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Analysis of Classroom Distractions in Tertiary Institutions

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ABSTRACT

Distraction is a process of diverting the attention of a person or group from the desired focus which results in blocking the reception of desired information. Various factors affect students in the course of their studies. This research studied what are the factors that lead to classroom distractions among final year student and propose suggestions for decreasing as well as removing such distractions. A structured questionnaire was administered among 250 students across five schools in a Polytechnic in Nigeria. From the statistical analysis carried out, the factor that mostly distracts both male and female students is smartphone usage (100%) during classes. 'Lack of interest in the course of study' was the least cause of distraction (2.0%). One of the factors affecting concentration in the class is 'lecturers receiving calls' (21.2%) during the classes. For effective teaching and learning to be accomplished, the teacher must be able to command a level of control in the classroom and exploring methods that captivate the attention of the student throughout the class. Finally, it is essential for the schools to bring out policies that will enhance teaching and learning and reduce distractions to an insignificant level.

Keywords: Classroom, Distraction, Smart Phones, Tertiary Institutions, Learning, Teaching, Concentration

1. INTRODUCTION

This research work was motivated by the fallout of the development in a Research Methodology class where some students were grossly distracted during the class. The study is purely to evaluate what are the causes and the impact of distraction when classes are going on and how they affect the students' academic performance. Classroom distraction arises from the inability of students to pay adequate attention to the reason for being in class. In any class where learning is taking place, maximum attention, and optimal alertness are required. Attention and alertness may be used interchangeably but they are not the same. Attention is the action of dealing with or taking special care of someone or something while alertness is the state of active attention to details and in this case to information derived from learning. Academic excellence is dependent on the optimal level of alertness during the delivery of lectures. This is about the students concentrating in their present class and making other things at that period insignificant (Castle and Buckler, 2009).

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Unwanted distraction is a major hindrance to attaining academic excellence; simply because academic success entails constant determination even at the appearance of distractions (Parks-Stamm, Gollwitzer, & Oettingen, 2010). Teaching in classrooms today may be more difficult than before because of lots of distractions here and there. The deficit on student skill's in reading, writing, and cognition has become a worry for Lecturers. These deficits are mainly the product of distractions from development in technology. Presently, improvement in technology has shifted from the drift from teacher to student with electronic gadgets such as laptops, smartphones, tablets, digital players, smartwatches, and recorders (McCoy, 2016). In any case, students can divert individual cohorts by talking during classes, not switching phones off, and being untidy. Students chatting with one another in the class is another form of distraction (Seidman, 2005). Studies have further shown that the unstructured use of laptops by students during the lecture classes tends to be a disadvantage than an advantage (Cismaru & Cismaru 2011).

Teaching in today's classroom may be more difficult than ever before because of the various factors causing distractions among students in the classroom. Distraction is fundamentally anything going on around that is keeping the task away from being completed. Therefore, understanding the relative potency of these distractions may help ensure classroom environments that optimize the potential for learning.

2. RELATED STUDIES

Douglas, Angel, and Bethany (2012) establishes the impact of the usage of digital devices in the classroom, the attendant distraction caused, and student performance. The ever-increasing use of computerized gadgets, for example, laptops, tablets, and smartphones have become worrisome particularly its influence on undergraduate students as relates to their studies. The researchers combine perception, review, survey, and interactions on the impacts of technology on students' perspectives and learning. Information were assembled in eight early science courses at an important university. Results show a huge negative connection between in-class smartphone usage and last grades, with the usage of phones contributing a drop of 0.3660.08 on a 4-point scale. They also discovered that their results agreed with the research results of Ophir, Nass, and Wagner (2009) which recommended that undergraduate students cannot perform multiple tasks almost as adequately as they want while studying. Their report also indicated that more students used smartphones in the classes much more than 75% which specified regular use of smartphones in the classes. The focus of their research is limited to the usage of digital devices in ongoing classes for first-year undergraduate students.

