



“A STUDY TO ASSESS THE IMPACT OF SMARTPHONES ON PHYSICAL WELLBEING AMONG ADOLESCENTS IN SELECTED SCHOOL AT BHILAI”.

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ABSTRACT

Impact of smart phone is a rapidly growing worldwide problem. The problem of Impact of smart phone of poses a significant threat to the impact of physical wellbeing. Almost every country in the world is affected from the impact of smart phone. Impact of smart phone use leads to problem like physical wellbeing. A study is conducted, “A study to assess the impact of smartphones on physical, wellbeing among adolescents in selected school at Bhilai”. The objective of the study was to assess the impact of smartphone on physical wellbeing among adolescents, to find out association between the impact of smartphones with selected socio- demographic variable, to create awareness among adolescents regarding impact of smartphone. The study was undertaken with 60 sample.

Key words: Impact, Smartphone, Physical Wellbeing, Adolescents.

INTRODUCTION

The smartphones, being a very new invention of humanity, became an inherent part of human's life. The smartphone combines different sophisticated features. It allows users to keep pictures, memories, personal information, correspondence, health and financial data in one place. Smartphones also became an integral part of modern telecommunications facilities. In some regions of the world, they are the most reliable or only available means of communication. The phones allow people to maintain continuous communication without interruption of their movements and distances.

Mobile phone is also called cell phone, cellular phone and a hand phone. It is an electronic device that can make and receive telephone calls over a radio link while moving around a wide geographic area. In addition to telephony, modern mobile phones also support a wide variety of other services such as text messaging, email, internet access, short-range wireless communications, business applications, gaming and photography, computing capabilities, etc.

The first hand-held mobile phone was demonstrated by John f. Michel & Dr. Martin Cooper of Motorola in 1973, weighing around 2.2 pounds (1 kg). In 1983, the DynaTAC 8000x was the first to be commercially available. From 1990-2011, worldwide mobile phone subscription grew from 12.4 million to over 6 billion, penetrating about 87% of the global population and reaching the bottom of the economic pyramid.

Mobile phones and message services from them have become and integrated aspects of society. Mobile phones most likely have become a primary means of communication. Its highest level of use is among adolescents, younger adults, socioeconomically disadvantaged populations, less educated young adults. A high level of mobile phone use is associated with lower levels of self-rated health, higher body mass index (BMI), and engaging in health-compromising behaviours. Mobile phone usage and short message service (SMS) presents a prime delivery channel for health behaviour change interventions because it has high penetration in populations of lower socio-demographic position and populations with poorer health.

A world-wide popularization of smartphones and a little knowledge about their side effects triggered the author to start research on effects of smartphones on human health and life. Merriam-Webster dictionary defines the smartphone as “a cell phone that includes additional software functions (as e-mail or an Internet browser)”. In this research, the author implies the handheld devices that have cellphone future.

Many research shows the effect of electromagnetic waves on human brains; effect of handheld device usage on human's upper extremities, back, and neck; effect of the smartphone on drivers; advantages and disadvantages of using smartphones; solutions how to mitigate effect of mobile devices on human health and life.

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NEED FOR THE STUDY

Mobile phones have grown at an unprecedented rate in the Indian subcontinent in the past few years. The Telecom and Regulatory Authority of India (TRAI, 2008-09) 2 reported that over the last year, cell phone subscriptions have grown almost 50 % from 261 million to 506 million. Android mobile phones came to India in the mid-2009, when the Indian government liberalized the economy and allowed Western companies to launch their products in the Indian market. Initially due to high costs, mobile subscriptions were very few and the service was mainly adopted by business executives and professionals.

Mobile phones use electromagnetic radiation in the microwave range, which may be believed harmful to human health. On 31st May 2011, world health organization (WHO) confirmed that mobile phone use may represent a long-term health risk, classifying mobile phone radiation as a “carcinogenic hazard” and “possibly carcinogenic to humans” after a team of scientist reviewed peer-review studies on cell phone safety.

Study report on mobile phone use showed a 40% increased risk for gliomas (brain cancer) in the highest category of heavy users i.e., 30 minutes per day over a 10 year period. Recent studies have found an association between mobile phone use and certain kinds of brain and salivary gland tumors. 11 studies from peer-reviewed journals concluded that cell phone usage for at least 10 years “approximately doubles the risk of being diagnosed with a brain tumor on the same side of the head as that preferred for mobile phone use.” Study on mice suggested that Android mobile phone use during pregnancy may likely result in lasting mental health problems for offspring that resemble the effects of attention deficit hyperactivity disorder (ADHD).

PROBLEM STATEMENT:

“A Study To Assess The Impact Of Smartphones On Physical, Psychosocial And Family Wellbeing Among Adolescents In Selected School At Bhilai”.

