

Classroom Distraction Due to Mobile Phones Usage by Students: College Teachers' Perceptions

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Abstract— there are more than six billion users of mobile phones worldwide. Smart phones and other handheld devices are largely used by the students. Research indicates that increasing use of mobile phones by the students in the classroom is a big interruption. This paper presents the result of a study conducted on teachers of various institutes of higher education in Oman. Total 32 teachers from both the public and private colleges and universities were responded the questionnaire. The results of the study show that participants reported strong perceptions of mobile phones as a classroom distraction in teaching and learning environment and students' misconduct. It has been strongly confirmed that mobile phones are misused and is potential source of stress among faculty and lack of concentration among students.

Keywords- Mobile phones, Classroom Distraction, Teaching

I. INTRODUCTION

Ubiquitous connectivity, seamless mobility and increasing power of mobile phones and smart hand held devices have a tremendous penetration everywhere in the world. The cell phone is one of the most rapidly growing technologies in the world with more than six billion subscribers (UN Report: 2013). Oman is not an exception. Oman now has 1,625,426 more mobile subscriptions than the number of people in Oman, according to the latest statistics from the Telecom Regulatory Authority (TRA) [1].

Almost all academicians and educators expect that at least class rooms should be free from these mobile phones. Ideally, students should not use their mobile phones while attending the lectures. On the other hand, latest researches clearly show the increasing use of mobile phones by the students in their class rooms. According to a recent study conducted by the University of Haifa, 94% of Israeli high school pupils access social media via their cell phones during class. Only 4% reported not using their cell phones at all during class [2]. A study about effects of social networking using mobile phones by the students was done in college of applied sciences, Nizwa, Oman by Mehmood and Taswir [3]. The findings of this study confirms that 80% students use a social networking site on phone, 10% spent half hour, 35% spent two hours per day and 25% spent more than two hours on mobile phones in a day. However, this study shows the results of a single college but it

confirms the general observations among students in other colleges and universities.

Traditionally, the learning environment should be quite and pleasant. The classroom discipline is one of the most important aspects in teaching and learning environment and considered as a basic requirement. Mobile phones have been observed to be a big disturbance in the class room environment. Any disturbance due to use of mobile phone inside a classroom like answering phone calls or sending text messages is unacceptable thing. If a mobile phone rings during a lecture it not only disrupts the learning of that student, but diverts other students' mind from the lecture and breaks the tempo of the teacher. Even if the mobile phone is put on a silent mode still students have been found to use it for messaging and doing other applications.

Objectives of this study:

The purpose of the current study is to explore the perceptions of college teachers on the mobile phones usage by the students during their class time.

The main objectives are:

1. To recognize the guidelines about restrictions on mobile phones usage during the class time.
2. To confirm the classroom disturbances faced by the college teachers due to use of mobile phones by students.
3. To survey the students' misconduct in the class room due to mobile phone use.
4. To discover misuse of mobile phones other than using for study and learning.
5. To know Teacher's inconvenience and feeling stressed when students use mobile phones during the class.

II. LITERATURE REVIEW

Cell phones are reportedly one of the biggest classroom distractions [4]. Teaching and learning suffers when students focus frequently on their mobile phones by losing their concentration on study. Today, teaching is more challenging

due to such type of disturbances. Teachers are struggling to minimize these disturbances while keeping students focused on learning. Some institutes have certain guidelines for restricting the students for carrying and using mobile phones in the class rooms, whereas some institutes are not much restrictive.

Many research papers have claimed that use of mobile phones in the class room is a big distraction. In their paper, Tindell and Bohlander [5] argued that the use of the cell phone is a distraction and that “if students are spending time texting, they are not paying attention in class”. Scott W. Campbell [6] conducted a study to explore some of the challenges associated with mobile phones in college classrooms. Participants including students and teachers reported that ringing is a serious source of irritation and distraction for both students and faculty members and supported for formal policies restricting the technology during class time. In a similar study done by Burns and Lohenry [7], students indicated that they used the text message feature and checked cell phone messages. Cell phones were identified by both students and faculty as a source of distraction during class time.

Belwal and Belwal [8] conducted a study on identifying mobile phone usage behavior of university students in Oman. They conducted a survey of 200 students in Muscat and Sohar cities of Oman. Their research revealed that a majority of students make less than 10 calls but more than 10 SMS per day, they feel uncomfortable without mobile phones, they keep their mobile phone switched on 24 hours, and they are equipped with almost every feature in their mobile. That means, students are keeping their mobile phones during their class times also.

A major concern about overuse of the mobile technology is multitasking. Students are busy in receiving and sending text messages while attending a class lecture. Gilroy [9] found that a third of university students in the US play video games on their mobile phones and laptops during class. Other studies from Korea, Norway, and the US indicate that various forms of mobile phone use take place in classrooms all over the world [10].

