

Role of Technological Gadget on the Tribal Culture and Education with Special Reference to the Attitude and Usage of Mobile Phone by IGNOU B.Ed Students of Mizoram

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ABSTRACT

Information and Communication Technology offers great opportunity to raise educational standards and qualities. It is believed that ICTs can empower teachers and learners by facilitating communication and interaction, offering new modes of delivery, and generally transforming teaching and learning processes. Digital learning is any instructional practice that effectively uses technology to strengthen a student's learning experience. It can provide a more individualized approach to teaching and help more students reach their full potential. Mobile phones as a symbol of electronic century and digital world has spread worldwide especially in youth. Mobile devices are used in a variety of teaching and learning environments. The concept of mobile learning (m-Learning) – understood for the purposes of this article as learning facilitated by mobile devices – is gaining traction in the developing world. Through mobile phone, teacher can communicate and impart knowledge to the students. Geographically, the Northeast is a compact unit covering an area of 2, 550, 825 Sq. Km. The region has a high concentration of tribal population. Each tribe has its own distinct tradition of art, language, culture, dance, music and life styles. The State of Mizoram is one of the eight states of the North East in which there is imbalance in educational development in the state. Inequalities in access to education continue to pose major barriers, and the delivery of cost-effective and quality education remains a persistent problem. The present study was conducted among IGNOU B. Ed Students of Mizoram to find out the ICT tools for teachers and general attitude and usage of mobile phone using the descriptive survey techniques. The subjects are further differentiated into four categories namely Post graduate rural, urban and graduate rural, urban student teachers. From the study, it is found out that urban teachers utilize mobile phone and its features more effectively than the rural teachers for educational purpose as well as day to day life.

Keywords: ICT, tribal, survey technique, hardware, software, IGNOU

Geographically, the Northeast is a compact unit covering an area of 2, 550, 825 Sq. Km. The whole region is connected with the rest of the country by a tenuous 22 kilometre land corridor through Siliguri in the eastern state of West Bengal - a link that has come to be referred to as the 'Chicken's Neck'. About 70% of the North east is hilly and terrain. In hilly areas of all the states, with the exception of Sikkim, shifting cultivation is practiced. Northeast

India constitutes a linguistic region with about 220 languages in three different language groups (Indo-Aryan, Sino-Tibetan and Austro) that share common structural features. According to 2011 census, they had a population of 44.98 million, about 3.7% of India's total and the literacy rate in all northeastern states is above the national average of 74.04%. The region has a high concentration of tribal population. The states of Arunachal Pradesh,

Meghalaya, Mizoram and Nagaland are mostly inhabited by a number of native tribes. Each tribe has its own distinct tradition of art, language, culture, dance, music and life styles. There is great religious and ethnic diversity within about 166 separate tribes speaking a wide range of languages.

The State of Mizoram is one of the eight states of the North East with an area of 21, 081 sq. km. The population of Mizoram as per 2011 census is 1,0,91,013 with a density of population of 52 persons per sq.km. About 70% of important institutions and government offices are located in the urban areas. This result is imbalance in educational development in the state. Inequalities in access to education continue to pose major barriers, and the delivery of cost-effective and quality education remains a persistent problem.

The traditional institution of education of tribal communities in the past generally started from the childhood through the process of enculturation, socialization and assimilation of knowledge. The Christian missionaries put efforts for the education of the tribal in the north east. David Scott a British Agent educates some smart looking Garo boys in 1812. With the initiative of David Scott, a Government of the missionary school was opened at Singimari but close down in 1829 due to shortage of personnel. The missionaries also opened Schools in Meghalaya, Assam, Nagaland, Manipur and Mizoram before independence. Despite the British India did not promote education of the backward classes in the official school, the Hunter Commission of 1882 pave way for the education of the backward, the aboriginal and the hill tribes. The Government could not take much steps due to the uncongenial atmosphere of the region and difficulties in accessed.

Digital learning opens up the scope and possibilities for education and training and enhances the learning experience; historically education was a very different experience when comparing it to the highly sophisticated, digital learning of today. Digital learning is any instructional practice that effectively uses technology to strengthen a student's learning experience. It can be used for

professional learning opportunities for teachers and to provide personalized learning experiences for students. Digital learning opens up the scope and possibilities for education and training and enhances the learning experience. Digital learning can provide a more individualized approach to teaching and help more students reach their full potential.