Shrivastava, Shrivastava & Muscat (2014) examines the perceptions of college academics on the classroom distraction caused by smartphone usage by their students. Students of this age are high users of smartphones and other electronic gadgets. Their paper presents the aftereffect of an investigation directed at 32 academics in public and private colleges and universities in Oman. All the academics responded to the questionnaire. 81% of the participants supported that there should be clear policies restricting smartphone usage in the classrooms. The outcomes of the investigation showed that academics have strong perceptions that smartphone usage during classes cause distraction both to teaching and learning. 77% of the respondent agree that there should be the instructor's directives restricting smartphone usage during the class. It also reveals that it aids students' misconduct in the classes. It was unequivocally affirmed that smartphones are being abused by the students and it is potentially the root cause of worry among academics and lack of attentiveness among the students. The research work is also limited to the impact of smartphones usage in the classroom from the teachers' perspectives.

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Beland, and Murphy (2016) in their research work titled "Ill communication: technology, distraction & student performance", investigated the effect of smartphone policy on students' performances in four major cities in England. It was discovered that mobile phones can disrupt teaching and learning in many ways with teachers working very hard to have student's full concentration. students with smartphones have access to social media, text, games, internet, thereby distracting them during classes. The study covers 90 schools in the four cities with 907 observations recorded. The effect of the smartphone prohibition policy on the performances of the students was measured. The outcomes show that there is an increase in the performances of the students after the schools ban the utilization of smartphones in the classrooms. This proposes that smartphone usage in the classrooms interrupt learning and a prohibition of its usage reduces drastically the problems of poor performances. This study is limited to smartphones causing distraction in the classroom.

Lim, Arawjo, Xie, Khojasteh, & Fussell (2017) examines the effect of technology (computer-mediated communication CMC) in undergraduates' boundary management strategies. In their previous research, it was discovered that communication technologies may make the boundaries between their work life and home life more trying for the working class to deal with. Students are less bothered by these boundary conditions, unlike the working class. To investigate this issue semi-structured interviews were used with 29 students with diverse ethnic nationalities and courses of study as respondents to know how they managed the boundaries between various aspects of their life. Interviewees revealed how they have been keeping up within adaptable and penetrable boundaries. They discovered that the students used both technology and non-technological means to strike balance in their daily activities. Distinctive life domains of the interviewees were mapped out and their self-reported role identified. The respondents considered technology to be a significant cause of boundary infringement yet playing a major role in managing the boundaries. Considering these discoveries, the researchers proposed a structure suggesting an instrument to manage all likely boundaries that will help the students manage themselves. This research revolves around the student's studies and family life and also, it was on students living in the United States.

Other related studies include Soyemi, Oloruntoba, and Okafor, (2015), who carried out a study on the impact of mobile phones on student academic performance in tertiary institutions and discovered that mobile phone impacts negatively on their academic performance. In other studies, by Gilroy (2004), Campbell (2006), Fewkes & McCabe (2012) and David, Kim, Brickman, Ran, & Curtis (2015), exposed the damaging impact of mobile phones on both students and faculty. Aguilera-Manrique et al (2018) observed a positive correlation between nomophobia and the use of smartphones. Likewise, they also discovered that there was a positive relationship between the assessment of smartphone limitation policies with every components of nomophobia and the total score of the survey.

Tesch, Coelho, & Drozdenko, (2011) found out in their pilot-study survey that the difficulty in understanding the teachers was the most powerful distracter to student attentiveness. End, Worthman, Mathews & Wetterau, (2009) in their research work discovered that students who were not disturbed by ringing phones do better than those whose phones distracted them in the course of an online class. Aligolbandi, Siamian, Balaghafari, Vahedi & Naeimi (2015) discovered the sleeping factor as the first priority of the internal factors of distraction between male and female students, while smartphone ringing or answering as the last priority. Amid external reasons for distraction in male students, the factor "Adornment of professors" was in the first priority, while "Used clothing and exotic costumes of Classmates" are external distracting factors affecting girl students.

