

# **IMPACT OF SMART MOBILE PHONES ON MANAGEMENT SCIENCE STUDENT'S OF BAHRIA UNIVERSITY, KARACHI**

By

**SYED MAHROZ SHAHID**

**22907**

A research thesis submitted to the Department of Management Sciences, Bahria University  
Karachi Campus, in fulfillment of the requirement for the MBA degree Thesis



**Spring 2016**

**Bahria University Karachi Campus**



## MBA thesis

2<sup>nd</sup> Half –Semester Progress Report & Thesis Approval

## Supervisor – Student Meeting Record

S.No.	Date	Place of meeting	Topic of discussion	Signature of student
5	25-04-16	Sir Mumtaz's Office	Analysis of data gathered and discussed chapter four.	
6	7-05-16	Sir Mumtaz's Office	Discussion on chapter five and discussion over how to link research with existing literature.	
7	25-05-16	Sir Mumtaz's Office	Final review of thesis, discussion on formatting and plagiarism checked.	

**APPROVAL FOR EXAMINATION**Candidate's Name: **Syed Mahroz Shahid**Registration No. **22907**Thesis Title: **Impact Of Smart Mobile Phones On Management Sciences Students Of Bahria University, Karachi**

I hereby certify that the above candidate's thesis has been completed to my satisfaction and , to my belief , its standard is appropriate for submission for examination. I have also conducted plagiarism test of this thesis using HEC prescribed software and found similarity index at **15%** that is within the permissible limit set by HEC for MBA thesis. I have also found that the thesis is in a format recognized by the Department of Management Sciences.

Supervisor's signature: \_\_\_\_\_ Date:    -06-2016   Name:    MUMTAZ KHAN   HOD's Signature: \_\_\_\_\_ Date:    -06-2016

## Declaration of Authentication

I, hereby, declare that no portion of the work referred to in this thesis has been submitted in support of any application for another or qualification of this university or any other institution of learning.

Signature: \_\_\_\_\_

Name: Syed Mahroz Shahid      Date: -06-2016

**LIST OF TABLES**

Table 4.1: Frequency distribution on the basis of gender ..... 11

Table 4.2: Frequency distribution on the basis of age ..... 11

Table 4.3: Reliability Statistics for Social Behavior ..... 12

Table 4.4: Reliability Statistics for Academic Performance ..... 12

Table 4.5: Reliability Statistics of Time Management ..... 13

Table 4.6: Model Summary<sup>b</sup> of Time Management ..... 13

Table 4.8: Coefficients<sup>a</sup> table for Time Management ..... 14

Table 4.9: Model Summary<sup>b</sup> for Social Behaviour ..... 14

Table 4.10: ANOVA<sup>b</sup> table for Social Behaviour ..... 15

Table 4.11: Coefficients<sup>a</sup> table for Social Behaviour ..... 15

Table 4.12: Model Summary<sup>b</sup> for Academic Performance ..... 16

Table 4.13: ANOVA<sup>b</sup> table for Academic Performance ..... 16

Table 4.14: Coefficients<sup>a</sup> table for Academic Performance ..... 17

Table 4.15: Pearson Correlation among hypothesis ..... 17

## LIST OF ABBREVIATIONS

IEA: Institute of Economic affairs

SUMTM : Sum of Time management variables

SUMSB: Sum of Social Behaviour variables

SUMACADEMIC: Sum of Academic Performance variables

**First Page of Plagiarism Test Report**

## ACKNOWLEDGEMENT

*By the grace of Almighty Allah, the most beneficent and the most merciful, I have finished my thesis and have been able to present it.*

I am extremely thankful to my advisor Sir Mumtaz Khan for his valuable time and guidance that helped me in doing research. He always guided, motivated and encouraged me in the completion of this thesis.

I also wish to acknowledge the valuable guidance provided by respected teacher Sir Khurram Adeel . He guided me with a lot of his expertise and state of knowledge.

## ABSTRACT

The usage of smart phone is common among people of all age groups; however, is popular among teenagers and students. The purpose of this research was to examine the impact of smart phone usage on students. The usage of smart phone is very common among students of universities in colleges. The sale of smart phone has been increasing with time and students are highest benefactors in increasing the sales. The research adopted the quantitative research approach because it increases the objectivity of results. Primary data was gathered for the purpose of conducting this study. Primary data was gathered from 150 participants.. Data analysis was carried out through the use of SPSS software. Data was analyzed by applying Cronbach Alpha reliability test, Pearson correlation and regression analysis. According to the results, smart phone usage has a negative impact on the studies of students. It is because the usage of phone results in distracting students from studies. Students who possess mobile phones are likely to use it during classroom, which distracts them from the lecture. Therefore, it has been recommended that both parents and teachers provide necessary counseling and guidance to students in order to reduce the harmful effects caused by mobile phone utilization. It also effects the social behavior of the students to it is necessary that they are guided and counseled properly so that these effects don't hurt their personality.