Thus, technology in education opens up a huge world of possibilities as to how one convey, share and engage with students presenting different ideas, facts and theories. ICT offers great opportunity to raise educational standards and qualities. Mobile with collaborative tools, e-learning is moving into virtual classes and virtual communication where the old method of practice has melted into new interactive teaching learning methodologies.

Mobile phones as a symbol of electronic century and digital world has spared worldwide especially in youth (Ameli, 2006, Mezei *et al.*, 2008). Mobile devices are used in a variety of teaching and learning environments. In mobile phone there is less need for new physical infrastructure such as roads and phone wires, and base-stations can be powered via generators in places where there is no electrical grid (Economist, 2008). Research studies and initiatives such as the Digital Education Enhancement Programme, (DEEP) carried out by an Open University team over two years in 12 primary schools in rural, disadvantaged areas of South Africa reported that ICT usage enhanced teachers professional knowledge and capabilities in very specific ways (Leach, 2008; Leach *et al.*, 2005). Through mobile phone, teacher can communicate and impart knowledge to the students. Mobile phone has no boundary; it can reach the unreached area. Therefore, it is utmost important to find out the attitude and usage of mobile phone by teachers. Hence, the study is taken up.

Review of related literature

Nawi *et al.* (2015) investigated the attitudes of the religious teachers' readiness to use mobile phones in their classrooms. According to this study, the religious teachers were exposed to learning activities using mobile phones and had positive attitudes

toward the use of mobile phones as learning tools. The positive attitude toward mobile learning was reported also by Güleroglu's (2015) and Youngkyun Baek *et al.* (2016).

Several studies has been conducted on the usage of Mobile Phone such as: Seppälä & Alamäki, 2003), Saran, Thornton and Houser (2005), Cagiltay and Seferoglu' (2008), McConotha, Praul and Lynch (2008, Cavus and İbrahim (2009), Brian Ferry (2009), Petra (2011), Gary Wood (2012), Gikas and Grant (2013) found that, Mobile phones are not just for phone calls, and tablets are not just for viewing materials but for record and send back interesting information about the context in which they are located. Mobile phone are used for other functionalities for educational purposes, such as e-mail exchange, receiving vocabulary lessons, and using video-capable mobile phones for explaining English idioms, text messaging and to for camera and teaching vocabulary. The use of mobile phone enhanced and motivates the learners which proved that students achieved higher scores while they were reviewing and practicing for the exams.

Objectives of the Study:

1. To find out the ICT tools for teachers
2. To find out the general attitude and usage of mobile phone by the IGNOU B. Ed Students

Delimitation of the Study

Due to limitation of time, the present study is confined only to IGNOU B. Ed Students.

METHODOLOGY OF THE RESEARCH

Research Design

The present study is a descriptive *survey technique* which involves the collection of primary data about subjects, by selecting a representative sample of the population or universe under study, through the use of a questionnaire.

Population and Sample

The investigator selected Secondary School teachers who attended IGNOU B.Ed. Workshop at the

Programme Study Centre (PSC) 1913, Institute of Advanced Study in Education of IGNOU for her study. The sample includes 217 female and male student teachers with the level of education. The subjects are further divided into in four (4) categories according to their locality and educational qualification. The four groups are:

- (a) Post Graduate Urban = No of Subjects = 50(F)+ 40(M) = 90
- (b) Post Graduate Rural = No of Subjects = 29(F)+ 38(M) = 67
- (c) Graduate Urban = No of Subjects = 12(F)+ 9(M) = 21
- (d) Graduate Rural = No of Subjects = 10(F)+ 29(M) = 39

Total no. = 217

Tool

In the present study, questionnaires prepared by the investigator were used with statements related to general attitude and usage of mobile phones.

Collection

The investigator personally administered the questionnaire to the male and female student teachers and collected their responses. Prior to conducting the questionnaire the investigator briefly described the purpose of her work and the type of the study where the facts were needed for them. She also asked them for their co-operation.

Statistical Analysis

The investigator did not use any standard statistical techniques to analyze her data but used simple percentage on the general attitude and usage of mobile phone among the two groups-Male and Female with levels of education.

Analysis of the Study

ICT Tools for teachers

Hardware:

- © **Desktop Computer:** In certain situation teachers

prefer Desktop for preparing notes, lesson plan and other spreadsheet works for its feature of extended keyboard and separate monitor.

