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IMPACT OF CELL PHONE USAGE ON ACADEMIC PERFORMANCE, SOCIAL LIFE AND PHYSICAL HEALTH OF STUDENTS: A CASE STUDY OF PUNJAB

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Abstract

The present was "The Impact of Cell Phone Usage on Academic Performance, Social Life and Physical Health of Students: A Case Study of Punjab" The present was "The Impact of Cell Phone Usage on Academic Performance, Social Life and Physical Health of Students: A Case Study of Punjab" Mobile phones are the most necessary medium of communication for adolescents. It has virtually affected the society's accessibility, security, safety and coordination of business and social activities and has hence become a part of culture of the whole world. Traditional agents of socialization are families and universities. With the expansion of educational system as a result of the need for highly skilled workers lead to the school system taking increasing larger responsibilities in socialization. Surprisingly, research on the influence of mobile phone on our schools today has not been given much attention. There is the conflicting priority of young people, parents and teachers in relation to the mobile phone device, with teachers more concerned about issues such as discipline in the classroom and parents worried about means of contacting their children at every point in time. Students' cell phone activities are reported as playing games, using social media, communication, watching videos and movies and the most important was academic purpose activities on regular basis. The pattern length of 259 students was selected from the population of university students of Punjab in above mentioned special universities. The sample size changed into composed of 179 male university students and 80 girl university students. University students need to be re-orientated on the need to set their priorities right. This drive towards reorientation must be championed by the university management in conjunction with the parents/guardians of the students. While the usage of internet enabled phones by students cannot be outlawed, they need to be continuously informed on the positive and negative effects of their usage and of the problems deriving from the over-dependency and unregulated use of their mobile phones.

***Keywords*:** *Cell Phone Usage, Students, Academic Performance, Physical Health. Social Life*

Introduction:

Globalization has changed our lives and one of the routes in which it is changing our lives, ordinary, is the way we convey; because of progressions in Information and Communication Technologies (ICT). One of the ICT's which is seeing fast progression is Mobile Phone. Cell phone is well known since the late 1990s (Vavoula et al., 2006) and today, with 7 billion versatile associations worldwide and one of a kind portable memberships of more than 3.5

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billion (Twum, 2011), they are exceptionally prevalent with youngsters and are ordinary in our instructive establishments. These telephones are not any more simply voice specialized apparatuses.Capacities like short message benefit (SMS) or messaging have turned out to be worldwide wonder. Relatively few of us keep wallet photographs of friends and family. Presently we spare photographs in our cell phones, and view them on a touch of the screen. Information Communication Technology (ICT) as per (Unagha, 2006) blended PC and media transmission. It is uneasy with the innovation utilized as a part of procuring, taking care of, and handling, putting away and spread of data. Along these lines, ICT alludes to any innovation utilized as a part of making, framing and spreading data through computerized gadgets. Liang et al., (2013) watched that ICT is exceptionally imaginative instrument that can perform such operations as getting, stowing and figuring, inspecting, passing on and repossessing data introduced to them and taking into account balanced or aggregate correspondence among individuals. The positive connection between scholastic order of understudies and the utilization of ICT has been the focal concentration of broad writing amid the most recent two decades. Few of them bolster understudies with their knowledge by enhancing the correspondence between the teachers and the understudies. (Valasidou and Bousiou, 2008). Yearly report of PTA, (PTA, 2014) demonstrates that exclusive in Pakistan, there are 3 million individuals who are utilizing web benefits in the nation. This fast development is because of the far reaching circle of Information Communication and Technology (ICT). These developing patterns are seen particularly in youth. Presently ICT is spreading over the training part and additionally it made a vacuum in the modern division. In the ebb and flow decade, there are much polite contention and investigates upon the allocation of ICT in the guideline portion as it has been creating as basic bit of our each hover of life. Cell phones have turned into a practically fundamental piece of day by day life since their fast development in prominence in the late 1990s, Ling, (2004). An across the country study led in 2010 demonstrates that cell phones are the most essential medium of correspondence for teenagers. It has for all intents and purposes influenced the general public's availability, security, wellbeing and coordination of business and social exercises and has subsequently turned into a piece of culture of the entire world. Ling, (2004), states that customary specialists of socialization are families and schools. With the development of instructive

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framework accordingly of the requirement for exceedingly gifted specialists prompt the educational system taking expanding bigger obligations in socialization.