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Ventilation and Lighting are among the environmental factors that also distract students in classes (Mehralizadeh *et. al.*, 2013). Studies by Kuznekoff & Titsworth (2013) showed that Students who were not using their smartphones outperformed those using their smartphones by taking 62% more detailed notes from the lecture and scored higher in the exam. Dansieh (2011) concluded that SMS text messaging had a negative effect on student-written communication skills as the students tend to use non-standard words in writing. Yamamoto (2007) examined students in a law school and discovered that numerous academics naturally accept that laptops usage among students ought to be confined in the study halls.

In justification for this work, the impact of distraction was considered among final year students in a particular Polytechnic in the south west of Nigeria. Also, the pattern of the lecture halls was considered. Most of the lecture halls have corridors on both sides of the hall with windows rising to the roof beam. So, consistent traffic is always on these corridors. There is no way traffic will go on the corridors without being recognized. It should be noted that auditoria are not like these, they were constructed with high-level windows.
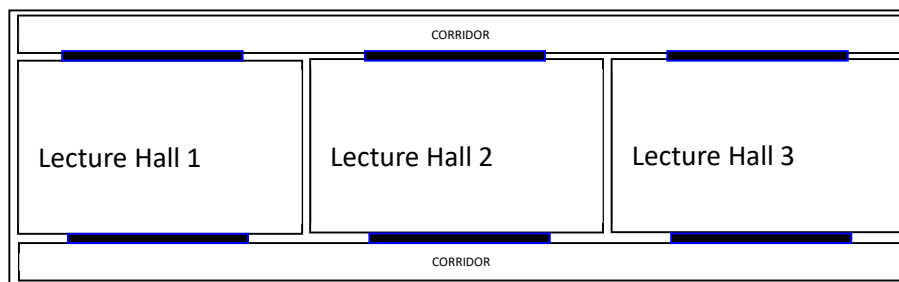

Figure 1: Typical Small Lecture Halls

3. METHODS

The research is based on students' experiences of how distraction affects their academic performance. The study was conducted by distributing structured questionnaire based on the likely factors that distract students in higher institutions in a developing nation like Nigeria. Also, interviews were conducted to determine the actual perspective behind the outcomes of the questionnaire. To determine the reliability of the questionnaire, final year students of the Federal Polytechnic Ilaro were selected randomly from 5 schools to complete the questionnaires. The population was selected among all the final year student of the School of Engineering, School of Communication and Communication and Information Technology, school of environmental studies, School of Management Studies, School of Pure and Applied Science with 250 population (149 male and 101 female).

A sample size of 250 out of 8500 students' populace participated in this research work with 149 (59.6%) as male and 101 (40.4%) as female. The sample populations were randomly selected across the 5 schools within the institution with 60 (24.0%) from School of Engineering, 30 (12.0%) from School of Communication and Information Technology, 55 (22.0%) from School of Pure and Applied Sciences, 60 (24.0%) from School of Management Studies and the remaining 45 (18.0%) from School of Environmental studies. These are presented in Table 1 and Figure 1 below.

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Table 1: Respondents by Gender by Schools