- ⊙ **Laptop Computer:** Laptop helps teachers in their approach to technology based materials. Most laptops have a built-in Wi-Fi technology which makes it flexible for the teachers to connect to the network wherever they are.
- ⊙ **Tablet:** Teachers can use tablet as a textbook and document viewer, as well as a productivity, content-creation, note-taking and administrative tool.
- ⊙ **Projector:** Teachers can make use of interactive projectors in many ways such as to demonstrate math manipulative, to show visuals for science experiments, to display maps, charts, graphs, images from textbook etc.
- ⊙ **Smart board:** Teachers can use the wide variety of online information sources such as knowledge databases, online video and news items to reinforce their lessons.
- ⊙ **Smart Phones:** Teachers can make use of smartphones in many ways – access to the internet for research and referencing, access to email, the ability to snap photos, messaging capabilities, use educational apps etc. Teachers can easily save their lectures in free cloud storage and share them to their students.
- ⊙ **Radio:** Elementary teachers can help students learn basic electricity and regional geography in entertaining ways using FM radios. Language and language arts teachers will be able to use radios to reinforce listening, writing, and speaking skills.

Table 1: General Attitude towards Mobile Phone

Sl. No	Item	PG Urban	PG Rural	Graduate Urban	Graduate Rural
		Yes %	Yes %	Yes %	Yes %
1	Mobile Phone can be misused	91.11	80.60	90.48	84.62
2	Used mobile phones effectively as aids in the teaching-learning process	77.78	49.25	52.38	58.97
		Necessity %	Necessity %	Necessity %	Necessity %
		100.00	85.07	95.24	87.18
3	For me, a mobile phone is?	Luxury %	Luxury %	Luxury %	Luxury %
		0.00	16.42	4.76	7.69

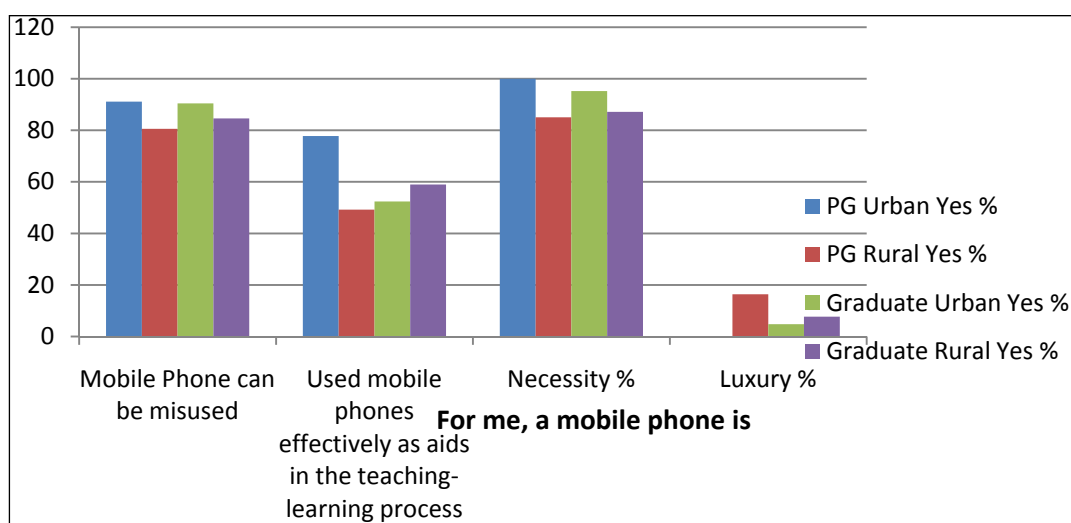


Fig. 1: General Attitude towards Mobile Phone

⊙ **Television:** Teachers could benefit from keeping students interested through the means of educational and thought-provoking television in the classroom.

Software

⊙ **Authoring System:** Teachers can create electronic flash cards or index cards to teach children about certain concepts. Also, they can create multimedia content like reviews, lessons, and tutorials.

⊙ **Desktop Publishing:** Teachers can use this software to inform parents and students about events or activities taking place in school. They can also use it for preparing results and reports of students.

⊙ **Reference Software:** Teachers can include reference software in research projects. Reference software lets students access the encyclopaedia, thesauruses, atlases, and dictionaries.

⊙ **Drill & Practise Software:** Teachers can include drill and practice software to strengthen the existing skill set of the students. This software is beneficial when teachers are trying to prepare students for exams and tests.

