

RESEARCH PAPER

Gender differences in awareness, knowledge and usage of mobile phone features among rural youth

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Abstract: The research study was conducted in Dharwad and Uttara Kannada districts of Karnataka state during the year 2016- 17 to know the ownership and usage of mobile phones by rural youth. Ex-post-facto research design was used in this study. For this study 120 girls and 120 boys from four different Pre University and Degree colleges were chosen. Thus total 240 college going students were purposively selected for the study. The data was collected from the selected sample through self-structured schedule. The results showed that, there was a positive and significant difference between boys and girls regarding usage, but there was no significant difference between boys and girls regarding awareness and knowledge of mobile phones. The awareness index of mobile phone feature was very high with 93.98 for girls, 93.81 for boys and 93.90 for the total. Cent per cent of the girls were at high awareness level whereas in case of boys 98.33 per cent were at high level and only 1.67 per cent at medium level. None of the respondents were at low level of awareness. Knowledge index of girls was 88.02, boys 92.80 and total 90.41 with respect to mobile phone features. Nearly cent per cent of the girls (99.17 %), boys (98.33 %) and total (98.75 %) belonged to high knowledge level. The total usage index of girls was lower (84.16) compared to boys (93.03). Majority of the girls (57.50 %), boys (85.83 %) and total (71.67 %) belonged to high usage level followed by medium level with 42.50 per cent girls, 14.17 per cent boys and 28.33 per cent total respondents.

Key words: Awareness, Knowledge, Mobile phones, Rural youth

Introduction

Mobile phones are wireless or cellular phones that utilize frequencies transmitted by cellular towers to connect the calls between two devices. Mobile phones are most widely used portable device in the world. Many people are living their life in mobile and internet age. Everything is at the tip of the finger because of mobile and internet. Today youth are using mobiles and internet for various purposes like call making, call receiving, SMS, social networking, camera, browsing, music, video-calling, recording, playing games, mobile banking and video-viewing. They can make use of their mobile knowledge for their betterment and they have more knowledge than adults because of their frequent usage. Rural youth are familiar with internet and its usage. Hence, today rural youth are also familiar with services like e-market, e-books, e-studies, online booking, online shopping, online payment and e-extension because of internet. Online application for jobs has also become very popular.

Today both boys and girls of rural areas are using mobiles and internet for their own purposes. Usually girls use mobiles to talk and communicate a lot through their mobiles than boys. Boys want practical things like learning about new apps in their mobiles. Girls are keener of their safety whereas boys want to take risks. These kind of natural behavioral differences between two gender brings the natural differences in their mobile and internet usage habits. So in this study an attempt was made to know the gender differences in using mobile and internet among rural youth.

Material and methods

The study was conducted in two districts of Karnataka state namely Dharwad and Uttara Kannada during the year 2016-17.

From each district four villages were selected. Garag, Alnavar, Hulakoppa and Navalur from Dharwad district and Manchikeri, Kiravatti, Gullapur and Banavasi villages of Uttara Kannada district were selected. From each village one college was selected. Fifteen girls and 15 boys were purposefully chosen from each colleges who were possessing mobile phones with internet facility. Thus, the sample consisted of 60 boys and 60 girls from each district and the total sample size was 240 with 120 boys and 120 girls.

Results and discussion

Comparison of boys and girls regarding pattern of answering calls and time spent on mobile phone calls

The results in Table 1 shows the comparison of boys and girls with regard to pattern of answering and time spent on mobile phone calls. There was positive and significant difference between boys and girls with regard to monthly expenditure on mobile phones. Boys had a higher expenditure than girls. There was no significant relationship with boys and girls in case of pocket money received. There was positive and significant difference between boys and girls with regard to number of calls received from family, friends and total. In all the three cases boys received more calls than girls. But there was no significant relationship with boys and girls regarding any other calls received. There was positive and significant difference between boys and girls in case of time spent on friend calls, any other calls and total calls. In all the three types the time spent by boys was greater than girls. There was no significant difference between boys and girls with regard to time spent on family calls. There was a significant difference between the boys and girls in case of monthly expenditure on mobiles. The boys spent more money

Table 1. Comparison of boys and girls regarding pattern of answering calls and time spent on mobile phone calls n = 240