**TABLE OF CONTENTS**

2<sup>nd</sup> Half –Semester Progress Report & Thesis Approval ..... ii

Declaration of Authentication ..... iii

LIST OF TABLES .....iii

LIST OF ABBREVIATIONS ..... iv

PLAGIARISM TEST REPORT ..... v

ACKNOWLEDGEMENT ..... vi

ABSTRACT ..... viii

CHAPTER 1: INTRODUCTION ..... 1

    1.1 Background ..... 1

    1.2 Problem Statement ..... 2

    1.3 Research Objectives ..... 3

    1.4 Hypotheses: ..... 3

    1.5 Time Horizon: ..... 3

    1.6 Time Scale: ..... 3

    1.7 Limitations of the Study: ..... 3

    1.8 Ethical Considerations: ..... 4

    1.9 Organization of Thesis: ..... 4

CHAPTER 2: LITERATURE REVIEW ..... 6

CHAPTER 3: RESEARCH METHODOLOGY ..... 9

    3.1 Research Type ..... 9

    3.2 Sample Size and Sampling Technique ..... 9

    3.4 Data Source ..... 9

3.5 Data Collection Method ..... 10

CHAPTER 4: DATA ANALYSIS ..... 11

4.1 Regression Analysis ..... 13

4.2 Pearson Correlation ..... 17

CHAPTER 5: DISCUSSION..... 19

DISCUSSION ..... 19

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS ..... 21

6.1 Conclusions ..... 21

6.2 Future Study..... 22

6.3 Recommendations ..... 22

CHAPTER 7: REFERENCES ..... 24

CHAPTER 8: APPENDIX ..... 26

8.1 Survey Questionnaire..... 26

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

Smartphone's as we all know are advanced mobile-phones as compared to their predecessors which had the basic call and messaging functions. Modern phones now are more advanced in connectivity as well as computing data. Number of new functions in the form of applications is now added in cell phones, which include camera for both image and video capture and music player and GPS. The popular mobile brands include Apple's Iphone, Samsung, Microsoft (Formerly Nokia) and Blackberry which include iOS, Google's Android, Microsoft Windows and RIM's Blackberry software as their operating systems respectively. Due to these qualities and functions they have become very much popular among the consumers and their demand is rapidly increasing. It has almost become a necessity for customers and they can't imagine a life without it. Smart phones have become an indivisible part of people's life and most of them carry it all the time in developed countries (Smura *et al*, 2009)

People of all ages are fond of smart phone's but is very much popular among teenagers and more specifically students. If we look around in universities and colleges we will find students with his/her head down and indulged in their smart phone almost everywhere either it be walking down the road, in parks and also during classes. The rising sales for smart phones are due to university students and they are the highest benefactors in increasing the sales (Jacob and Isaac, 2008). The main factor that effects the growth of smart phone usage is the specialty of its functions that helps its users in their daily life mainly business people and university students. These electronic devices have somehow now become a companion of this generation of undergraduates but the question which arises is that, is there a need of such companionship, are these devices being used properly or are they being utilized in some other purposes? The change in the usage of technology for current generation as compared to generations before them has been well documented (Oblinger and Oblinger, 2005). Growing up with video games, messaging services, computers and internet this generation has a very distinct view of information access than their former generations (Prensky, 2001). The age group of 18-25 which make up most of

the undergraduate students are now used to immediate information access and their expectations are that they have all the desired information they need answered and available to them immediately rather than going and getting that information (Oblinger and Oblinger, 2005).

Libraries services and resources are more precise, organized and efficient than searching on the net. If libraries wish to remain pertinent to students, then services must be available when and where students access information. Today a hand-held, internet-supported device commonly known as “smart” phone only requires one hand to operate and because of this many academic libraries are planning to make applications that will make some or all of their services available on these devices. But in order to make and create such applications, or apps, that are useful to patrons, their use of the devices must be fully understood. This paper reports on a survey of undergraduate use of smart phone applications for both every day and academic use.

### **1.2 Problem Statement**

There has been a dramatic increase in the ownership of internet enabled mobile-phone devices recently by undergraduates students of every field (Dahlstrom et al., 2012). However, famous writers have written that the most utilization of these gadgets is for diverse use like entertainment purposes and correspondence. (Viticc i, 2012). Both scholastic libraries and universities have expressed that they have or plan to have a portable web which can function effectively on internet enabled phones (Thomas, 2012). Before helpful and natural applications can be built up, the recurrence of utilization of various sorts of applications by this population should be investigated with a specific end goal to advise the acts of the individuals who wish to pull in them to their web destinations. The use of cellular phones has re-formed, re-composed and modified many social facets. Especially focusing on young people's cell phone use, different literatures has given confirmation of them being utilized for both constructive purposes and antagonistic reasons. Is the gap between positive uses and negative impact increasing? Are results and concerns replacing positive uses? How do guardians/parents see the general utilization of cell telephones by their young children? Are there any arrangements, conceivable outcomes and possibilities to address such issues? These are the fundamental inquiries that drive this study.