Literature Review:

Adeyemi, (2020) experienced about the technology usage especially cell phone, its impacts and the relationship between both the technological gadgets and students regarding their educational achievements through technological devices usage like cell phone, tablets, personal computer and laptops. In this paper a self-made questionnaire was developed in consultation with two experts in the medical profession, each of whom authenticated the objectives-based content and questions of the measure. It is concluded that Technology usage might produce comparatively more significant increases in academic achievement than would non-usage. Further research is warranted to examine its effects."

Rabiu et al., (2016) had been added a journal on the students at secondary level and their pattern of usage of cell phone for academic purpose. It seems that mobile phone is common access for every student they come to university along their mobile phones of different models and different pins they have set on their phones. The main objective of this research was to see the influence of cell phone on their academic performance and their behaviour toward parents and teachers. The conclusion of this study is mobile phone usage significantly influence academic performance among male and female senior secondary school students.

Sung, (2015) worked on the usage of computer has been less by new devices named cell phones. It have diverse the teaching methods and adoption of cell phone has been increased day by day. By this teaching and learning capacity has been enhanced by its easy access at any time at any place. Different software's may help in out to the students in many subject. It is concluded that importance of teachers professional development during their adoption of and adaptation to mobile-device based teaching the investigations into increasing the education of teachers regarding the use of mobile devices have been extremely limited.

Rodrigues et al., (2015) worked on the easy access to the doctor at any time for help by making a call. This may helpful for the cell phone owners to discuss any time and consult with

doctor. Improvement on patient lives, especially in elderly, disabled, and chronically ill. It is concluded that m-Health services and applications has already a very important and determinant role in restructuring the old healthcare services and systems that still based on the physical relationship between patient and physician.

Li et al., (2015) talked about the well-being of the individuals with an external locus of control, in comparison to individuals with an internal locus of control, have less control over their cell phone use i.e., more likely to use at bedtime; more likely to use in class and while studying and are consequently more vulnerable to the negative outcomes associated with excessive cell phone use i.e., poor sleep quality, reduced academic performance, and reduced subjective well-being.

Roberts & Rees, (2014) explains about the activity types and the addiction of cellphone among young girls and boys which are university going. Most of them relay on their cell phone too much. Addiction in the senses of negativity has been used over here. Study results suggest that certain activities performed on one's cell-phone are more likely to lead to dependence than others and that these addictive activities vary across gender. Additionally, time spent on a particular activity does not necessarily signal the activity's addictive potential.

Keikhosrokiani et al., (2013) researched on the usage of cell phone and its role in society. It has been affected the daily life of a common man of a society. Everyone is using this for daily routine work like business dealing, conversations, messaging and internet use also. Now a days it has been changed the life in a totally new scenario like our previous norms and values and most importantly our behaviour. Cell phone are changing the social life patterns, technological access platforms, and cultural values. It is concluded that Smartphone can certainly be smart if the vendors, society and technologists understand their responsibility towards usage of these devices smartly in order to get more benefit in business, education, health and social life.

Göksu & Atici, (2013) worked on the mobile phone usage toward learning and to keep someone up-to-date regarding today's world information is so necessary. Cell phone helps out to suggest and access the information to an individual. Therefore, mobile devices which are sometimes criticized as one of the learning tools and which are developing in extend of size and features have recently been used intensively and they have increased the effectiveness of

learning environments. It is concluded that these kinds of learning have supported learning, increased the interaction and contributed to the persistency in learning; however, it has also been concluded that it is on its own, never adequate for learning.