Sl. No.	Statements	Girls Mean	Boys Mean	't' value
1	Pocket money	241.40	256.14	0.56 NS
2	Monthly expenditure	196.05	319.25	4.03**
3	Number of calls			
	3.1 Family	2.82	3.93	3.74**
	3.2 Friends	3.87	5.32	3.15**
	3.3 Any other	0.66	0.83	1.06
	3.4 Total	8.19	9.68	2.84**
4	Time spent on calls			
	4.1 Family	17.96	20.86	1.07NS
	4.2 Friends	22.87	38.39	4.35**
	4.3 Any other	1.26	3.43	3.29**
	4.4 Total	42.35	62.58	3.79**

** - Significant at 0.01 level, NS - Non-significant

than girls on mobiles (Table 1). The reason is that the usage of mobiles is also high in case of boys as they make use of all the features present on mobiles. The calls received by boys was higher than girls in case of family, friends and any other even though girls are talkative in nature. The reason behind receiving less calls may be because of rural environment and restrictions on girls by parents for using and spending on mobiles compared to boys. The boys also spent more time on calls with friends, any other and total when compared to girls. As the boys receive more calls than girls and also do not have any restrictions regarding usage and expenditure on mobiles has resulted in significant difference between boys and girls regarding time spent on mobiles.

Awareness of the respondents regarding mobile phone features

A close perusal at the Table 2 shows that cent per cent of the boys and girls were aware of the call making on mobile phones. In case of girls more than 90 per cent of the respondents had awareness of all the features like SMS/ text message (95.33 %), camera and gallery (99.16 %), social networks

Table 2. Awareness of the respondents regarding mobile phone features n = 240

Mobile features	Awareness		
	Girls (120) Yes F (%)	Boys (120) Yes F (%)	Total (240) F (%)
Call making	120 (100)	120 (100)	240 (0.00)
SMS/ text message	118 (98.33)	117 (97.56)	235 (97.91)
Camera and gallery	119 (99.16)	116 (96.66)	235 (97.91)
Social networks	109 (90.83)	112 (93.33)	221 (92.08)
Music/MX player	116 (96.66)	115 (95.83)	231 (96.25)
FM radio	109 (90.83)	105 (87.50)	214 (89.16)
Alarm and calendar	117 (97.50)	113 (94.16)	230 (95.83)
Calculator	119 (99.16)	115 (95.83)	234 (97.50)
Dictionary	111 (92.50)	113 (94.16)	224 (93.33)
Internet	108 (90.00)	111 (92.50)	219 (91.25)
Shopping apps	106 (88.33)	110 (91.66)	216 (90.04)
Playing games	115 (95.83)	114 (95.00)	229 (95.41)
Educational apps	113 (94.16)	109 (90.83)	222 (92.54)
Awareness index	93.98	93.81	93.90

(90.83 %), music/MX player (96.66 %), FM radio (90.83 %), alarm and calendar (97.50 %), calculator (99.16 %), dictionary (92.50 %), internet (90.00 %), playing games (95.83 %) and educational apps (94.16 %). Only in case of shopping apps the awareness was little less with 88.33 per cent. The same trend was seen in boys also with more than 90 per cent of the respondents being aware of all the features that is SMS/text message (97.56 %), camera and gallery (96.66 %), social networks (93.33 %), music/MX player (95.83 %), alarm and calendar (94.16 %), calculator (95.83 %), dictionary (94.16 %), internet (92.50 %), shopping apps (91.66 %), playing games (95.00 %) and educational apps (90.83 %). The awareness regarding FM radio was little less with 87.50 per cent. In case of total respondents more than 90 per cent of the respondents are aware of all the features and little less that is 89.16 per cent were aware of FM radio. The awareness index was very high with 93.98 for girls, 93.81 for boys and 93.90 for the total. Majority of the rural youth were aware of all the mobile phone features which is reflected with high awareness index. Almost all the rural youth possessed their own mobile phones hence they know all the mobile features very well. Mobile phone features like camera, gallery, photo collage, cam scanner, games, shopping applications like amazon, snap deal, mantra and flip kart always attract the youth. The reason behind this may be mobile phones have become an important and cheap means of communication now-a-days and also many a times it is considered as necessity than luxury. The findings are in agreement with the studies of Singh *et al.* (2013) who revealed that majority of post graduate students had awareness about almost all mobile features.