### **1.3 Research Objectives**

The focus of this research is centered on impact of mobile phone usage on students.

- To comprehend the effects of cell phone utilization on students (constructive , negative effects)
- To examine whether the students' dependence on smart phones influences their Social behavior.
- To comprehend the consequences of mobiles on for undergraduates' studies

### **1.4 Hypotheses:**

H1: Time management of students is significantly affected by mobile phone usage

H2: Social behavior of students is significantly affected by mobile phone usage

H3: Academic performance of students is significantly affected by mobile phone usage

### **1.5 Time Horizon:**

The current research is a scholastic examination for the consummation of post-graduation degree and will subsequently relate to constrained time scale as exhibited by university's directions. The study is based on fleeting analysis and review methods and depends on cross-sectional study rather than longitudinal methodology.

### **1.6 Time Scale:**

The time skyline for the ongoing research task is cross-sectional, which implies that the exploration will slice through an expansive range of the objective exploration populace with a specific end goal to incorporate whatever number of viewpoints and scope of exploration bits of knowledge as possible.

### **1.7 Limitations of the Study:**

Because of scholastic nature of this study, the exploration includes number of confinements in setting of test size, spending plan and time. The study correlates to restricted sample size i.e. undergraduate students from management sciences department of Bahria university Karachi

campus only to acquire the respective research objectives within the given time. In context to that different confinements are connected with this exploration that mostly compare to cost, financing and time imperatives taking into account short and brief estimation of sample study. It is vitally important to note that there are numerous inclinations may relate to connect with quantitative study which may which promote support and correct the premise (base) of certain solid discoveries. Moreover, it is additionally credited that it was hard to get optional wellspring of information from each asset on the given subject thus, the study is especially taking into account establishment of the individual study.

### **1.8 Ethical Considerations:**

In light of this exploration study, it was made sure to meet all the moral parts of the concentrate properly and totally. For the most part, one of the key angle includes the investment of people or respondents which compare to keep up strict secrecy and privacy context. In that way, it was ascribed that it was made guaranteed to keep the assents of respondents before gathering particular data collection. The overall research aim and objectives of this respective study was made clear to the potential respondents. In that way, it was acquired to keep the data about the respondents private and their personality must stay mysterious. The data given is not shared with others. In other context, it was guaranteed to keep the reference as precise as could be expected under the circumstances for referring to the source of secondary data in view of creating the connection of uprightness and maintain a strategic distance from different aspects of plagiarism. Likewise, the biographic data of the considerable number of respondents was kept private and unknown and was not imparted to some other person. All the optional information accumulated from officially existing literature is appropriately referenced with a specific end goal to maintain a strategic distance from counterfeiting and produce trustworthiness.

### **1.9 Organization of Thesis:**

The thesis will be organized and divided into a total of six parts or chapters, which will be followed by a bibliography/reference list and an appendix for additional charts, figures and graphs.

The opening **first** chapter will provide a detailed account of the nature and background of the research problem, the research questions and hypothesis, the major objectives of the study and an overview .

The next **second** chapter will be based on a critical literature review, using the existing academic theories, researches and scholarly works done and published on the topic in the past.

The **third** chapter in the thesis will highlight the research methodology to be used. It will hence emphasize and explain the nature and kind of research, the sampling side of the research, the data collection approach as well as the data integration and analysis tools and techniques to be employed in the study.

The **fourth** chapter will extend and integrate the collected information from both the primary and the secondary researches and will analyse the data.

The **fifth** chapter will discuss the detailed analysis of the information collected and analyzed by contrasting and matching them .

The last **sixth** chapter will conclude the research thesis. This chapter will also present a number of useful recommendations and suggestions.

## CHAPTER 2

### LITERATURE REVIEW

There is much research now a days on the use of internet enabled mobile phone devices and computing although some researchers only look at particular aspects such as the use of mobile applications by undergraduate students of universities. Important studies can be found in many different fields such as data gathering, computing through mobile, and electronic library frameworks. Experienced clients, understudies, and IT experts were investigated and it was presumed that portable web clients are prone to address information needs as they emerge (Heimonen, 2009). In a study distributed in September 2012, mobile searches of clients from 18 to 60 years of age were inspected and it was observed that social mobile searches happened in affectionate gatherings, was roused by irregular discussions, and for the most part comprised of scanning for trivia and arranging future pursuits of the gathering (Church et al, 2012). In Spain data needs through journal studies were explored by Karen Church at Telefonica Research to record how looking conduct is vigorously affected by area and time (Church and Smyth, 2008, 2009). Teenagers around 14-18 years old were interviewed and provided with special phones that tracked usage (Rahmati and Zhong, 2012). The literature of computing through mobile is much more extensive in degree yet it is exact in information recovery. The four month merged strategy field study found distinctive utilization designs connected to different areas, and cell phone use was huge even when PCs were inside short proximity. In this field, analysts regularly utilize internal programs connected to advanced cell phones to create demanding information for quantitative examination. Evaluation was done from the basis of data collected through the Appazaar application (Bohmer et al, 2011). This application created proposals for different applications in light of their present advanced cell use. It also monitored application usage, time, and location. The creators finalized that the utilization of news applications overwhelmed in the morning, recreations and games were common during the evening, and that correspondence applications were utilized throughout the duration of the day. It did not monitor geographic location, so the results are generally applicable. In the profession of library and information