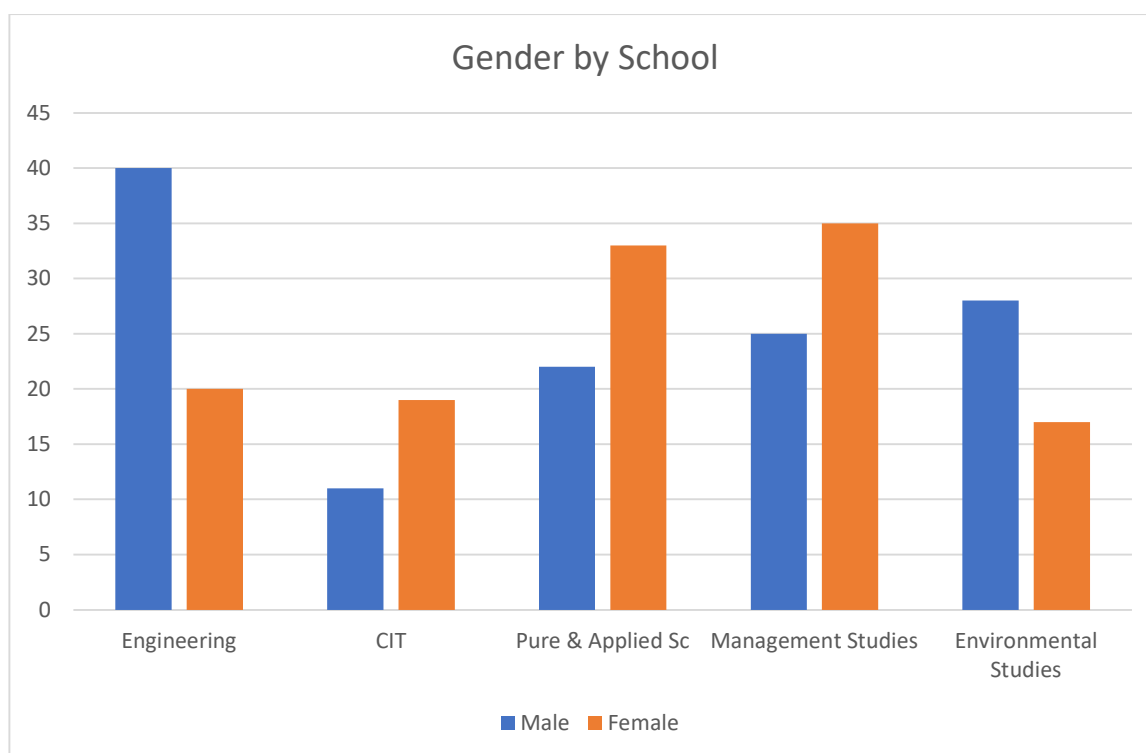|	Engineering	CIT	Pure & Applied Sc	Management Studies	Environmental Studies	Total
Male	40	11	22	25	28	149
Female	20	19	33	35	17	101
Total	60	30	55	60	45	250

Figure 2: Chart showing Respondents by Gender by Schools

A variety of factors affecting the full concentration of students in the class in a contemporary setting in Nigeria were enumerated and put in a structured questionnaire. The factors include economy of the families, mobile phone usage, emotional issues, the position of sitting in the class (front, middle or back), eating and chatting in the class, movement on the corridors of the class, poor ventilation, lateness to class, attraction to the opposite sex and so on. The results are taken from both sexes to be able to compare the gender sensitivity of the study. To simplify the analysis because of the number of factors that caused a distraction in the classes, the response required is Yes, No, and Undecided.

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4. RESULTS AND DISCUSSION

The responses of the students are tabulated in Table 2. The percentages of the responses were taken over the total, that is,

% of Response = (Number of Responses) / (Total number of Participants)

The total number of respondents was used as the basis for calculation so that the percentage of the responses can be in terms of all the respondents and not according to their sexes.

Table 2: Distribution of Student Responses to Different Types of Distractions

Distractions	Male						Female					
	Y	%Y	N	%N	U	%U	Y	%Y	N	%N	U	%U
Economically Poor Families	122	48.8	15	6.0	12	4.8	80	32.0	15	6.0	6	2.4
Mobile Phones	149	59.6	0	0.0	0	0.0	101	40.4	0	0.0	0	0.0
Hunger	145	58.0	4	1.6	0	0.0	41	16.4	55	22.0	5	2.0
Love and Emotional Issues	12	4.8	130	52.0	7	2.8	20	8.0	75	30.0	6	2.4
Away from Parents	10	4.0	139	55.6	0	0.0	15	6.0	86	34.4	0	0.0
Lack of Interest in the Course	2	0.8	140	56.0	7	2.8	3	1.2	98	39.2	0	0.0
Sitting Position in the Class	38	15.2	84	33.6	27	10.8	25	10.0	76	30.4	0	0.0
Drinking, Eating in Class	24	9.6	114	45.6	11	4.4	25	10.0	76	30.4	0	0.0
Power Outage	11	4.4	136	54.4	2	0.8	15	6.0	80	32.0	6	2.4
Surrounding Noise	134	53.6	12	4.8	3	1.2	95	38.0	5	2.0	1	0.4
Phone of Lecturers Ringing	25	10.0	112	44.8	12	4.8	28	11.2	72	28.8	11	4.4
Movement on the Corridors	135	54.0	12	4.8	2	0.8	52	20.8	45	18.0	4	1.6
Attraction to Opposite Sex	140	56.0	5	2.0	4	1.6	20	8.0	78	31.2	3	1.5
Unfinished Assignment	149	59.6	0	0.0	0	0.0	99	39.6	2	0.8	0	0.0
Poor Ventilation	12	4.8	134	53.6	3	1.2	88	35.2	13	5.2	0	0.0
Chatting in the Class	128	51.2	20	8.0	1	0.4	25	10.0	76	30.4	0	0.0
Noise from other Classes	140	56.0	5	2.0	4	1.6	98	39.2	3	1.2	0	0.0
Personal Hygiene	62	24.8	84	33.6	3	1.2	99	39.6	2	0.8	0	0.0
Lateness to Classes	105	42.0	40	16.0	4	1.6	90	36.0	11	4.4	0	0.0