Abeshu & Geleta, (2015) researched on the cell phone usage and its health risks on an individual. These risks range from self-reported problems such as headache, difficulties in concentration, dizziness, depressive symptoms, sleep disturbances, to radiation and oxidative stress, effect on DNA strands, effect on male reproductive system, effect on membrane structure and function, and carcinogenesis. It is concluded that Mobile phones emit radiations between 900 to 1800 MHz. Since their introduction in late 1990s, about 6.8 billion people worldwide are currently using mobile phones. Through time speculation and concern of possible health risks of use of mobile phones increased.

Klasnja et al., (2012) mapped the areas of mobile phone toward the health interventions. He talked about that there is a need to see the productive usage of cell phone in health sector for treating many decease there are interventions of diabetes and effectiveness was also measured through cell phone. It is concluded that the vast majority of phone-based interventions we identified for this review focus on only three areas: chronic disease management, supporting health behavior change, and monitoring of symptoms and critical events. Although all three areas are extremely important, other aspects of health management could benefit from mobile phone-based solutions key among them, we believe, is personal health information management.

Tsai et al., (2009) explains about depression among young people or youth by the use of cell phone. Almost every young member of society has a personal cell phone and use it according to his or her taste by playing games, texting or calls making. Some of them fell happy to take some pictures and to access to the internet. By all these usage it may cause the physiological and psychological disease. It is concluded that would benefit from an audio enhancement enabling listening and speaking practice under the teacher's guidance. Responding to students' request for better using the class forum for discussion, the next version of this mobile learning system needs to include a broader spectrum of distance learning features, such as supporting students' access to the forum messages with mobile devices.

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Hegarty et al., (2009) worked on the psychological problem like loneliness regarding social contact. He says that social contacts matters a lot to the youngsters but if we classified the quality vs/- quantity it may be too much less and an individual may feel the loneliness in his or her social contacts scenario. It was concluded that revealing why lonely and anxious individuals differ in their preferences for texting and talking on their cell phones, the present study points towards the hyper personal possibilities of new mobile communications technologies.

Johnson, (2007) researched on the prohibition of cell phone in schools of America. There were too much problems faced by the school administration on the regulation usage of cell phone at schools in working or learning hours. But there is most shocking thing is that parents were promoting the cell phone usage among their children for social security purposes. The battle of the cell phone has been waged for the past decade. Cell phones are going to continue to present teachers with many problems; and with the occasional teachable moment.

Thornton & Houser, (2005) added about the English learning in the education sector in japan may cause the enhancement of cell phone usage. Because the learning of an international language may be difficult for understanding they may take help from the apps of cell phone to practice the English it may more effective for them. It was concluded that most of them think about that receiving information about their classes via mobile phones is an important potential use. When actually using educational materials designed for mobile phones, students evaluated them positively, and test results showed that they were able to learn via this medium.

Campbell, (2005) worked on the mobile phone and how it effects the all over a person's social life and personal life. This study was concluded that mobile phone has impacted on young people's peer groups enabling a truly networked society. It has also impacted on the evolving relationships within the family; especially by the increased negotiating power the mobile phone gives to young people in regard to curfews and safety issues.

RESEARCH METHODOLOGY

The motive of this quantitative examine became to decide the effect of the smart phone usage upon the academic overall performance of the students of Public and personal sector Universities of Punjab, Pakistan. The study population consists of Bahauddin Zakariya

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University Multan, Air University, Institute of Southern Punjab, national university of commercial enterprise management and Economics and university of education. The sampling strategy for this examine became convenient sampling. Convenient sampling is non-probability sampling approach wherein sampled population is based totally on "convenient" sources of data for researchers and does now not involve recognized nonzero probabilities (Lavrakas et al., 2007). The pattern length of 259 students was selected from the population of university students of Punjab in above mentioned special universities. The sample size changed into composed of 179 male university students and 80 girl university students. Statistics analysis through Statistical package for Social Sciences (SPSS 20. 00) in various steps has been performed. The impact of cell phone upon university students' overall performance.