science, the literature can be sub grouped into; the requirement for libraries to offer portable mobile service, how models of library administration will have to adjust to versatile advances, and specialized contemplations in building up those portable cell phone services. While generally useful to the profession, authors often proceed under the assumption that library patrons, especially students, will use the technology if the software is created. Few question the current use by patrons in order to inform the proposed actions. Additionally, with the rapid change in technology research articles are quickly outdated, so only the most current research is considered. The literature that projects the need for library mobile services has been plentiful. Farkas (2010), Krishnan (2011) and Thomas (2012) perceive the capability of cell phones as an apparatus for libraries, both open and scholastic, yet don't address current supporter use. Seeholzer and Salem (2011) collected data from university students from Kent State University in 2009. The center gathering study inquired the needs of the members with respect to conceivable versatile library administrations, however just quickly addressed current use and proprietorship Starkweather and Stowers (2009), Wilson and McCarthy (2010) and Little (2011) also discussed the potential for mobile services in the university setting but did not survey students regarding their actual use of the technology. A survey was carried out recently in Utah State University regarding the use of mobile devices which gave results that 54 % students used it for academic purposes (Dresselhaus and Shrode, 2012). 71% percent of undergraduate students reported that they owned a cell phone. To assess the utilization of hand held gadgets to get to scholastic data, the researchers gave results in view of the students separate universities. As anyone might expect, more than half of the students in the universities of business reported utilizing advanced mobile phones for course work. The information for this research was gathered in 2010 and may be outdated (Shrode, 2012). The effect of computing through mobile on library services also has been addressed. Library benefactors' enthusiasm for getting to library inventories with handheld gadgets was reviewed (Cummings et al, 2010). They reasoned that the way in which supporters use library services through cell phones varies from PC utilization, and that portable OPAC interfaces will need to mirror these distinctions. Complete underestimation of library reference administrations is predicted by Peter (2011) unless it is upgraded to address the issues of portable clients. Quick reaction, every minute of every day accessibility, and the relinquishment of the conventional reference meeting are incorporated into his recommendations

of another model for reference administrations in a portable situation. Lippincott (2010) encourages the availability of subject matter through cell-phone devices in addition to reference services and acknowledges the fundamentals to maintain work ability when providing mobile services. Others discuss examine the potential utilization of versatile library benefits once they are created.

Customers have turned out to be exceedingly reliant on advanced mobile phones which they can utilize when they drive, unwind at home, travel abroad etc (Genova, 2010). Purchasers are seen to be subject to their advanced cells when they see them as a need and have solid affinity for consistent high utilization, being locked in and unwilling to part from them (Tian et al., 2009). Thus, purchaser's expectations for future purchase behavior will be influenced by their past experience as they are vigorously reliant on PDAs as a result of the fundamental intentions (Kuhlmeier and Knight, 2005). Suki and Suki (2007) found that heavy cellular phone clients have a more elevated amount of information, have more social support, keep up broad interpersonal systems and have contact with individuals inside the social framework as well as outside it. Peterson and Low (2011) expressed that student's browse sites, check their email and utilize long range informal communication destinations, for example, Facebook and Twitter regularly.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Research Type

This study is based on quantitative analysis with descriptive approach and based on quantifiable and numerical data will be collected. As the research is designed to study the effects of mobile phones on the life of students. The collection of information is utilized to prove the stated hypothesis and demonstrate the existence of phenomenon instead of exploring or proposing any new scenario. The results by means of using quantitative approach is to present positive approach that presents the results in forms of facts and figures.

#### 3.2 Sample Size and Sampling Technique

The sample size selected was 150 respondents . The reason for selecting 150 sample size was as many previous studies had taken sample size ranging from 100 to 200, so an intermediary sample size was selected after consulting these studies. The respondents were the undergraduate students of management sciences department Bahria University, Karachi campus. The reason for selecting only management sciences department was to better understand the impact of smart phones on the students related to my field of academic study. The sampling technique used was non-probability convenience sampling .The reason for selecting a non-probability convenience sampling technique under the said methodology was because it is easy to carry out with few rules governing how the sample should be collected.The relative cost and time required to carry out a sample are small in comparison. Non probability convenience sample helps in gathering useful data and information that would not have been possible using probability sampling techniques, which require more formal access to lists of population.

#### 3.4 Data Source

Data type of this research only involves primary source from which we obtain primary data.