Note: Y-Yes, %Y-% Yes, N-No, %N-%No, U-Undecided, %U-%Undecided

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It could be observed from Table 2 that some factors affect the male more than the female. Being a final year student, certain factors did not distract them. Such are: love and emotional issues (12.8%), away from parents (10.0%), lack of interest in the course of studies (2.0%), eating in the class (19.6%), sitting position in the class (25.2%), and power outage (10.4%). Attraction to the opposite sex affected the male students (56.0%) than the female students (8.0%). It was observed that poor ventilation affected female students (35.2%) than male students (4.8%). Likewise, chatting in the class affects male students (51.2%) more than the female students (10.0%). Certain perspectives are behind the results obtained from the administered questionnaire. These were brought forth during the interviews. As final year students, they responded that they are well balanced emotionally to handle love affairs and away from home. The majority of the female students said they are used to chatting, so anyone chatting in the class does not disturb them, while the male students said they are easily carried away by chatting. Female students also complained that poor ventilation affects their makeups, while their male counterparts are less concerned about it. Of interest to the female respondent is the issue of personal hygiene with 39.6% while the male respondents are 24.8%. also disturbing to note, is the level of distraction caused by lecturers receiving calls during the classes which account for 21.2%.

Table 3: Factors that Distracts the Students Most

Distractions	All Respondents					
	Y	%Y	N	%N	U	%U
Economically Poor Families	202	80.8	30	12.0	18	7.2
Mobile Phones	250	100	0	0.0	0	0.0
Hunger	186	64.4	59	23.6	5	2.0
Surrounding Noise	229	91.6	17	6.8	4	1.6
Movement on the Corridors	187	74.8	57	22.8	6	2.4
Unfinished Assignment	248	99.2	2	0.8	0	0.0
Noise from other Classes	238	94.2	8	3.2	4	1.6
Lateness to Classes	195	78.0	51	20.4	4	1.6
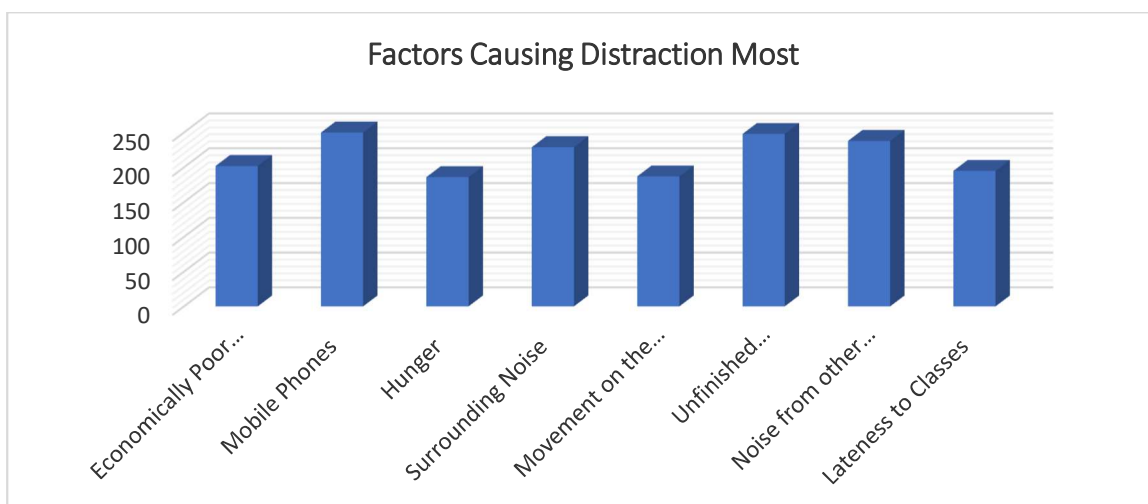
Figure 3: Bar Chart showing the Factors that Distracts the Students Most