RESULTS AND DISCUSSIONS:

Data analysis was done by use of SPSS (Version 20.0) in two sections. These sections were separated according to gender grouping of student i.e. male students and female students. Averages and standard deviations were calculated section wise and t-test was also conducted section wise to find out the results in each group of program. The reliability test for measurement of academic performance was also revealed the consistent results with the Cronbach's Alpha value of 0.622. It is displayed as below:

Reliability Statistics of Academic performance

Cronbach's Alpha	N of Items
.622	5

Impact on Academic performance

Explanations	gender (M/F)	N	Mean	Std. Deviation	T - Test
How often does the use of Mobile Phone in class interfere your learning?	male	179	2.3296	1.16492	2.355
	female	80	1.9500	1.27190	2.277
How often does the use of Mobile Phone in class assist your learning?	male	179	2.4860	1.25133	-.082
	female	80	2.5000	1.29263	-.081
How often do the calls/messages received just before class impact on your ability to concentrate?	male	179	2.2682	1.08392	-.964
	female	80	2.4125	1.17671	-.934

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How often does the use of Mobile Phone during your study time distract you?	male	179	2.8101	1.32720	-.988
	female	80	2.9875	1.35473	-.980
How often does the use of Mobile Phone during your study time assist you in learning?	male	179	2.9385	1.22778	-2.023
	female	80	3.2875	1.39795	-1.925

Results and table results depicts that male and female are agreeing and neutral with the statements.

Reliability Statistics effects of mobile phone on academic performance

Cronbach's Alpha	N of Items
.670	6

Positive effects of mobile phone on academic performance

Explanation	gender (F.M)	N	Mean	Std. Deviation	T – Test
I can easily contact the teachers for study purposes	male	179	3.7207	1.18044	.950
	female	80	3.5625	1.35799	.901
I can easily contact classmates to get help in studies	male	179	4.2346	.98342	1.890
	female	80	3.9750	1.10207	1.810
My academic performance has been increased due to mobile technology	male	179	3.5531	1.28572	-1.746
	female	80	3.8375	1.02431	-1.903
The Mobile Phone has helped to improve the level of the quality of education	male	179	3.8436	1.08519	.909
	female	80	3.7000	1.35385	.836
The teacher uses mobile phone in the class room	male	179	2.9218	1.32161	-2.327
	female	80	3.3500	1.46780	-2.236
Students use dictionary/thesaurus/calculator of mobile phone in classes	male	179	3.6704	1.10044	.592
	female	80	3.5750	1.39416	.541

Results and table depicts that male and female are disagreeing with all the statements.

Reliability Statistics effects of mobile phone on academic performance

Cronbach's Alpha	N of Items
.671	10

Negative effects of mobile phone on academic performance

Explanation	gender (F.M)	N	Mean	Std. Deviation	T – Test
I keep my mobile phone on and the ring tone	male	179	2.9441	1.49426	2.625

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disturbs the study	female	80	2.4125	1.53189	2.600
I purchased the mobile phone without the permission of the parents	male	179	2.3352	1.36548	2.281
	female	80	1.9250	1.27065	2.345
I send missed calls to class fellows to disturb the study	male	179	2.0838	1.44125	-.151
	female	80	2.1125	1.35005	-.155
I waste my time sending/writing SMS during class work	male	179	2.2291	1.34417	-1.490
	female	80	2.5000	1.36873	-1.480
The Mobile Phone has put negative impact on students moral values	male	179	2.9497	1.31659	-.002
	female	80	2.9500	1.41332	-.002
The mobile phone is a waste of time for students	male	179	2.7877	1.37378	-.068
	female	80	2.8000	1.27686	-.070
The students use mobile phone in examination hall as a source ofunfair means	male	179	2.4749	1.32952	.625
	female	80	2.3625	1.35239	.621
Students tease the fellow mates by sending missed calls through unknown members	male	179	3.0391	1.18683	2.731
	female	80	2.5750	1.42113	2.550
Too much time consumption upon mobile phones creates disturbance in study.	male	179	3.4860	1.25581	1.994
	female	80	3.1375	1.39387	1.916
Mobile phone is responsible for my low academic performance	male	179	3.0950	1.27064	5.293
	female	80	2.2000	1.22629	5.366