**3.5 Data Collection Method**

The primary data collection method involved the use of questionnaire survey forms comprising of closed ended questions and a likert scale which is an effective survey technique. The designed questionnaire was distributed among the sample population that intends to collect the desired information for the research project so as to explore and identify the impacts of advanced cell phones on students . The questionnaire were provided to the students in order to obtain the respective information accurately. The questionnaire system that was used for this research was based on self-administered procedure however, the design of questionnaire was mainly linked for addressing the respective concerns and interests by the respondents

**3.6 Data Analysis and Tables**

The results are presented with the use of SPSS and Cronbach Alpha , Regression analysis and Pearson Correlation were used to analyse the data .Cronbach Aplha is a reliability test and was carried out to check the reliability of data collected. Regression analysis was carried out in order to test the association between dependent and independent variables and Pearson correlation was used to identify positive, negative or no linear relationship between the variables.

## CHAPTER 4

### DATA ANALYSIS

#### 4.1 Frequency Table

##### 4.1.1 Gender

**Table 4.1: Frequency distribution on the basis of gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	87	58.0	58.0	58.0
	Female	63	42.0	42.0	100.0
	Total	150	100.0	100.0	

According to the results, there were 58% male participants and 42% female participants in the study. The percentage of male participants was higher than that of female participants.

##### 4.1.2 Age Group

**Table 0.2: Frequency distribution on the basis of age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15 - 19	31	20.7	20.7	20.7
	20 -25	52	34.7	34.7	55.3
	26 - 30	49	32.7	32.7	88.0
	More than 30	18	12.0	12.0	100.0
	Total	150	100.0	100.0	

There were 20.7% respondents who were 15 to 19 years old, 34.7% were 20 to 25 years old, 32.7% were 26 to 30 years old, 12% were more than 30 years old. A majority of participants were 20 to 25 years old

**Reliability Analysis**

**Social Behavior**

**Table 4.3: Reliability Statistics for Social Behavior**

Cronbach's Alpha	N of Items
.711	6

The reliability of social behavior scale is 70%.

**Academic Performance**

**Table 4.4: Reliability Statistics for Academic Performance**

Cronbach's Alpha	N of Items
.645	2

The reliability of Academic Performance scale is 64.5%

## Time Management

**Table 4.5: Reliability Statistics of Time Management**

Cronbach's Alpha	N of Items
.875	4

The reliability of time management scale is 87.5.

### 4.1 Regression Analysis

Regression analysis was carried out in order to test the association between dependent and independent variables.

**Hypothesis 01: Time management of students is significantly affected by mobile phone usage**

**Table 4.6: Model Summary<sup>b</sup> of Time Management**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.118 <sup>a</sup>	.014	.007	4.09309

*a. Predictors: (Constant), Use*

*b. Dependent Variable: SUMTM*

According to ANOVA table, mobile phone usage is only causing 1.4% variation in the time management of students.

Table 4.7: ANOVA<sup>b</sup> table for Time management

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.092	1	35.092	2.095	.150 <sup>a</sup>
	Residual	2479.501	148	16.753		
	Total	2514.593	149			

a. Predictors: (Constant), Use

b. Dependent Variable: SUMTM

According to ANOVA Table, the value is sig. is 0.15, which is greater than 0.05. Therefore, the impact of mobile phone usage on time management is not significant.

Table 4.7: Coefficients<sup>a</sup> table for Time Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.115	.436		14.028	.000
	Mobile Phone Use and Social Behavior	-.073	.087	-.068	-.848	.398

a. Dependent Variable: SUMTM

**Hypothesis 02: Social behavior of students is significantly affected by mobile phone usage**

Table 4.8: Model Summary<sup>b</sup> for Social Behaviour

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.211 <sup>a</sup>	.045	.038	4.65059



Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.211 <sup>a</sup>	.045	.038	4.65059

a. Predictors: (Constant), Use

b. Dependent Variable: SUMSB

According to model summary, 45% variation in social behavior of students is affected by mobile phone usage.

**Table 4.9: ANOVA<sup>b</sup> table for Social Behaviour**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	149.649	1	149.649	6.919	.009 <sup>a</sup>
	Residual	3200.945	148	21.628		
	Total	3350.593	149			

a. Predictors: (Constant), Use

b. Dependent Variable: SUMSB

According to ANOVA table, the impact of mobile phone usage on social behavior of students is significant.

**Table 4.10: Coefficients<sup>a</sup> table for Social Behaviour**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.633	.687		21.293	.000
	Mobile Phone Use and Social Behavior	-.486	.185	-.211	-2.630	.009

a. Dependent Variable: SUMSB

According to coefficient table, there is a negative association between mobile phone usage and social behavior of students.

**Hypothesis 03: Academic performance of students is significantly affected by mobile phone usage**

**Table 4.11: Model Summary<sup>b</sup> for Academic Performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.191 <sup>a</sup>	.036	.030	2.26053

*a. Predictors: (Constant), Use*

*b. Dependent Variable: SUMACADEMIC*

According to model summary, 36% variation in academic performance is associated with the use of mobile phone.

