

# Information And Communications Technology (Ict) Usage And Health Status Of The Student Teachers Of Msu-Iit, Iligan City

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**Abstract.** In education, ICT is very helpful because of the following reasons; it can lead to greater efficiency throughout the school, communication channels are increased through email, discussion, groups, and chat rooms and its regular use across different curriculum subjects can have a beneficial motivational influence on students' learning. The dissertation aims to know the harmful effects of severe exposure of the student teachers of CED, MSU-IIT to Information Communications Technology (ICT) on the aspects of mental, emotional, and physical health. Result shows that the usage of cellular phones/smartphones, student teacher's field directly affects the mental and emotional health of a student teacher. Information Communications Technology (ICT) usage also affects the psychological health of a student teacher as shown in the result. However, age, gender, and family income do not directly affect a student teacher's emotional, mental, or physical health in terms of Information Communications Technology (ICT) usage and exposure.

**Keywords:** ICT Usage, ICT Negative Effects, ICT.

## 1 Introduction

In all parts of this planet, Information and Communications Technology (ICT) is very rampant. Information and Communications Technology (ICT) is a vital tool in many different jobs and activities for adults and children. In education, ICT is very helpful because of the following reasons; it can lead to greater efficiency throughout the school, communication channels are increased through email, discussion, groups, and chat rooms and its regular use across different curriculum subjects can have a beneficial motivational influence on students' learning. Teachers also have a variety of benefits in using ICT, such as ICT facilitating sharing of resources, and expertise, and advising greater flexibility in when and where tasks are carried out easier planning and preparation of lessons, and designing materials. access to up-to-date pupil and school data, anytime and anywhere, enhancement of professional image projected to colleagues, and

computer use during lessons motivates students to continue using learning outside school hours. ICT also offers benefits to students and these are: higher quality lessons through greater collaboration between teachers in planning and preparing resources, gains in understanding and analytical skills, including improvements in reading, comprehension is improved, development of writing skills (including spelling, grammar, punctuation, editing, and redrafting, fluency, originality, and elaboration) development of higher level learning styles. Students who use educational technology in school felt more successful in school and they are more motivated to learn and have increased self-confidence and self-esteem, opportunities to address their work to an external audience, and opportunities to collaborate on assignments with people outside or inside the school. ICT also offers benefits to parents like easier communication with teachers, higher quality student reports-more legible, more detailed, and better presented, and greater access to more accurate attendance and attainment information.

But too much exposure to anything becomes bad already, such as long periods of using Information and Communications Technology (ICT) can increase your chance of developing an injury. Inappropriate computer use can cause muscle and joint pain, overuse injuries of the shoulder, arm, wrist or hand, and eye strain. Information and Communications Technology (ICT) is commonly used by professionals and students for the accessibility of information and the bridge for communication, but majority of Information and Communications Technology (ICT) users nowadays are very attached to it, to the extent that their awareness on the negative effects that computers might give to them will be erased.

This severe exposure to Information and Communications Technology (ICT) will lead into different types of health problems including the physical, emotional and mental health of a person.

Physical, mental and emotional health are just some of the most important aspects of a human body in order to perform daily activities. It is essential also when applying for jobs. These aspects of a human being are the most to see and judged when applying for job and will also serve as the basis for all the persons doing and daily routine. That if a person has the ideal physical look; he or she is more likely to do physical exercise but if a person is weak-looking he or she must have a bad habit. That is why regular physical activity is essential to prevent and reduce risks of many diseases and improve physical and mental health. But when physical activity has been alternated with severe exposure to any bad doing that is when physical health problems occur. These problems come into different forms that make a person weak and muted.

## **2 Methods**

### **2.1 Research Design**

This study will make use of the Descriptive Correlation Method to describe the profile of the respondents such as age, year level and family income. A modified questionnaire will be used in gathering of data.

### **2.2 Population Description**

The subjects of the study will be the student teachers of MSU-IIT who will be identified during first semester of S.Y. 2015-2016 through purposive sample, those who will be around during the survey.

### 2.3 Sample and Sampling Procedure

The respondents of this study will be students of MSU-IIT who are enrolled during the S.Y. 2015-2016. These students are taking different subject area relating to education. The selections of the respondents will be based on their availability during the research. Purposive Sampling Procedures will be used so that no individual will be selected twice and that each individual in the population is selected once.

### 2.4 Research Instrument

The researchers will utilize a modified questionnaire as the principal instrument in gathering the needed data. The questions are based from gathered facts and information.