⊙ **Tutorial Software:** Through tutorial software, teachers can teach students new lessons and provide them a platform through which they may learn the lesson at their own pace.

⊙ **Educational Games:** This type of software is very effective for younger children because it motivates them to learn.

Table 2: Purpose of Using Mobile Phone

Sl. No	Item	PG Urban	PG Rural	Graduate Urban	Graduate Rural
4	Purpose of using mobile phone	Yes %	Yes %	Yes %	Yes %
a	Voice calls	100	100	100	100
b	Video calls	4.44	0.00	0.00	5.13
c	SMS	95.56	65.67	90.48	82.05
d	MMS	3.33	4.48	0.00	0.00
e	Calendar	61.11	40.30	42.86	30.77
f	Calculator	70.00	46.27	66.67	46.15
g	Internet	68.89	40.30	76.19	35.90

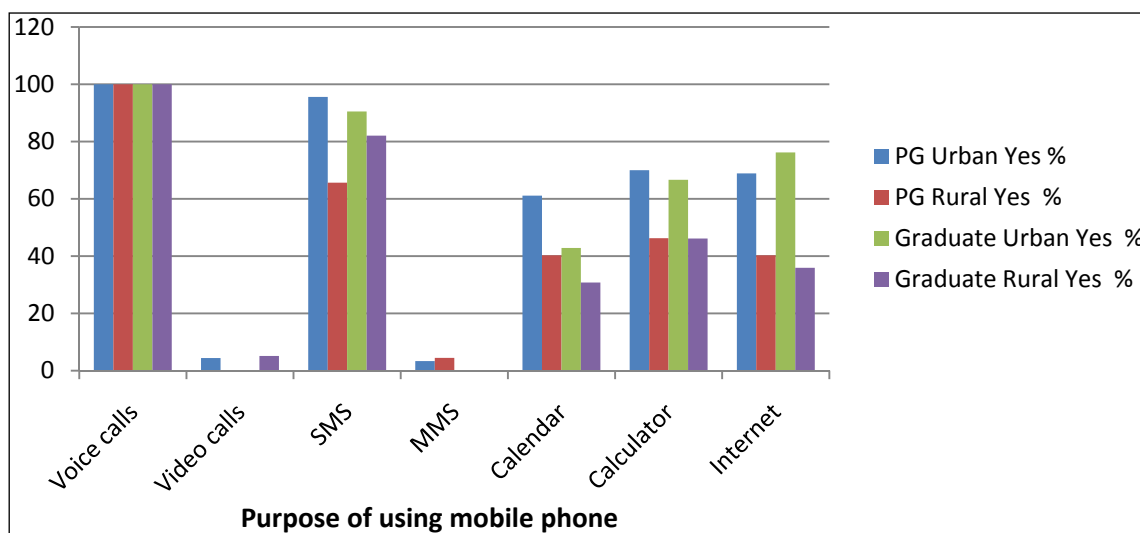
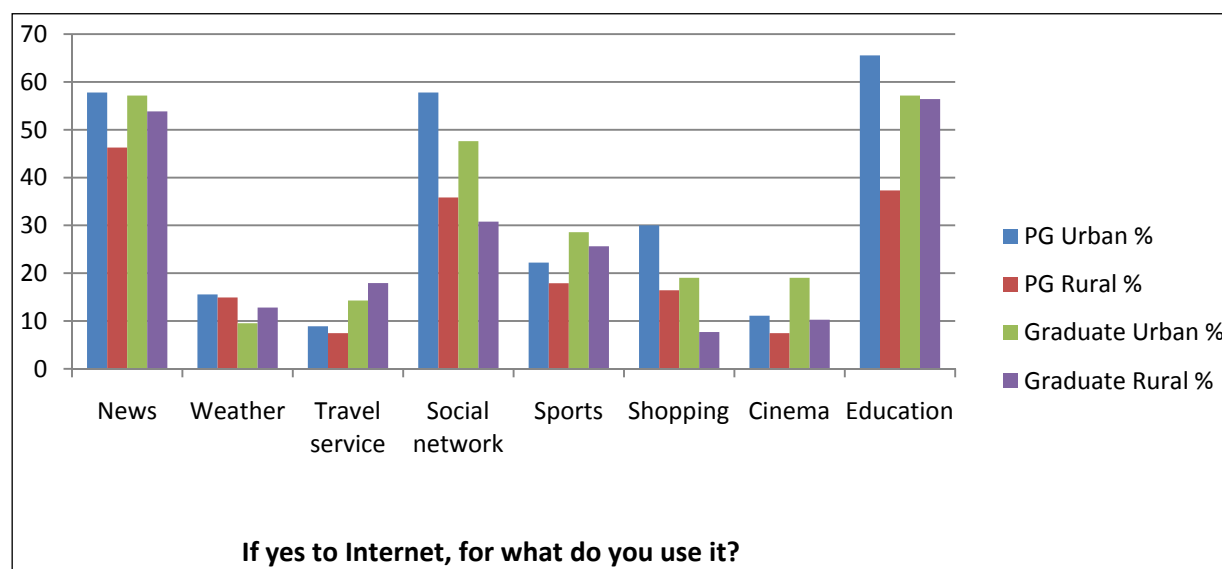