**Table 4.12: ANOVA<sup>b</sup> table for Academic Performance**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	28.556	1	28.556	5.588	.019 <sup>a</sup>
Residual	756.277	148	5.110		
Total	784.833	149			

*a. Predictors: (Constant), Use*

*b. Dependent Variable: SUMACADEMIC*

The ANOVA table shows that sig. value is 0.01 which is less than 0.05; therefore, it can be agreed that the use of mobile phone is associated with academic performance of students.

Table 4.13: Coefficients<sup>a</sup> table for Academic Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.892	.334		14.643	.000
	Mobile Phone use and Academic Performance	-.212	.090	-.191	-2.364	.019

a. Dependent Variable: SUMACADEMIC

According to the coefficient table, there is negative association between mobile phone usage and academic performance of students.

#### 4.2 Pearson Correlation

Table 4.14: Pearson Correlation among hypothesis

		SUMACADEMIC	SUMTM	SUMSB	SUMUSE
Academic Performance	Pearson Correlation	-.849**	.747**	-.024	
	Sig. (2-tailed)	.000	.000	.769	
	N	150	150	150	150
Time Management	Pearson Correlation	.849**	-.829**	-.036	
	Sig. (2-tailed)	.000	.000	.661	
	N	150	150	150	150
Social Behavior	Pearson Correlation	.747**	.829**	-.025	

	Sig. (2-tailed)	.000	.000		.761
	N	150	150	150	150
Mobile Phone usage	Pearson Correlation	-.024	-.036	.025	-
	Sig. (2-tailed)	.769	.661	.761	
	N	150	150	150	150

\*\* . Correlation is significant at the 0.01 level (2-tailed).

In order to determine the relationship between Time management , Academic performance and Social behavior and the use of mobile phone, Pearson correlation analysis was used.

## CHAPTER 5

### DISCUSSION

The purpose of this study was to determine the impact of cell phone utilization on students. The topic of smart phone usage has been chosen for this study because of an increase in the ownership of mobile phones. According to Dahlstrom et al (2012), there has been an increase in the usage of mobile phones. The mobile phones are used for the purpose of entertainment and business. The usage of mobile phone has modified many aspects of social life. The usage of smart cell phone is common among students. Therefore, it is important to conduct study to determine the effects of cell phones on students.

For this research, primary data was gathered. Primary data was gathered from 150 respondents. The respondents were approached through non probability convenience sampling method. Data was analyzed with the help of SPSS software. The tests, which were conducted for data analysis, include Chronbach Alpha (Reliability Tests), Pearson Correlation and Regression.

The results of regression and correlation analysis have revealed that there is an association between education and smart phone usage by students. The increasing use of smart phone negatively affects education of students. Previous literature reviews have also supported the fact such as by Peterson and Low (2011) who expressed that student's browse sites, check their email and utilize long range informal communication destinations, for example, Facebook and Twitter regularly which distracts them from academic studies. Also Students agreed that they have started writing short messages in daily life in order to save time. This has negatively affected the writing skills of students and they tend to use these short messages during noting lectures and giving exams. According to the participants of study, they use mobile phones for various purposes including text reading, messaging, reading of related and unrelated material, calling, and lecture recording. Most of the students are engaged in activities, which are not related to their studies. As a result of these activities, students get distracted from their lecture. The

continual use of mobile phone also results in reducing the interest of students in studies. When students are not in their classroom, they use mobile phones for various purposes; such as watching movies, listening to music, social media usage, and others. The use of smart phone distracts the attention of students when they work on their assignments and projects. This has a negative impact on the results of student's academic performance.

The use of smart phones also have a negative effect on the social behavior of the students as they prefer to keep themselves updated via social networking sites while being at their homes rather than meeting up with their friends and families at social gatherings. Communication skills also decline as a result of continual use of mobile phones. It is because as a result of mobile phone usage, face-to-face communication is decreased. According to the studies of Genova (2010), Tian et al (2009), and Kuhlmeier and Knight (2005), the usage of smart phone has been increased because it provides up-to-date information and also allow users to stay connected with friends, family, members, and acquaintances from any where without being physically present. Also the security issues, associated with smart phone usage, have affected the social life of students. Students agreed that they had security issues; such as cyber bullying and unsecure web access.

Meanwhile the use of smart phone is seen to have no effect on the time management of the students. Apart from some students who claimed that use of smartphones only had a minor effect on them with the slight decrease in sleeping hours others were of the view that their time management wasnt effected by smart phone usage , according to Dimmick et al (2011) smart phone and its features have allowed people to manage time and space more effectively.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Conclusions

The aim of this study was to identify the impact of Smart mobile phone utilization on students of Bahria University enrolled in management sciences department. The study adopted a quantitative approach and primary data had been gathered. The analysis of different studies revealed that cell phone utilization has a negative impact on students in terms of their social behavior and education. In order to test hypothesis, data was gathered from 150 students. For the purpose of primary data collection, non probability convenience sampling was used. The use of non probability convenience sampling decreases time and cost. It is also easy to carry out with few rules governing how the sample should be collected.. It also helps in gathering useful data and information that would not have been possible using probability sampling techniques.