Awareness level of respondents regarding mobile phones

Cent per cent of the girls are at high awareness level. With respect to boys 98.33 per cent are at high level and only 1.67 per cent at medium level. In case of total 99.17 per cent are at high level and only 0.83 per cent are at medium level. None of the respondents are at low level of awareness (Table 2a). Rural youth's (both boys and girls) awareness was high regarding mobile phone features.

Knowledge of respondents regarding mobile phone features

More than 90 per cent of the girls had knowledge about features like call making (96.66 %), SMS/text message (97.50 %), camera and gallery (95.83 %), music/MX player (91.66 %), alarm and calendar (95.83 %) and calculator (93.33 %). The knowledge was between 80 - 90 per cent in case of social networks (84.16 %), FM radio (82.50 %), dictionary (84.16 %), internet (87.50 %), playing games (89.16 %) and educational apps (82.50 %) and 77.50 per cent had knowledge about shopping apps (Table 3). Similar trend was seen in boys

Table 2a. Awareness level of respondents regarding mobile phones

Awareness	n = 240		
	Girls (120) F (%)	Boys (120) F (%)	Total F (%)
Low (1-9)	0 (0.00)	0 (0.00)	0 (0.00)
Medium (10-19)	0 (0.00)	2 (1.67)	2 (0.83)
High (20-28)	120 (100.00)	118 (98.33)	238 (99.17)

also with more than 90 per cent of the respondents having knowledge of all the features except shopping and educational apps which was 85.83 and 88.33 per cent, respectively. With respect to total respondents more than 90 per cent had knowledge regarding call making (97.08 %), SMS/ text message (95.42 %), camera and gallery (94.16 %), music/MX player (92.08 %), alarm and calendar (95.83 %), calculator (95.00 %), internet (90.00 %) and playing games (92.08 %). Between 80 - 90 per cent had knowledge with respect to social networks (89.58 %), FM radio (87.92 %), dictionary (88.75 %), shopping apps (81.67 %) and educational apps (85.41 %). Knowledge index of

girls was 88.02, boys 92.80 and total 90.41. As the rural youth were possessing own mobile phones and aware of maximum features due to the usefulness of features in different situations. They also gained knowledge of various features which is shown by high knowledge index. Rural youth not only had knowledge of call making, text message but also other features like camera, cam scanner, gallery, photo shop, chrome, FM radio, google map, music, you tube and various online and offline games. They had knowledge about educational applications like dictionary, general knowledge, student app, google classroom, my homework student planner, e-learning apps *etc.* (Table 3). The study conducted by Jha *et al.* (2014) also reported similar findings as cent percent of farmers had knowledge about call making and call receiving and more than 70 per cent had knowledge about other features.

Table 3. Knowledge of respondents regarding mobile phone features
n = 240

Mobile features	Knowledge		
	Girls (120)	Boys (120)	Total (240)
	Yes F (%)	Yes F (%)	F (%)
Call making	116 (96.66)	117 (97.50)	233 (97.08)
SMS/ text message	117 (97.50)	112 (93.33)	229 (95.42)
Camera and gallery	115 (95.83)	111 (92.50)	226 (94.16)
Social networks	101 (84.16)	114 (95.00)	215 (89.58)
Music/MX player	110 (91.66)	111 (92.50)	221 (92.08)
FM radio	99 (82.50)	112 (93.33)	211 (87.92)
Alarm and calendar	115 (95.83)	115 (95.83)	230 (95.83)
Calculator	112 (93.33)	116 (96.66)	228 (95.00)
Dictionary	101 (84.16)	112 (93.33)	213 (88.75)
Internet	105 (87.50)	111 (92.50)	216 (90.00)
Shopping apps	93 (77.50)	103 (85.83)	196 (81.67)
Playing games	107 (89.16)	114 (95.00)	221 (92.08)
Educational apps	99 (82.50)	106 (88.33)	205 (85.41)
Knowledge index	88.02	92.80	90.41

Table 3a. Knowledge level of respondents regarding mobile phones
n = 240

Knowledge	Girls	Boys	Total
	F (%)	F (%)	F (%)
Low (1-9)	0 (0.00)	0 (0.00)	0 (0.00)
Medium (10-19)	1 (0.83)	2 (1.67)	3 (1.25)
High (20-28)	119 (99.17)	118 (98.33)	237 (98.75)

Knowledge level of respondents regarding mobile phones

Nearly cent per cent of the girls (99.17 %), boys (98.33 %) and total (98.75 %) belonged to high knowledge level. Only 0.83, 1.67 and 1.25 per cent of the girls, boys and total respectively were having medium level of knowledge. None of the respondents were at low level knowledge. Due to the knowledge of both boys and girls regarding most of the features nearly cent per cent of the boys and girls fall in high knowledge level (Table 3a). The study conducted by Jha *et al.* (2014) also showed that majority of the farmers had high knowledge level about call making and call receiving.