This table and results shows that male and female are agreeing and neutral with all the statements.

Reliability Statistic of Impact of cell phone on social life

Cronbach's Alpha	N of Items
.744	27

Impact of cell phone on social life

Explanation	gender (M/F)	N	Mean	Std. Deviation	Std. Error Mean	T–Test
I can never spend enough time on my mobile phone	Male	179	2.5866	1.26182	.09431	.140
	Female	80	2.5625	1.32974	.14867	.137
I have used my mobile phone to make myself feel better when I was feeling down	Male	179	3.5084	1.14347	.08547	3.066
	Female	80	3.0125	1.32640	.14830	2.897
My friends and family complain about my use of the mobile phone	Male	179	2.7542	1.19264	.08914	2.325
	Female	80	2.3500	1.49345	.16697	2.135
I find myself occupied on my mobile phone	Male	179	2.9497	1.35445	.10124	2.152

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when I should be doing other things, and it causes problems	Female	80	2.5500	1.43994	.16099	2.102
The time I spend on the mobile phone has increased over the last 12 months	Male	179	2.8212	1.31174	.09804	4.950
	Female	80	2.0125	.96119	.10746	5.559
All my friends own a mobile phone	Male	179	2.4972	1.31275	.09812	2.847
	Female	80	2.0125	1.15280	.12889	2.992
Sometimes, when I am on the mobile phone and I am doing other things, I get carried away with the conversation and I don't pay attention to what I am doing	Male	179	2.7933	1.27057	.09497	.323
	Female	80	2.7375	1.31922	.14749	.318
I have tried to hide from others how much time I spend on my mobile phone	Male	179	2.7430	1.22286	.09140	2.741
	Female	80	2.2750	1.36850	.15300	2.626
I lose sleep due to the time I spend on my mobile phone	Male	179	2.7765	1.42817	.10675	.612
	Female	80	2.6625	1.28224	.14336	.638
I have been in trouble because my mobile phone has gone off during a meeting, lecture, or in a theatre	Male	179	2.6927	1.39844	.10452	1.408
	Female	80	2.4250	1.44761	.16185	1.390
I feel anxious if I have not checked for messages or switched on my mobile phone for some time	Male	179	3.0112	1.24065	.09273	1.560
	Female	80	2.7375	1.43856	.16084	1.474
I have used my mobile phone to talk to others when I was feeling isolated	Male	179	2.7709	1.24433	.09301	-.925
	Female	80	2.9375	1.52899	.17095	-.856
I have frequent dreams about the mobile phone	Male	179	3.5922	1.22068	.09124	-.736
	Female	80	3.7125	1.20331	.13453	-.740
If I do not have a mobile phone, my friends would find it hard to get in touch with me	Male	179	2.9330	1.25240	.09361	-.163
	Female	80	2.9625	1.53807	.17196	-.151
I have been told that I spend too much time on my mobile phone	Male	179	3.3464	4.50501	.33672	1.323
	Female	80	2.6625	1.52568	.17058	1.812
I feel lost without my mobile phone	Male	179	3.0279	1.37567	.10282	.904
	Female	80	2.8625	1.32878	.14856	.916
My productivity has decreased as a direct result of the time I spend on the mobile phone	Male	179	2.9665	1.24476	.09304	.238
	Female	80	2.9250	1.40321	.15688	.227
My friends do not like it when my mobile phone is switched off	Male	179	2.7039	1.36016	.10166	-1.326
	Female	80	2.9500	1.42225	.15901	-1.304
I have attempted to spend less time on my mobile phone but am unable to	Male	179	3.0838	1.20333	.08994	.340
	Female	80	3.0250	1.45806	.16302	.316

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The results shows that male and female are almost neutral and agreeing with the statement but they strongly disagree about one statement that their friend didn't like their cell phone using behaviour. It shows that youth addictions toward mobile phone adoption.