OBJECTIVES OF THE STUDY:

1. To assess the impact of smartphone on physical wellbeing among adolescents.
2. To find out association between the impact of smartphones with selected socio-demographic variables.
3. To create awareness among adolescents regarding impact of smartphone usage by using information booklet.

HYPOTHESIS

H₁: there will be significant impact of smartphones on physical wellbeing among adolescents

H₂: there will be significant association between the impacts of mobile phones with selected socio-demographical variables.

METHODOLOGY

RESEARCH APPROACH: -

In present study evaluative approach is used to assess the impact of smartphones on physical, psychosocial and family wellbeing among adolescents in selected school at Bhilai.

RESEARCH DESIGN

Research designed helps the researcher in selection of subject, identification of variables, and their manipulation and control. The research design for the study is descriptive research design.

POPULATION OF THE STUDY

A total category of persons or object that meets the criteria for study established by the researcher, any of person, object or measurements having an observable characteristic in common. The population for the present study is adolescent Students.

TARGET POPULATION: -

“The target population refers to the entire group of people or cases about which the researcher would like to draw conclusion or make a generalization. In the present study, the target population is all adolescent students of English Medium School.

ACCESSIBLE POPULATION: -

In this study the accessible population is the adolescent students studying in English medium school at Bhilai.

VARIABLES:

In the present study, the variable for study is research variables.

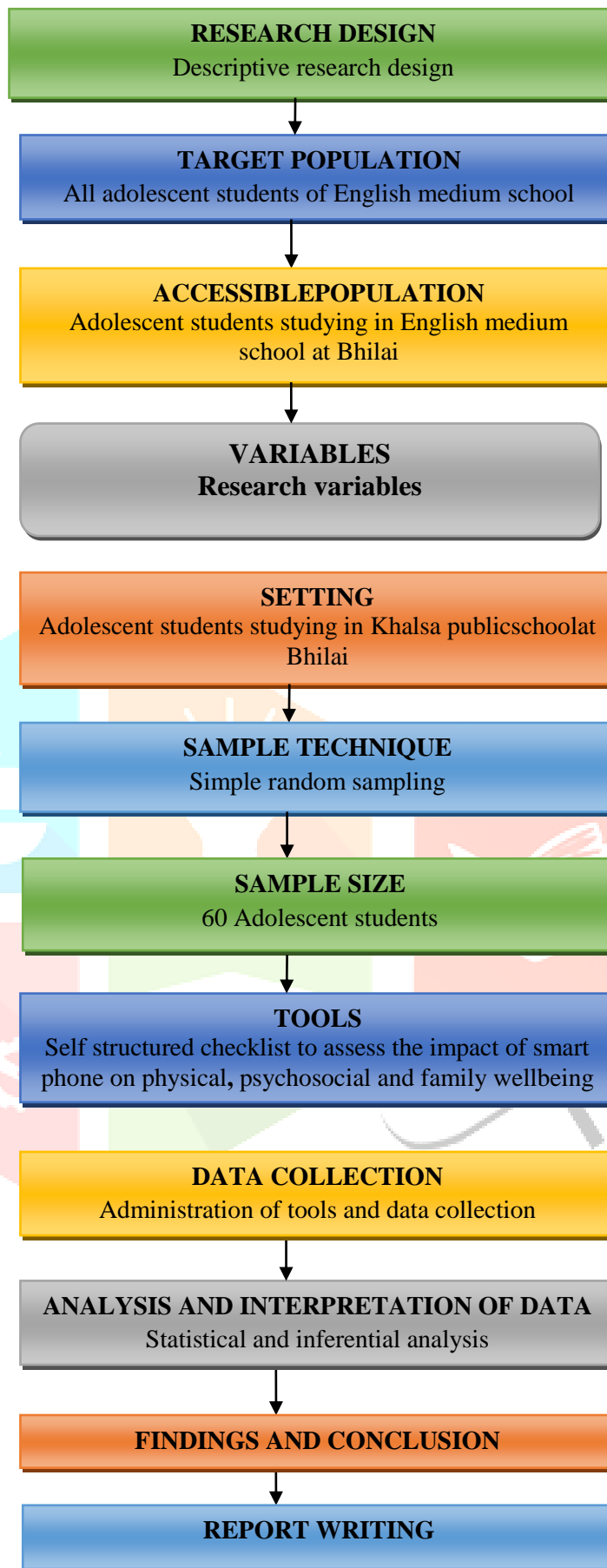
SAMPLE AND SAMPLING TECHNIQUES:

A sample is a small portion of the population selected to participate in the research study and the member of the sample are study subjects. The sample of the population for the present study is adolescents Students from selected school at Bhilai, (C.G.).