### 2.5 Data Collection Method

A letter will be disseminated to the respondents. The researcher will personally give the questionnaire to the respondents to provide adequate information, instruction and purposes. The respondents will be requested to fill out the questionnaire with the presence of the researchers. Once the respondents are done answering the questionnaire, it will be immediately collected.

### 2.6 Statistical Treatment

The data that the researchers gathered were tabulated using the different statistical tools; Descriptive – Descriptive statistics includes statistical procedures that we use to describe the population we are studying. The data will be collected from the sample, and the results will help us organize and describe the data, frequency will be used to determine the number of times an answer is being chosen by the respondent, percentage is another way of expressing a proportion. Frequency and percentage were used in the presentation of the demographic profile. Tabular and summer calculation were utilized to present the data or information. Correlation Coefficient was utilized to measure the strength of the relationship between two random variables by mean of a single number. The Pearson Correlation Coefficient (p) measures the strength of the linear relationship between two variables X and Y.

## 3 Results And Discussion

This study aimed to know the negative effects of the severe exposure to ICT to the student teachers of MSU-IIT College of Education, and the ICTs that are commonly used by the student teachers that affect the health status of the student teachers of MSU-IIT, College of Education. Results indicated that the frequent use of iPhones affect the psychological and emotional health of the student teachers depending on the course taken.

Table 1. Profile of the Respondents according to their Age

	Age	Age	
		Frequency	Percent
Valid	19	6	.8

20	41	5.3
21	10	1.3
22	1	.1
23	2	.3
Total	60	7.8

As depicted in the table 1, majority of the respondents are in the age of 20 with 5.3%, followed by 21 with a 1.3%. So, this implies that majority of our respondents were 20 years old. Hence, most of the student teachers who are fourth year are aged 20 years old.

Table 2. Profile of the Respondents according to their Gender

		Gender	
		Frequency	Percent
Valid	MALE	27	3.5
	FEMALE	33	4.3
	Total	60	7.8

Table 2 shows the profile of the respondents according to their gender. 33 of our respondents are female with a 4.3% and 27 are male with a 3.5%. So, this shows that most of the respondents are female. Since there is a higher number of female students enrolled in the College of Education compared to male students.

Table 3. Profile of the Respondents according to their Course

		Course			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MAPEH	15	1.9	25.0	25.0
	DT	7	.9	11.7	36.7
	IT	7	.9	11.7	48.3
	TLE	1	.1	1.7	50.0
	BEED	15	1.9	25.0	75.0
	ENG				
	BEED	3	.4	5.0	80.0
	SCIE				
	BIO	1	.1	1.7	81.7
	PHY	1	.1	1.7	83.3
	MATH	7	.9	11.7	95.0
	GENSCIE	3	.4	5.0	100.0
	Total	60	7.8	100.0	

Table 3 shows that the majority of the respondents were BSED-Mapeh and BEED-English with the frequency of 15 and a percentage of 25. This is due to the accessibility and the availability of the students, who were more reachable compared to other courses of the college of education.

Table 4. Profile of the Respondents according to their Family Income

	Family Income		Valid Percent	Cumulative Percent
	Frequency	Percent		
Valid	₱5,000.00	4	.5	6.7
	₱8,000.00	5	.6	8.3
	₱10,000.00	21	2.7	35.0
	₱11,000.00	1	.1	1.7
	₱12,000.00	2	.3	3.3
	₱14,000.00	1	.1	1.7
	₱15,000.00	13	1.7	21.7
	₱16,000.00	1	.1	1.7
	₱20,000.00	10	1.3	16.7
	₱30,000.00	1	.1	1.7
	₱40,000.00	1	.1	1.7
	Total	60	7.8	100.0

Table 4 shows the family income of the respondents. The result shows that most of our respondents has an income of ₱10,000.00 monthly with a frequency of 21 and a percentage 2.7.

Table 5. Relationship between the ICT usage in terms of frequency and duration and the health status of the student teachers of CED, MSU-IIT

				PHYSICAL	MENTA L/ EMOTI ONAL STATE	PS Y C H O L O GI C A L
No. of Computer	Years Using		Pearson Correlation	.071	.115	.1
			Sig. (2-tailed)	.590	.380	.1
			N	60	60	60
Mobiles			Pearson Correlation	-.108	.032	.0
			Sig. (2-tailed)	.412	.807	.6
			N	60	60	60