Fig. 2: Purpose of Using Mobile Phone

Table 3: Purpose of Using Mobile Internet

Sl. No	Item	PG Urban %	PG Rural %	Graduate Urban %	Graduate Rural %
5	If Yes to internet, for what do you use it?	%	%	%	%
a	News	57.78	46.27	57.14	53.85
b	Weather	15.56	14.93	9.52	12.82
c	Travel service	8.89	7.46	14.29	17.95
d	Social network	57.78	35.82	47.62	30.77
e	Sports	22.22	17.91	28.57	25.64
f	Shopping	30.00	16.42	19.05	7.69
g	Cinema	11.11	7.46	19.05	10.26
h	Education	65.56	37.31	57.14	56.41

**Fig. 3:** Purpose of using Mobile Internet

- ⊙ **Simulation Software:** Simulations software enables teachers to teach students through virtual experience.
- ⊙ **Speed Reading Software:** Speed reading software can help both students and teachers learn to read faster and increase their reading comprehension so they no longer feel overwhelmed by the volume of homework.
- ⊙ **Spelling Software:** Teachers can use spelling software to teach simple words to young children, help older students supplement their classroom learning and enhance their own spelling abilities.
- ⊙ **Vocabulary Software:** Vocabulary software is designed to help the students spell, pronounce, and understand new words faster and more efficiently than one of those word-of-the-day calendars.
- ⊙ **Special Needs Software:** Online education software also includes special software developed to address the requirements of a student with special needs.
- ⊙ **Maths Problem Solving Software:** This educational software makes it possible for math teachers to strengthen the problem solving skills of students and science teachers may use this software to conduct science experiments.

Table 4: Reasons for not using Mobile Internet

Sl. No	Item	PG Urban	PG Rural	Graduate Urban	Graduate Rural
6	Reasons for not using mobile internet	%	%	%	%
a	I don't have an internet-enabled mobile phone	14.44	29.85	19.05	20.51
b	I don't know how to use mobile internet	5.56	16.42	14.29	17.95
c	Its too expensive	5.56	16.42	9.52	10.26
d	I don't know about phone internet	2.22	11.94	14.29	15.38