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Most critical among the factors causing distraction in the classes is the use of the smartphone with 100% of the respondents agreeing to this. All the students said unequivocally that smartphone usage distracts them as some of them are carried away chatting, texting, and doing what is not relevant to the lectures going on. Followed closely to that is an unfinished assignment with a cumulative 99.2%.
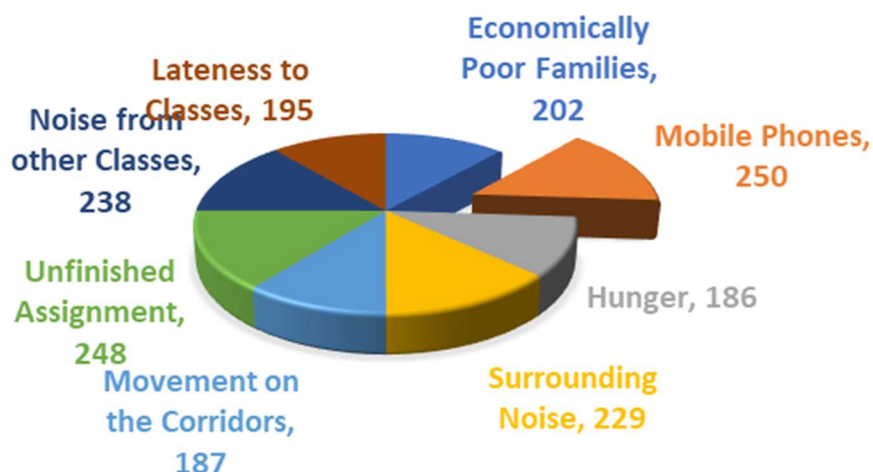

CHART SHOWING FACTORS CAUSING DISTRACTIONS

Economically Poor Families, 202
Mobile Phones, 250
Lateness to Classes, 195
Noise from other Classes, 238
Hunger, 186
Unfinished Assignment, 248
Movement on the Corridors, 187
Surrounding Noise, 229

Figure 4: Pie-Chart Showing the Factors Causing Distraction Most

The respondents said they become disorganized in the class when they have unfinished assignments to be submitted. Noise from other classes formed 94.2% which directly translates to the fact that any adjoining class without a lecturer will likely become noisy. The noise from the surrounding (91.6%) particularly affects classes close to the generator set and the students' market. Most of the male students interviewed said they are sometimes distracted when the opposite sex is passing through the corridors while their female counterparts observed that movement on the corridors distract if the noise associated with it is unbearable. Another salient point is hunger (64.4%) which is directly related to the economic status of the respondents' families (80.8%).

5. CONCLUSION

The research has been able to bring to the front burner the factors causing distractions among final year students in one of the tertiary institutions in Nigeria. Foremost among these, is the usage of phones in the class both by the students and their teachers. To this end, the authority should come up with a phone usage policy in the class. Closely knitted to mobile phone usage is movement around the lecture halls. This can be resolve by making the walkways off the class areas and enforcing strict noise control mechanisms around the classrooms. Invariably, any form of distraction will affect the performances of the students, so whatever it is going to take, this should be minimized to the barest minimum.

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