Sampling technique is a method or process devised for obtaining a sample, which will be a representation of its population. The process of sampling makes it possible to draw valid inferences or generation on the basis of careful observation of variables within a relatively small portion (sample) of the population. In the present study simple random technique is used.

SAMPLE SIZE:

According to H. Janet (2008), “a sample is a carefully selected subject of the population that represents the composition of that population.” In the present study sample size consists of 60 adolescents Students from Khalsa public school at Durg, (C.G.).

**SCHEMATIC REPRESENTATION OF RESEARCH DESIGN**

RESULTS

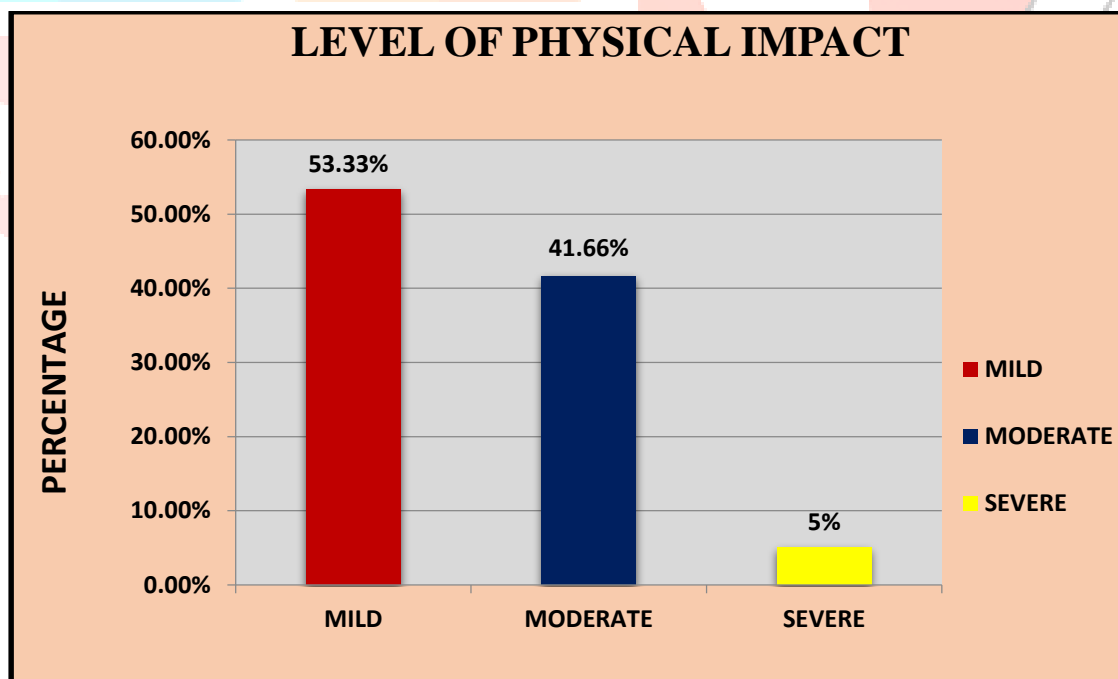
Data collected were tabulated, analysed and interpreted. Column diagram showing the analysis of impact of smartphone on physical wellbeing among adolescents. Table 1.1 (figure-1.1) represents that 53.33% of adolescent are having mild impact, 41.66% of them having moderate impact and 5% of them having severe impact regarding physical impact of smartphone.

SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

Analysis of impact of smartphone on physical wellbeing among adolescents.

N=60

S.no	Level of physical impact	Frequency (f)	Percentage (%)
1	MILD	32	53.33
2	MODERATE	25	41.66
	SEVERE	3	5
	TOTAL	60	100



**ASSOCIATION BETWEEN THE IMPACT OF SMARTPHONES WITH SELECTED
SOCIO DEMOGRAPHIC VARIABLES.**

TABLE 1.2

Chi-square analysis to find out association between the impacts of smartphones on physical wellbeing with selected socio demographic variables.

N=60

Socio demographic variables		Impact of smartphone on physical wellbeing						Total	Chi-square value
		MILD		MODERATE		SEVERE			P value
		(N)	%	(N)	%	(N)	%		
Age	15yr	2	100	0	0	0	0	2(100%)	DF=6 CHI=11.04 P>0.05 NS
	16yr	8	44.44	10	55.55	0	0	18(100%)	
	17yr	20	66.66	8	26.66	2	6.66	30(100%)	
	18yr	2	20	7	70	1	10	10(100%)	
Gender	Male	24	60	14	35	2	5	40(100%)	DF=2 CHI=2.26 P>0.05 NS
	Female	8	40	11	55	1	5	20(100%)	
Education -nal status	11 th class	17	56.66	11	36.66	2	6.66	30(100%)	DF=2 CHI=0.8 P>0.05NS
	12 th class	15	50	14	46.66	1	3.33	30(100%)	
Education of father	Illiterate	0	0	2	100	0	0	2(100%)	DF=2 CHI=2.86 P>0.05NS
	Literate	32	55.17	23	39.65	3	5.17	58(100%)	
Education of mother	Illiterate	3	42.85	4	57.14	0	0	7(100%)	DF=2 CHI=0.98
	Literate	29	54.71	21	39.62	3	5.66	53(100%)	