Javid et al. [11] conducted a study in order to determine the effects of mobile phone on the performance of students at university level on students of The Islamia University of Bahawalpur, Bahawalnagar Campus, Pakistan. The study shows that most of the students were agreed that the mobile phone is wasting the students’ precious time and money. Moreover it has increased the rate of telling lie among students. In a similar study by Aamri and Suleiman [12] done in Sultan Qaboos University among the students to investigate the use and practices of cell phones in the process of learning english language. The authors concluded that “Students like to use them but teachers do not encourage them to do so fearing that this digital device will be a big distraction for both teachers and students alike”.

Harman and Sato’s [13] study revealed a correlation of text phone messages and lowered academic scores, as well as problems remembering disrupted class discussions. Emeka Ezemenaka [14] carried out a study in University of Ibadan

students in Nigeria. This study tried to understand the usage and perceived effect on students’ academic performance due to the time spent on the phones during class hours which has a general perception as a medium of distractions to students. The analysis of the students’ perception showed that the internet enabled phone usage does not affect the academic performance of the students but distractions by the usage of phone were notably admitted.

There have always been issues with students’ passing of notes in class and cheating on exams. As pointed out by Orbinger & Coffey [15], “Many students are extremely rapid and proficient at text messaging and could share answers on both multiple choice and essay type items”. Another important issue is noted by Kiedrowski, Smale & Gounko [16] who discussed the issues of privacy violations. They wrote that “Using the video features of a cell phone, students can record other students to denigrate peers or teachers by posting these rogue videos in public forums such as YouTube to simply try to ‘provoke a teacher into losing their temper’ (p.54)”.

Based on the available literature, it is concluded that students are heavily using mobile phones and distracting the teaching and learning. Students are also misusing their mobile phones for creating disturbances. Therefore, the focus of this paper is to conduct a survey among teaching faculty of higher education institutes in Oman to verify their views about mobile phone usages.

III. RESEARCH METHODOLOGY

A. Research Instrument

The research was conducted by using the procedure of survey method which is a type of descriptive research. As a research tool, a questionnaire of a five point rating scale was developed to collect the data about the usage of mobile phones by the students in their class rooms. The questionnaire was made available online and was sent to various faculties of universities and colleges in Oman. A total of fifteen items were carefully included in this rating scale. Teachers were required to respond on a five point Likert scale.

The preliminary concept about the phenomenon and selection of variables causing disturbance in the classroom due to use of mobile and smart phones have been developed from the literature review, experiences of teachers and informal interactions with some of the faculty members of higher education academic institutions.

The sample for the study includes the academic staff of higher institution and university in Oman from different public and private institutions consisting both male and female participants.

B. Reliability of Instrument

Reliability of the data is needed in any research for authenticity. In order to find the reliability of the items used in the instrument, Cronbach’s alpha test was conducted on the 15 items in the questionnaire where dependent variable distraction is distributed on a 5 point likert scale. The Cronbach Alpha

showed that the reliability of the scale was 0.93 for all 15 items which is significantly suitable for this study.

C. Statistical Analysis

Descriptive statistics was used to answer the questions of the study. To analyze the data, responses were converted into numerical scale according to the following description: Strongly Agree 5, Agree 4, Neutral 3, Disagree 2, and Strongly Disagree 1. The data analysis included the calculation of the weighted mean for each statement. As it was a five point scale, the maximum average score would be 5 and minimum possible score would be 1.

The perception of teachers on mobile phone usage of students was considered positive or negative depending on how much the average score lied near or far from 5.

D. Hypothesis

The mobile phone use by the students during class time is a class room distraction.

IV. RESULTS AND DISCUSSIONS

The survey gathered basic demographic information as well as participants' perception regarding the use of cell phones in the classroom while learning takes place. Total 32 participants completed the survey online. Male were 23 and female were 09. The respondents from public institutes were 13 and from private institutes were 19. Only 5 respondents were having experience less than 5 years, rest all were having more than five years. One incomplete response has been excluded in final calculations. The following are the results of the study based on table I:

1) Research Question 1:

81% Participants supported that there should be clear policies restricting mobile phones in college classrooms (Mean score: 4.23). 77% of respondent are agree and strongly agree that there should be instructor's guidelines restricting mobile phone during the class. Mean value for the item is 4.19 and SD 3.21. Higher mean scores reflect favorable support for guidelines restricting mobile phone use in the classroom learning environment.

2) Research Question 2:

Perception of teachers regarding mobile phone usage as a serious source of distraction is confirmed by the respondents. 83% respondents are agreed and strongly agree that it is very serious interruption in the class with the Mean value of 4.32 and SD 2.45. When asked oppositely that mobile phones are not serious problem in your classes? 61% of the respondents are strongly disagree and disagree means they believe mobile phones use is serious problem when teaching and learning takes place, with the Mean value of 2.35 and SD 3.46.

3) Research Question 3:

Respondents confirmed that more than 50% students are using mobile phone during the classroom. Most of the time teachers have to ask the students to switch off or keep in silent

mode. 86% respondents confirmed that they ask their students to switch off the phone, which means students keep switch on their phone unless they are told to switch off or keep in silent mode. The mean value of 4.39 strongly supported their opinion. This question is related to students' disorderly behavior during the class. Even when students are asked to switch off their mobile phones, on average 64% students obey their teachers and on average more than 50% students do not follow the teacher's instruction. This impolite behavior of the students is a clear indiscipline.