Primary data was analyzed with the help of SPSS Software. The tests, used for data analysis, included descriptive statistics, correlation, and regression. The purpose of using descriptive statistics was to define the number of male and female participants, age of participants, marital status of participants, and other demographic characteristics. Cronbach Alpha was used to measure the reliability scale. Regression analysis was conducted in order to test the association between mobile phone usage, studies, and social behavior and Pearson Correlation analysis was conducted in order to test the overall relationship between variables.

The results of regression analysis have revealed that there is an association between mobile phone usage by students and their studies. The excessive use of mobile phone by students has a negative impact on their learning. It is because the usage of mobile phone distracts students from their assignments and tasks. Moreover, students find social media and games very much attractive , which negatively affect their studies. These findings have been supported by the previous findings. According to Heimonen (2009) and Church et al, (2012), there has been an increase in the use of mobile phone in the current era. The usage of mobile phone is higher

among university students. The researchers have further explained that mobile phones are utilized for various purposes including the access of social media, Internet surfing, listening to music, downloading videos, and others. Moreover, smart phones are also used to access learning material in a convenient manner. However, only a small number of students use their phone for learning purpose. A large number of students use mobile phones in order to play games, watch movies, and other entertainment-related purpose.

The findings of primary data have confirmed that the use of mobile phone has a negative impact on the studies of students. Students are compromising their studies in order to spend a significant portion of their time on mobile phones.

## **6.2 Future Study**

As this study was limited to a specific sample size, there are numerous possibilities of conducting further studies with some changes and new areas of interests such as the impact of smart mobile phones on students of other departments with in the university, impact of mobile phones on students of other universities and their departments, impact of mobile phones on health of students and impact on society , economic conditions and many other relevant topics

## **6.3 Recommendations**

It is important to take adequate actions to reduce the negative effects of mobile phone utilization. Following are some of the recommendations for reducing the harm caused by mobile phone usage:

- It is important to create awareness among students regarding the harmful effects of mobile phone utilization. Students are often unaware of the negative impact of mobile phone usage. It is because of a lack of proper counseling on this subject matter. Both parents and teachers should provide necessary counseling to students in order to increase their awareness
- Students should not be allowed to use mobile phones in the classroom or lecture hall. The instructors should ensure that students do not possess mobile phones when attending the lecture.



- The educational institutions should encourage students to participate in social events, training sessions, conferences, seminars, and workshops, which will engage students in learning and increase their interest
- Parents should provide necessary guidance and counseling to students to make them aware of the importance of education and negative impact of mobile phone usage on studies.

**CHAPTER 7****REFERENCES**

- Aarsand, Pal Andre. 2007. "Computer and Video Games in Family Life: The Digital Divide as a Resource in Intergenerational Interactions." <http://www.bibsonomy.org/bibtex/26ed7c2ea05a85ebaf17553d84a5e020c/drea>.
- Campbell, Scott W., and Yong Jin Park. 2008. "Social Implications of Mobile Telephony: The Rise of Personal Communication Society." *Sociology Compass* 2 (2): 371–87. doi:10.1111/j.1751-9020.2007.00080.x.
- Carayannis, Elias G., Stephen C. Clark, and Dora E. Valvi. 2012. "Smartphone Affordance: Achieving Better Business Through Innovation." *Journal of the Knowledge Economy* 4 (4): 444–72. doi:10.1007/s13132-012-0091-x.
- Caronia, Letizia, and André H. Caron. 2004. "Constructing a Specific Culture: Young People's Use of the Mobile Phone as a Social Performance." *Convergence: The International Journal of Research into New Media Technologies* 10 (2): 28–61. doi:10.1177/135485650401000204.
- Chang, C.W., Wu, C.R. and Liao, C.C. 2010, "The virtual cooperation platform in enterprise and supplier cooperation models., *Cyberpsychology, Behavior, and Social Networking* 13(4):473-5. doi:10.1175/j.1858-2357
- Devitt, Kerry, and Debi Roker. 2009. "The Role of Mobile Phones in Family Communication." *Children & Society* 23 (3): 189–202. doi:10.1111/j.1099-0860.2008.00166.x.
- Drake, Frances. 2006. "Mobile Phone Masts: Protesting the Scientific Evidence." *Public Understanding of Science* 15 (4): 387–410. doi:10.1177/0963662506057246.
- Farnsworth, John, and Terry Austrin. 2010. "The Ethnography of New Media Worlds? Following the Case of Global Poker." *New Media & Society* 12 (7): 1120–36. doi:10.1177/1461444809355648.
- Jagun, Abi, Richard Heeks, and Jason Whalley. 2008. "The Impact of Mobile Telephony on Developing Country Micro-Enterprise: A Nigerian Case Study." *Information Technologies & International Development* 4 (4): pp–47.

