly defined smoking zones.
Perceived level of discomfort by cigarette smoke	Comfort	Discomfort	Surprisingly also, only about one third of the respondents feel discomfort by the air pollution caused by the cigarette smoke. The reason for this could be said to be psychological being that most students have gotten so used to it that they feel no potential harm.
	65.79	28.95	
What percentage of respondents supports the creation of smoking zones?	For	Against	This includes a combination of students that smoke cigarette at the three buildings under observation. As stated above, despite the fact that majority of them neither smoke nor feel distracted by cigarette smoke, slightly higher percentage of respondents prefer to have clearly defined spaces exclusively for smoking.
	68.6	31.4	

*within the school’s environment (with emphasis on blocks A and B and the Library buildings)*

47.6 percent of the initial 27.1 percent of all responders indicates that they are addicted smokers. Further still, from the survey, it becomes explicit that the majority of the smoking population in CIU are not essentially addicted in view of the fact that they do not lose concentration, nor feel depressed, nor feel physical pain such as headache; they neither feel aggressive also when deprived of cigarette. On the other hand though, the non-smoking students which constitute an overwhelming majority of 51 out of the 70 responders (that is 72.9 percent) have entirely different set of responses to the questions asked the first-hand smokers (especially in support of a smoking zone). Such responses include the fact that smoking not only causes eyes, nose and throat irritation, it also causes annoyance and loss of concentration. Also, more of the second-hand smokers have been treated for cigarette related ailment in the past compared with active first-hand smokers.

Table 4.1 Showing perception of CIU students to cigarette smoking

## 5 CONCLUSION

Whereas sustainable design and technology is a vast discipline comprising various components each of which is exhaustive on its own, the role of Architects as designers in synchronizing all the respective component parts is inevitable. Choice of form, shapes and use of architectural spaces in such a way as to enhance maximum productivity of its intended users thus become vital.

However, in view of the robust existing literature, it will be proper to suggest that while efforts are made at encouraging all aspects of the fundamental human rights such as right to smoke or not, equal attention should be paid to taking maximum caution at not jeopardizing the all-round wellness of others who (by right) choose not to smoke cigarette. Conclusively, it is highly recommended that effort should be made by the management of CIU to make adequate provision for the safety of its non-smoking student population by creation of smoking zones. Also it is needful to state that further research needs to be done in order to determine why many students feel unharmed by cigarette smoke. Doing this will assumedly create a leverage for all students (no matter how few they might be) in performing better in their academic works thus attaining a healthier overall mental, psychological, and emotional status.

Since 52.6 percent of the cigarette smokers noted that they had at one time or the other attempted to quit smoking but failed. This makes it clear that it will be a novel idea if the school devices an effective way of re-orienting such individuals, doing so will afford more students the chance of being free from the health hazards of smoking.

Because of the necessity and importance of sanity and sanitation, placing trash cans by all entrances to academic buildings in the school is vital; however, placing signage forbidding smoking at same spots will undoubtedly go a long way in preventing the abuse and misuse of such architectural space.

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