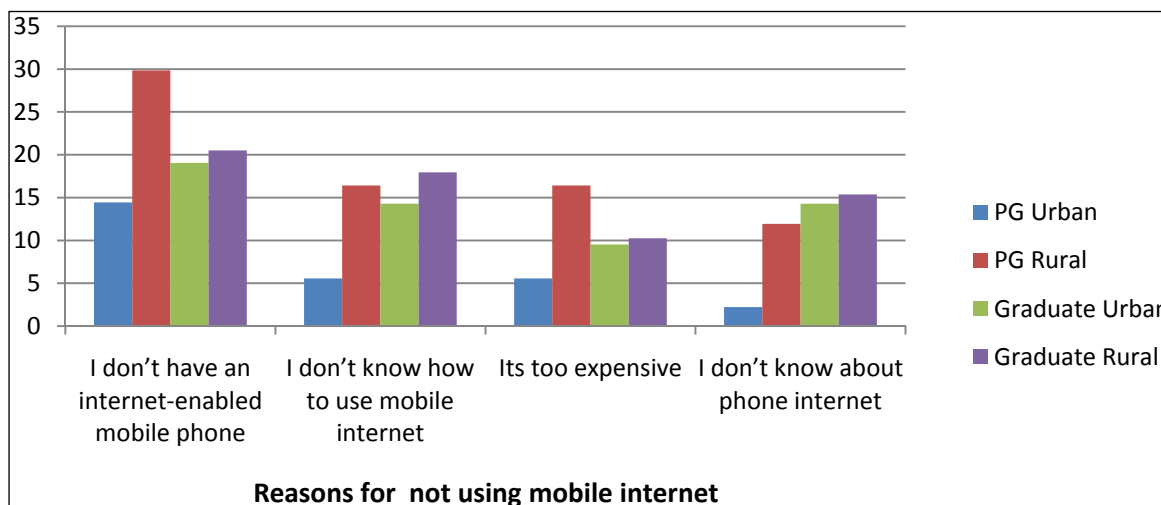


Fig. 4: Reasons for not using Mobile Internet

Attitude and Usage of Mobile Phone

1. General Attitude Towards Mobile Phone

Analysis of Table 1 and Fig. 1 reveals that more than 80 % in all the groups are of the opinion that there is a misuse of mobile phones. The study also reflected that more than 85% of the teachers reported that mobile phone is a necessity for them and the percentage of teachers having mobile phone as a luxury is less than 16% in all the groups. They also thought that mobile phone can be used effectively in teaching learning process with the highest among Post Graduate Rural Group being 77.78 %.

2. Purpose of Using Mobile Phone

Observing of data vide Table 2 and Fig. 2 reveals 100% of all categories used mobile phone for voice calls respectively. Use of video calls is very low in all the groups. 5.13% in the Graduate-Rural group uses

video call regularly whereas only a small percentage in the other groups sometimes uses video calls. The study reflects that 65% to 95% of the teachers had used mobile phone for sending SMS.

No teacher from the Graduate-Urban groups and rural has ever used MMS further, it is also found that 61.11% of the teachers in the Post-Graduate urban group use mobile phone as a calendar and calculator. Use of mobile internet is less than 76% in all the groups with the highest being Graduate Urban group (76.19%) and the lowest being Graduate Rural group (24.14%).

3. Purpose of Using Mobile Internet

From the above Table 3 and Fig. 3, it is reflected that the highest percentage of teacher using mobile internet for news is found to be highest among the PGU group (57.78%) and lowest among the PGR group (46.27%). It is also observed that less than 30% of the teachers of all groups use mobile

Table 5: Purpose of Using Voice Calls and SMS

Sl. No	Item	PG Urban	PG Rural	Graduate Urban	Graduate Rural
7	Purposes of using voice calls	%	%	%	%
	a Chatting and gossiping with friends	57.78	41.79	61.90	35.90
	b Talking with relatives	84.44	65.67	76.19	84.62
	c Discussing schoolwork with teachers/colleagues	71.11	56.72	66.67	56.41
8	Purposes of using SMS				
	d For giving and receiving news and information	66.67	62.69	71.43	69.23
	a Chatting and gossiping with friends	76.67	55.22	80.95	56.41
	b Communicating with relatives	90.00	80.60	90.48	84.62
	c Discussing schoolwork with teachers/colleagues	77.78	64.18	61.90	46.15
	d For giving and receiving news and information	84.44	79.10	76.19	69.23