When asked that do you think it is indiscipline when students do not turn their ringers off or to keep silent mode during class? 84% respondents were agreed and strongly agreed and confirmed it as indiscipline act with the mean value of 4.26 and SD 2.71

4) Research Question 4:

It has been observed that students are misusing their mobile phones even during their class timing. For discovering the misuse of mobile phones other than using for study and learning, following related questions were asked.

The first question was about teachers' observation of some students who are taking simply the photos of lectures/diagrams in place of writing. 80% respondent observed this type of occurrence in the class room which is not good for effective learning, with the mean value of 3.94 and SD 2.7. Another big issue was related to cheating using mobile phone. Approximately all respondents agreed that use of mobile phone is a potential source of cheating during exam. 100% respondents have heard/read about mobile phones being used for cheating during exam. A high value of mean 4.55 was observed towards strongly agreed.

5) Research Question 5:

In this study, an effort was made to know the feeling of discomfort and stress because of students' disturbing acts. When asked you do not mind when a student answers his/her mobile phone during class if he/she leaves the room to answer the call. 58% respondents are strongly disagree means they mind if the student leaves the class to answer the call/SMS. It not only shows disrespect towards the teachers but also affect learning. They also feel tense or inconvenient when a student uses his/her mobile phone during class time? 84% respondent are strongly agreed and agreed that they feel stressed with mean value of 4.13.

Most of the participants complain/discuss to their colleagues about mobile phones being used in classrooms. 65% respondents discuss the problem with colleagues with mean of 3.65 and SD 2.72. 74% respondents also criticize about mobile phones being used in classrooms. Students using their mobile phones while studying not only disturb the teaching but also a reason of their poor performance. This also creates an unknown stress to teachers towards their performance. 81% respondents believe that it is one of the reasons for the lack of concentration among students with the mean value of 4.26 and SD 2.6. It is clear that faculty feel stress due to use of the phone during the class and its one the main reason of lack of concentration and poor academic performance.

V. CONCLUSIONS

Based on participants’ data, the primary hypothesis was supported. Higher mean value reflect more support for guidelines restricting mobile phone use in the classroom, stronger perception regarding serious interruption in teaching and learning environment and students misconduct. It has been strongly confirmed that mobile phones are misused and is potential source of stress among faculty and lack of concentration among students. Most of the faculty members show negative attitudes about cell phones use in college classrooms during lectures. Although some past studies have explored college students’ cell phone usage, few studies have examined the perceptions of faculty or university staff. This study only covered teachers’ perceptions. However, the number of respondents was not large enough but included all type of institutions and teachers. A further study on the topic is needed to detect significant association between the variables. The study will help higher academic institution to identify the problems and challenges faced by teachers in the classroom due to use of mobile phone.

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Table I

Likert weightings	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean	SD
Q1 about college guidelines	9.7	3.2	6.5	16.1	64.5	4.23	3.38
Q2 about instructor’s guidelines	6.5	6.5	9.7	16.1	61.3	4.19	3.21
Q3 asking students to switch off/ keep in silent mode during the class	3.2	9.7	0	19.4	67.7	4.39	2.78
Q4 on average how many students obey you to switch off	9.7 (0-20%)	9.7 (20-40%)	16.1 (40-60%)	25.8 (60-80%)	38.7 (80-100%)	3.74	3.37
Q5 on average how many students do not use mobile phones during	22.6 (0-20%)	16.1 (20-40%)	12.9 (40-60%)	19.4 (60-80%)	29 (80-100%)	3.16	4.32

teaching hours

Q6 it is indiscipline when students do not turn their ringers off or to keep silent mode during class?	6.5	0	9.7	29	54.8	4.26	2.71
Q7 when a mobile phone rings during class, it is a serious interruption?	3.2	0	12.9	29	54.8	4.32	2.45
Q8 feel it inconvenient when a student uses his/her mobile phone during class time?	6.5	6.5	3.2	35.5	48.4	4.13	2.77
Q9 you do not mind when a student answers his/her mobile phone during class if he/she leaves the room to answer the call/sms	35.5	22.6	16.1	16.1	9.7	2.42	3.57
Q10 mobile phones are not serious problem in your classes?	35.5	25.8	12.9	19.4	6.5	2.35	3.46
Q11 do you discuss to your colleagues about mobile phones being used in classrooms?	9.7	6.5	19.4	38.7	25.8	3.65	2.72
Q12 do you hear people complaining about mobile phones being used in classrooms?	3.2	9.7	12.9	64.5	9.7	3.68	1.79
Q13 mobile phones being used for cheating during exam?	0	0	0	45.2	54.8	4.55	1.98
Q14 students are taking simply the photos, using mobile, of your lectures/diagrams, in place of writing?	9.7	3.2	6.5	45.2	35.5	3.94	2.71
Q15 is it one of the reasons of lack of concentration among students during class time?	3.2	3.2	12.9	25.8	54.8	4.26	2.6