									P>0.05NS
Occupation of father	Farmer	1	33.33	2	66.66	0	0	3(100%)	DF=6 CHI=6.05 P>0.05NS
	Private job	10	50	10	50	0	0	20(100%)	
	Government job	8	61.53	5	38.46	0	0	13(100%)	
	Business	13	54.16	8	33.33	3	12.5	24(100%)	
Occupation of mother	Housewife	26	52	21	42	3	6	50(100%)	DF=6 CHI=1.97 P>0.05NS
	Private job	3	75	1	25	0	0	4(100%)	
	Government job	1	33.33	2	66.66	0	0	3(100%)	
	Business	2	66.66	1	33.33	0	0	3(100%)	
Family monthly income	Rs:10,000-15,000	13	54.16	10	41.66	1	4.16	24(100%)	DF=6 CHI=7.703 P>0.05 NS
	Rs:15,000-20,000	5	35.71	8	57.14	1	7.14	14(100%)	
	Rs:20,000-25,000	3	37.5	5	62.5	0	0	8(100%)	
	Above Rs.25,000	11	78.57	2	14.28	1	7.14	14(100%)	
Number of cell phones you have	1pcs.	23	53.48	18	41.86	2	4.65	43(100%)	DF=6 CHI=15.75 P<0.02 S
	2pcs.	3	30	7	70	0	0	10(100%)	
	3pcs.	1	50	0	0	1	50	2(100%)	
	More than 3	5	100	0	0	0	0	5(100%)	
Hours spent with your	Less than 1 hrs.	13	59.09	8	36.36	1	4.54	22(100%)	DF=6 CHI=9.61
	1-2 hrs.	14	66.66	5	23.80	2	9.52	21(100%)	

smartphone per day	2-4 hrs.	3	27.27	8	80	0	0	10(100%)	P>0.05 NS
	More than 4 hrs.	2	33.33	4	57.14	0	0	7(100%)	

Significant at P<0.05 highly significant at P<0.01 very high significant at P<0.00

Table 1.2 shows that association between the impact of smartphones on physical wellbeing with selected socio demographic variables. It is calculated by using pearson chi - square test. I found association between numbers of cell phones is significant.

CONCLUSION:-

On the basis of the findings of the study, the following conclusion was drawn.

H₁: there will be significant impact of smartphones on physical, wellbeing among adolescents.

Table 1.1(figure-1.1) represents that 53.33% of adolescent are having mild impact, 41.66% of them having moderate impact and 5% of them having severe impact regarding physical impact of smartphone.

BIBLIOGRAPHY

- 1) Samkange-Zeeb F and Blettner M. Emerging Health Threats. 2009.
- 2) Warwick B. The social impact of mobile phones. Consumer Watch. Available from <http://ezinearticles.com>
- 3) Dutta P. What are the negative effects of cell phones? Retrieved from <http://www.ehow.com>.
- 4) Gandhi G, Anita. Genetic damage in mobile phone users. Some preliminary findings. Indian Journal of Human Genetics. 2005; 11(2): 99-104.
- 5) Sánchez-Martínez M, Otero A. Study on mobile phone and adolescents. Cyber Psychology and Behavior. 2009 April; 12(2): 131-137.
- 6) Bulck J V. Adolescent use of mobile phones for calling and for sending text messages after lights out. Sleep. 2007 Sept 1; 30(9): 1220–1223.
- 7) Kamibeppu K, Sugiura H. Impact of the mobile phone on junior high-school students' friendships. Cyber psychology and Behavior. 2005 April; 8(2): 121-30.
- 8) Market Analysis and Consumer Research Organization. Study of mobile phone usage among the teenagers and youth in Mumbai. April- May 2004.
- 9) Riddervold IS, Pedersen GF, Andersen NT, Pedersen AD, Andersen JB, Zachariae R, et. Cognitive function and symptoms in adults and adolescents in relation to radio frequency radiation from UMTS base stations. Bioelectromagnetics. 2008; 29(4): 257-267.
- 10) Yena C F, Tangb T C, Yenb J Y, Lind H C, Huang C F, Liua S C et. Symptoms of problematic cellular phone use, functional impairment and its association with depression among adolescents. Journal of Adolescence. 2009 Aug; 32(4): 863-873.