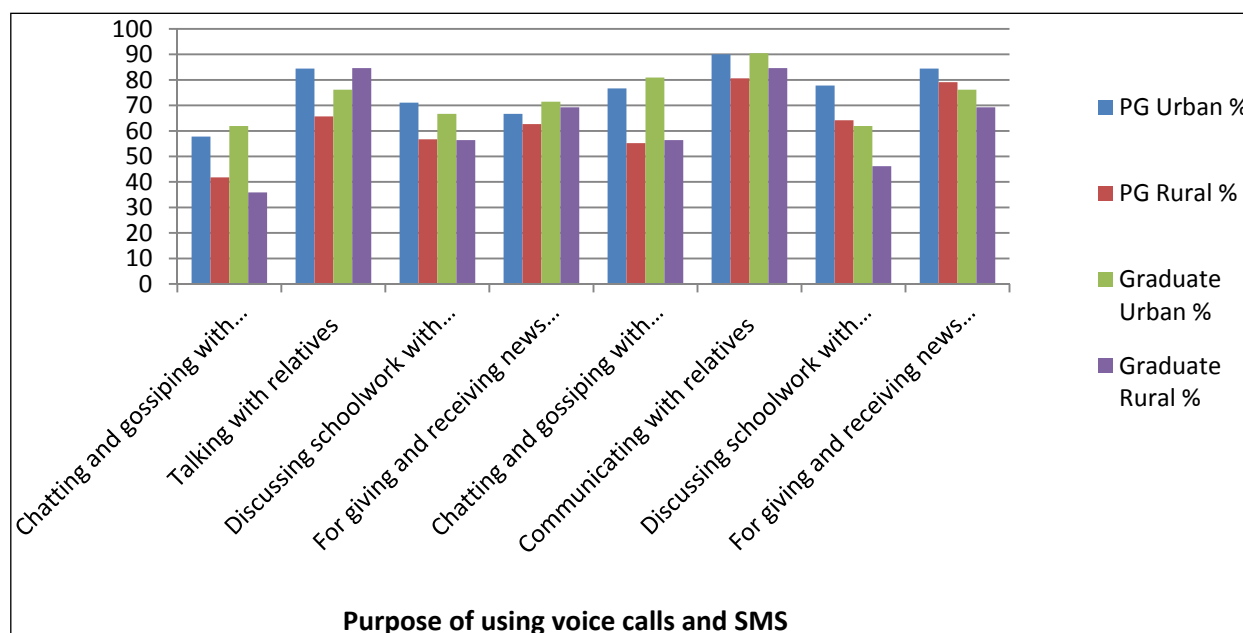


Fig. 5: Purpose of using Voice Calls and SMS

internet for weather, travel service and shopping. Further, the study also reveals that 47.62 % of Urban Graduate use mobile internet for social network and the lowest is found to be Graduate Rural group (30.77%). The percentage of teacher who use mobile internet for education is found to be highest among the PGU group and lowest among the PGR group.

4. Reasons for not using Mobile Internet

Analysis of data vide Table 4 and Figure 4 reveals that only 14.44 % of the PG Urban group don't have internet enabled phone whereas 29.85 % of the PG Rural group don't have an internet enabled phone. It is also shown that 17.95 % of the Graduate Rural group doesn't know how to use mobile internet

which is the highest among the groups. 16.42% of the PG Rural group found mobile internet expensive which is stated by only a small percent of the other groups. The percentage of student teachers who are ignorant about mobile internet is very low in all the groups the highest being 15.38 % of the Graduate Rural group.

5. Purpose of Using Voice Calls and SMS

A cursory glance at Table 5 and Fig. 5 shows that the number of people using voice calls for schoolwork and information purposes is highest in the Graduate Urban group (71.43%). In all the other groups also, it is more than 50%. The number of teachers using voice calls for chatting and talking with relatives is lowest among Graduate – Rural group i.e., 35.90%. The percentage of persons using SMS for gossiping and communicating with friends is more than 55% in all groups. Also, the percentage of persons using SMS for schoolwork is highest among Post Graduate Urban Group i.e. 77.78%. The number of teachers using SMS for giving news and receiving information is lowest among Graduate Rural Group (69.23%).

Implications of the Study

1. The Study implies that Post Graduate Urban Teachers can effectively use mobile phone as aids in the teaching-learning process.
2. It also implies that both urban and rural teachers have the attitude of having mobile phone as a necessity.
3. The Study indicates that Post Graduate rural teachers utilize mobile phones for SMS, Calendar, Calculator and Internet purpose less than the Post Graduate Urban teachers which is also the same for Graduate rural teachers as compared to the graduate urban teachers
5. The Study also reveals that Graduate and Post Graduate rural and urban teachers use mobile internet more effectively for reading news, social networking, shopping and most importantly, education.
6. It also shows Graduate rural teachers use internet regularly for checking weather and travel service.

7. The Study also indicates due to the limit of knowledge and expensiveness, Graduate and Post Graduate rural teachers could not use mobile internet.
8. It also specifies that Graduate urban teachers use voice calls more than other teachers for chatting and gossiping, talking with relatives and also for giving and receiving news.
9. The present study also shows the purpose of using SMS for chatting and gossiping, talking with relatives, discussing schoolwork with colleagues and also for giving and receiving news is less practiced for graduate rural teachers but Graduate and Post graduate teachers use it efficiently.

CONCLUSION

From the present study, it can be concluded that Urban teachers use Mobile phone more effectively than rural teachers in way of education as well as everyday life although in some cases, rural teachers are more dominant than the urban teachers.

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