Usage of mobile phone features among respondents

Both boys and girls usage index of call making feature was 100. In case of girls usage index was more than 90 for the features SMS/ text message (96.66), camera and gallery (95.00), music/MX player (94.16), dictionary (93.33). It was between 80 - 90 for the features social networks (88.33), FM radio (80.83), alarm and calendar (89.16), calculator (88.33) and internet (80.83) but it was between 70 - 80 for the features shopping apps (76.66), playing games (70.83) and educational apps (78.33) But with regard to boys usage index was more than 90 for all the features

Table 4. Usage of mobile phone features among respondents

n=240

Mobile features	Usage							
	Girls				Boys			
	Regularly F (%)	Sometimes F (%)	Never F (%)	Index	Regularly F (%)	Sometimes F (%)	Never F (%)	Index
Call making	63 (52.50)	57 (47.50)	0 (0.00)	100	99 (82.50)	21 (17.50)	0 (0.00)	100
SMS/ text message	56 (46.66)	60 (50.00)	4 (3.33)	96.66	84 (70.00)	35 (29.16)	1 (0.83)	99.16
Camera and gallery	56 (46.66)	58 (48.33)	6 (5.00)	95.00	86 (71.66)	29 (24.16)	5 (4.16)	95.83
Social networks	45 (37.50)	61 (50.83)	14 (11.66)	88.33	90 (75.00)	24 (20.00)	6 (5.00)	95.00
Music/MX player	41 (34.16)	72 (60.00)	7 (5.83)	94.16	79 (65.83)	34 (28.33)	7 (5.83)	94.16
FM radio	28 (23.33)	69 (57.50)	23 (19.16)	80.83	72 (60.00)	36 (30.00)	12 (10.00)	90.00
Alarm and calendar	51 (42.50)	56 (46.66)	13 (10.83)	89.16	87 (72.50)	27 (22.50)	6 (5.00)	95.00
Calculator	42 (35.00)	64 (53.33)	14 (11.66)	88.33	75 (62.50)	40 (33.33)	5 (4.16)	95.83
Dictionary	55 (45.83)	57 (47.50)	8 (6.66)	93.33	68 (56.66)	47 (39.16)	5 (4.16)	95.83
Internet	36 (30.00)	61 (50.83)	23 (19.16)	80.83	70 (58.33)	42 (35.00)	8 (6.66)	93.33
Shopping apps	23 (19.16)	69 (57.50)	28 (23.33)	76.66	67 (55.83)	42 (35.00)	11 (9.16)	90.83
Playing games	29 (24.16)	56 (46.66)	35 (29.16)	70.83	74 (61.66)	39 (32.50)	7 (5.83)	94.16
Educational apps	37 (30.83)	57 (47.50)	26 (21.66)	78.33	68 (56.66)	35 (29.16)	17 (17.16)	85.83
Usage index	84.16				93.03			

Table 4a. Usage level of respondents regarding mobile phones

Usage	n = 240		
	Girls F (%)	Boys F (%)	Total F (%)
Low (1-14)	0 (0.00)	0 (0.00)	0 (0.00)
Medium (15-28)	51 (42.50)	17 (14.17)	68 (28.33)
High (29-42)	69 (57.50)	103 (85.83)	172 (71.67)

like call making (99.16), camera and gallery (95.83), social networks (90.00), music/ MX player (94.16), FM radio (90.00), alarm and calendar (95.00), calculator (95.83), dictionary (95.83), internet (93.33), shopping apps (90.83) and playing games (94.16). Only in case of educational apps it was 85.83. The total usage index of girls was lower (84.16) compared to boys (93.03). Both rural boys and girls had high awareness and high knowledge about mobile features hence their usage is also high in case of all types of features (Table 4).