	Pearson	-.006	.050	-
	Correlation			.0
Computer				81
	Sig. (2-tailed)	.961	.702	.5
				37
	N	60	60	60
	Pearson	-.058	-.199	-
	Correlation			.0
Tablets				02
	Sig. (2-tailed)	.658	.128	.9
				90
	N	60	60	60
	Pearson	.053	-.048	-
	Correlation			.0
Smart Phones				16
	Sig. (2-tailed)	.688	.717	.9
				02
	N	60	60	60
	Pearson	-.005	.294*	.0
	Correlation			.13
iPhones				.9
	Sig. (2-tailed)	.972	.022	20
				60
	N	60	60	60
	Pearson	-.028	.139	.2
	Correlation			61
Calling				*
	Sig. (2-tailed)	.833	.290	.0
				44
	N	60	60	60
	Pearson	-.118	.211	.1
	Correlation			44
Messaging				.2
	Sig. (2-tailed)	.371	.106	73
				60
	N	60	60	60
	Pearson	-.112	.052	.0
	Correlation			17
Internet				.8
	Sig. (2-tailed)	.396	.692	94
				60
	N	60	60	60
	Pearson	-.285*	-.008	-
	Correlation			.0
Social Networking				44
	Sig. (2-tailed)	.027	.949	.7
				41

	N	60	60	60
	Pearson Correlation	-.166	.143	.084
Movies/Videos	Sig. (2-tailed)	.204	.275	.525
	N	60	60	60
	Pearson Correlation	-.039	.047	-.050
ICT	Sig. (2-tailed)	.337	.338	.223
	N	600	420	600

Legend: if p-value is less than 0.05, then the relationship is significant; otherwise is not significant.

As depicted in the table above, there is a significant relationship between iPhones and mental/emotional health status with the p-value of 0.022, between calling and Psychological health status with the p-value of 0.44 and between social networking sites and physical health status with the p-value of 0.027.

Table 6. Relationship among the usage of Information and Communication Technology, gender and Psychological Health Status of the respondents

Tests of Between-Subjects Effects					
Dependent Variable: PSY					
Source		Df	Mean Square	F	Sig.
ICT	Hypothesis	4	2.039	17.050	.009
Gender	Hypothesis	1	1.606	7.894	.014
ICT * Gender	Hypothesis	4	.120	.141	.966

Legend: if p-value is less than 0.05, then the relationship is significant; otherwise is not significant.

As depicted in the table above, there is a significant relationship with the Frequency usage of ICT and Psychological Health Status with a p-value of 0.009 and the Gender and Psychological Health Status with 0.014. But there is no significant relationship between the Gender with ICT usage Gender towards Psychological Health Status with a p-value of .966. Hence, we do not have sufficient evidence to conclude that there is a significant relationship between ICT usage and the Psychological Health Status of the respondents.

Table 8. Relationship among the usage of Information and Communication Technology, family income and Mental/ Emotional Health Status of the respondents

Tests of Between-Subjects Effects					
Dependent Variable: MS					
Source		df	Mean Square	F	Sig.
ICT	Hypothesis	4	2.395	2.473	.081
Family_Income	Hypothesis	10	1.116	1.054	.426
ICT * Family_Income	Hypothesis	11	.886	.634	.787

Legend: if p-value is less than 0.05, then the relationship is significant; otherwise is not significant.

As depicted in the table above, there is a significant relationship between the ICT usage to the Mental/emotional state of the respondents with a p-value of .081. There is no significant relationship between the Family Income with frequency usage of ICT and the Mental/Emotional State of the respondents. The p-values are greater than 0.05. Hence, we do not have sufficient evidence to conclude that there is a significant relationship between Family Income with frequency usage of ICT and the Physical Health of the respondents.

Table 9. Relationship among the usage of Information and Communication Technology, family income and Psychological Health Status of the respondents

Tests of Between-Subjects Effects					
Dependent Variable: PSY					
Source		df	Mean Square	F	Sig.
ICT	Hypothesis	4	2.870	3.305	<b>.040</b>
Family_Income	Hypothesis	10	.897	1.063	<b>.429</b>
ICT * Family_Income	Hypothesis	11	.891	1.188	<b>.332</b>

Legend: if p-value is less than 0.05, then the relationship is significant; otherwise is not significant.

As depicted in the table above, there is a significant relationship between the ICT usage to the Psychological Health Status with a p-value of .040. There is no significant relationship between the Family Income with frequency usage of ICT and the Physical Health of the respondents.



The p-values are greater than 0.05. Hence, we do not have sufficient evidence to conclude that there is a significant relationship between Family Income with frequency usage of ICT and the Psychological Health Status of the respondents.

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