- Lee, Sang Yup. 2014. "Examining the Factors That Influence Early Adopters' Smartphone Adoption: The Case of College Students." *Telematics and Informatics* 31 (2): 308–18. doi:10.1016/j.tele.2013.06.001.
- Levinson, Paul. 2004. *Cellphone: The Story of the World's Most Mobile Medium and How It Has Transformed Everything!* Palgrave Macmillan.
- Mekić, Ensar, and M. Kürşad Özlen. 2014. "Acceptance of Smartphones by Users in BiH through Extended Technology Acceptance Model." *И ССЛЕД*, 136.
- Mohd Suki, Norazah, and Norbayah Mohd Suki. 2013. "Dependency on Smartphones." *Jurnal Teknologi* 62 (1). doi:10.11113/jt.v62.1281.
- Nasar, Jack, Peter Hecht, and Richard Wener. 2007. "'Call If You Have Trouble': Mobile Phones and Safety among College Students." *International Journal of Urban and Regional Research* 31 (4): 863–73. doi:10.1111/j.1468-2427.2007.00759.x.
- Ravichandran, Shanthi Vaidyanathan. 2009. "Mobile Phones and Teenagers: Impact, Consequences and Concerns-Parents/caregivers Perspectives." *Unitec Institute of Technology*. <http://130.217.226.8/handle/10652/1270>.
- Sa'don, Nor Fadzleen, Halina Mohamad Dahlan, and Abdelrahman Ibrahim. 2014. "Usage of Mobile Learning in Malaysia Secondary Education: Stakeholders' View." *Journal of Information Systems Research and Innovation, JISRI* 6: 42–50.
- Shapiro, J. N., and D. A. Siegel. 2015. "Coordination and Security: How Mobile Communications Affect People." *Journal of Research* 52 (3): 312–22. doi:10.1177/0022343314559624.
- Simplice Asongu. 2015. "The Impact of Mobile Phone Penetration on African Inequality." *International Journal of Social Economics* 42 (8): 706–16. doi:10.1108/IJSE-11-2012-0228.

**CHAPTER 8**

**APPENDIX**

**8.1 Survey Questionnaire**

<b>1. Gender</b>	Male <input type="checkbox"/>	Female <input type="checkbox"/>
------------------	-------------------------------	---------------------------------

<b>2. Age Group</b>	15-19 <input type="checkbox"/>	20-25 <input type="checkbox"/>	26-30 <input type="checkbox"/>	More than 30 <input type="checkbox"/>
---------------------	--------------------------------	--------------------------------	--------------------------------	---------------------------------------

<b>3. Possession of mobile phone</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
--------------------------------------	------------------------------	-----------------------------

**4. Do you use mobile during the class?**

Yes <input type="checkbox"/>	No <input type="checkbox"/>
------------------------------	-----------------------------

**5. If you use mobile in the class, how do you use it in the class?**

Usages	Yes	No
Text Reading	<input type="checkbox"/>	<input type="checkbox"/>
Text Messaging	<input type="checkbox"/>	<input type="checkbox"/>
Reading material unrelated to the class	<input type="checkbox"/>	<input type="checkbox"/>
Reading material related to the class learning	<input type="checkbox"/>	<input type="checkbox"/>
Calling	<input type="checkbox"/>	<input type="checkbox"/>
Call Receiving	<input type="checkbox"/>	<input type="checkbox"/>
Lecture Recording	<input type="checkbox"/>	<input type="checkbox"/>

**6. Out of class for what purpose do you use mobile and how much time in a day do you give to that use?**

Usages	Yes	No	Time in Minutes
Text Reading	<input type="checkbox"/>	<input type="checkbox"/>	
Text Messaging	<input type="checkbox"/>	<input type="checkbox"/>	
Reading material unrelated to the class	<input type="checkbox"/>	<input type="checkbox"/>	
Reading material related to the class learning	<input type="checkbox"/>	<input type="checkbox"/>	
Calling Others	<input type="checkbox"/>	<input type="checkbox"/>	
Call Receiving	<input type="checkbox"/>	<input type="checkbox"/>	
Lecture Recording	<input type="checkbox"/>	<input type="checkbox"/>	
Games	<input type="checkbox"/>	<input type="checkbox"/>	
Movies and Music	<input type="checkbox"/>	<input type="checkbox"/>	
Social Media Apps	<input type="checkbox"/>	<input type="checkbox"/>	
Internet Browsing	<input type="checkbox"/>	<input type="checkbox"/>	

7. What is your CGPA? \_\_\_\_\_

		SA	A	N	D	SD
8.	I have picked the habit of writing short messages in my daily life other than mobile.					
9.	I think my communication skills are declining.					
10.	I feel distracted by mobile phone while preparing for exams.					
11.	I have a habit of using phones during job or work/task assignment.					
12.	I don't have any privacy related issues while using mobiles.					
13.	I prefer to chat with my friends.					
14.	I feel my availability in social events have declined.					
15.	I feel that my life has become overly busy.					
16.	I think I have security issue. e.g. Cyber-bullying, Unsecure web browsing.					

17.	I use mobile phones till late night.					
18.	My sleep time have been reduced to below 6 hours.					
19.	I feel sleepy during day time.					