Reliability Statistics of cell phone on Physical Health

Cronbach's Alpha	N of Items
.687	12

According to the findings of current study, it is very clear that Cell phone has negative impact upon the physical health of students. They are feeling all syndromes stated Ellahi et al., (2011) after using cell phones. The male students are facing more severe problems as compare to female students. It is may be due to the excessive using cell of male students while others are more familiar with the use of cell and they have become used to these problems. It has proved the acceptance of our third assume that Cell phone has negative impact upon physical health of students.

Impact on Physical Health

Explanation	gender (M/F.M)	N	Mean	Std. Deviation	Std. Error Mean	T – Test
I have headache problem by cell phone usage	male	179	2.5754	1.47208	.11003	-.254
	female	80	2.6250	1.40861	.15749	-.258
I have migraine problem	male	179	2.2291	1.28869	.09632	-.912
	female	80	2.3875	1.29745	.14506	-.910
I've difficulties in concentration	male	179	2.8827	1.37501	.10277	.941
	female	80	2.7125	1.27482	.14253	.968
I feel I've memory problem	male	179	2.6201	1.34534	.10056	-.874
	female	80	2.7750	1.25259	.14004	-.898
I have depressive symptoms	male	179	3.0391	5.58023	.41709	.121
	female	80	2.9625	1.45344	.16250	.171
I have sleeping disorder regarding per day cell phone use	male	179	2.5978	1.34715	.10069	-2.036
	female	80	2.9625	1.29697	.14501	-2.066
I feel lazy and like to play games on cell phone only	male	179	2.8101	1.40533	.10504	-.144
	female	80	2.8375	1.45344	.16250	-.142
I have eyesight problem when use cell phone	male	179	2.8547	1.33708	.09994	-1.260
	female	80	3.0875	1.45127	.16226	-1.221
I feel muscle fatigue	male	179	2.6480	1.36330	.10190	-1.950
	female	80	3.0000	1.29263	.14452	-1.990
I feel neck pain when use cell phone continuously	male	179	2.9385	1.34983	.10089	-.763
	female	80	3.0750	1.28058	.14317	-.779

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I feel finger tingling problem	male	179	2.7654	1.36601	.10210	-.051
	female	80	2.7750	1.51762	.16967	-.049
I feel hearing problem after phone use by listening songs	male	179	2.9330	1.47487	.11024	.851
	female	80	2.7625	1.51986	.16993	.842

Results and table depicts that male and female students did not disagree with the statements they were agree and neutral.

Conclusion

This study is centered around Impact of cell phone usage on academic performance, social life and physical health of students. The intent of this quantitative study was to determine the impact of cell phone usage upon the students' performance by measuring their physical health, their class performance and their social and routine life in the universities of Punjab, Pakistan. In this study, the test was based on whether or not cell phone usage, the independent variable, had an impact on student performance that is based upon academic performance, physical health and social life, the dependent variables. To investigate the student's performance the dependent variables are further categorized in different dimensions such as: the physical health will be measured in terms of musculoskeletal disorders, vision syndromes and carpal tunnel syndromes (i.e.: tingling of hands and fingers, pain in wrist etc.), the academic performance will be measured, their time spent on cell phone in different activities and their usage of cell phones during 24 hours and the social life will be measured in terms of social relationships of students with their friends and family members. This study could lead to a positive social change in educational sector of Pakistan by increasing the level of awareness of the positive usage of cell phones.

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