Usage level of respondents regarding mobile phones

The usage level of respondents regarding mobile phones indicates that majority of the girls (57.50 %), boys (85.83 %) and total (71.67 %) belonged to high usage level followed by medium level with 42.50 per cent girls, 14.17 per cent boys and 28.33 per cent total respondents (Table 4a). Due to the high awareness and high knowledge, the rural youth have felt the necessity of using different features hence the results. Rural boys use all the mobile phone features without limitations and girls use with some limitations. Hence, majority of the rural boys were high users and in case of girls almost half of them were medium users and remaining half were high users. Due to increasing level of education in rural families and the necessity of communication has made the rural families to allow their children to use mobile phones for different purposes. The findings of Sharma and Malaviya (2004) also reported that nearly 40 per cent of the girl students had medium level of internet utilization.

Comparison of boys and girls regarding awareness, knowledge and usage of mobile phones

Significant difference was observed between boys and girls regarding usage, but there was no significant difference between boys and girls regarding awareness and knowledge of mobile phones (Table 5). The usage of boys was higher than girls. As said earlier both rural boys and girls were highly aware and had high knowledge about mobile features. Hence, there was no much difference between boys and girls regarding awareness and knowledge. In case of usage, there was significant difference between rural boys and girls with boys using more mobile phones than girls. Usage is personal and girls have their own obstacles to use it frequently at home hence the result. Thanuskodi (2013) also reported that there was significant difference between male and female students with respect to accessing internet.

Rank wise favourite mobile features among rural youth

In case of preferences of mobile phone features (Table 6), both boys and girls have given first rank to social networks and

Table 5. Comparison of boys and girls regarding awareness, knowledge and usage of mobile phones

Gender	n = 240		
	Girls (Mean)	Boys (Mean)	't' value
Awareness	27.15	27.25	0.44 NS
Knowledge	26.33	26.99	2.29 NS
Usage	30.61	35.98	7.81**

Table 6. Rank wise favourite mobile features among rural youth n=240

Mobile features	Boys		Girls	
	Average	Garrett rank	Average	Garrett rank
Call making	56.50	V	55.30	VI
SMS / Text message	56.05	VI	59.49	V
Camera & gallery	59.16	IV	59.75	IV
Social networks	70.70	I	70.16	I
Music/ MX player/				
Video player	53.62	VII	53.52	VIII
FM radio	37.00	XI	36.51	XI
Alarm & Calendar	32.67	XIII	32.10	XIII
Calculator	34.14	XII	33.15	XII
Dictionary	46.42	IX	48.29	X
Internet	69.12	III	68.25	II
Shopping apps	46.18	X	48.62	IX
Playing games	70.72	II	67.81	III
Educational apps	53.01	VIII	54.46	VII

last rank to alarm and calendar. Further, girls have given second rank to internet, third rank to playing games, fourth rank to camera & gallery, fifth to SMS / text message, sixth to call making, seventh to educational apps, eighth to music /MX player, ninth to shopping apps, tenth to dictionary, eleventh to FM radio and twelfth rank was given to calculator. Among boys second rank was games, third to internet, fourth to camera & gallery, fifth to call making, sixth to SMS / text message, seventh to music / MX player, eighth to educational apps, ninth to dictionary, tenth to shopping apps, eleventh to FM radio, twelfth rank was given to calculator. Both boys and girls of rural area want to use social network feature than any other features in the mobiles. The purpose of putting internet pack itself is accessing social network among rural youth. Through this they want to expand their communication network. Boys are more interested in games activities like fruit ninja, temple run, bubble shooter, sub way surf, gun shoot, fire wall, race, doctor driving whereas girls prefer internet to see online products like dress, cosmetics *etc.* The least rank was given to alarm and calendar by both boys and girls. The reason behind this may be having other sources apart from mobiles for alarm and calendar. Haque *et al.* (2016) also found that most of the medical students were using internet for social networks and entertainment.

Conclusion

There is significant difference between boys and girls with regard to usage of mobile phones but there was no significant difference between boys and girls with respect to awareness and knowledge. Both boys and girls were with same educational background and hence there was no difference in their

awareness and knowledge. But as girls have some restrictions from the parents, they spend less money on mobiles and their usage level is lower than the boys. As we are in the ICT era the

parents should be educated about the necessity for the girls also to use mobiles which may help in reducing the differences between boys and girls usage.

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