

RESEARCH ARTICLE :

Information and communication technology (ICT) applications based for adults learning styles on KVK Rudrur in Nizamabad district, Telangana

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SUMMARY : Learning has a cognitive, affective and behavioral characteristic, based on seeing, interacting and responding to methods in learning. Individual learning style refers to style or learning methods used in the process of learning. The VARK profile version 7.0, developed by Flemming (2006) was adopted for the study. VARK© inventory (V) visual, (A) aural, (R) read/write, and (K) kinesthetic learning modalities) is one such tool that is easy to use and can give adults information on how to maximize their learning. The study was conducted in kvk Rudrur 5 adapted villages in Nizamabad district. A total of 150 kvk clientele adults were selected as the sample of the study following proportionate random sampling technique. Data were collected using interview schedule during 2016. Simple statistics like number, Frequency, Percentage and mean were used. The results adults learning style that multi device users were high (60.00%), followed by two (30.66%) and remaining were (9.33%) device users. Among multi device users, bimodal learning style was predominant (20.66%), followed by auditory (16%). Visual and auditory learners were more on two device user category. Multi learning style respondents were using multi device users.

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BACKGROUND AND OBJECTIVES

The very expression Information and Communication Technology has lots of built in ideas. It is not just using gadgets.; the focus is on what is being transacted through this medium. It is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular

phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications. The term ICT is also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. However, ICT has no universal definition, because the concepts, methods and applications involved

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in ICT are constantly evolving on an almost daily basis. The broadness of ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form, e.g. personal computers, digital television, email, robots, CDs etc.

Jain *et al.* (2012) in the context of their study on access, use and impact of ICTs on farm women, reported the access to ICTs was found to be improving the income of farm women households and increase their participation in the decision-making. They concluded that access of ICT to farm women is largely determined by the socio-economic status and educational status of the household. Women farmers reported use of ICT for treatment of sick animals as well as for getting knowledge of the latest prices of vegetable produce. Interestingly, many women farmers having access to ICT were also not able to use ICT because of lack of time and language.

IAMAI and IMRB International (2013) in their study jointly conducted in 35 cities across seven states found that, regional language content availability can boost the growth of internet in India by 24 per cent. The study identified local language as the single largest driver of internet growth in rural areas, as 43 per cent of the non-users of internet in rural areas have said that they would adopt the medium if the content is provided in local languages. In urban areas, the same number stood at 13.5%. Another important finding of survey was the vernacular sites are growing at 56 % year after year, whereas English sites just by 11%. The fastest growing websites in India are now vernacular news sites and the consumption is growing five times as compared to English.

The study further revealed that, rural segment application usage among local language users were to listen/watch/upload/download the music/videos/photos/movies accounted to 52%, mobile Value Added Services downloads like ringtones, wallpaper etc were 46%, social networking websites were 44%, emails 43% and whereas for text chat and chatting on social networking website it was 20 and 25 %, respectively. There exist gender differences in internet presence in which 39% were female and 61% were males.

Kameswari (2011), in the context of ICTs in agricultural extension found farmers in the age category between 35 and 45 years. The majority of respondents (39%) was above the age of 45 years and many of them were exarmy personnel. Further,

only 9% of the respondents had no formal education. This is a reflection of the high literacy rate (72%) in the state, which is above the national average of 64.84%. It also indicates that use of ICTs in the state may not be constrained due to lack of formal education among the users, especially if there is adequate and appropriate content in the local language (Hindi/Kumaoni/Garhwali).

Mikre (2011) discussed the roles of ICT in education with emphasis to the computer and internet through review of relevant research articles. The review concluded that regardless of all the limitations characterizing it, ICT benefits education systems to provide quality education in alignment with constructivism, which is a contemporary paradigm of learning. The computer and the internet are especially useful to enhance student engagement in learning and positively impacts student performance and achievement. He recommended the mainstreaming of ICT utilization, particularly the computer and internet in education systems, for they benefit curriculum implementation and enhanced student learning. Therefore, education policy makers, educators and all concerned should evaluate and recognize the roles of ICT in education in order to work for the effective functioning of this technology in their education systems.

RESOURCES AND METHODS

An exploratory research design was adopted to conduct the present study. The VARK profile version 7.0, developed by Flemming (2006) was adopted for the study. VARK© inventory (V) visual, (A) aural, (R) read/write, and (K) kinesthetic learning modalities). The study was conducted in kvk Rudrur 5 adapted villages (Beerkur, Kistapur, Malkapur, Ranampally, Timmapur) in Nizamabad district. A total of 150 kvk clientele adults were selected as the sample of the study following proportionate random sampling technique. As part of the studying adults learning style profile the general characters like Age, Gender, Education, Occupation and Nature of ICT usage were studied by collecting information through interview schedule.

OBSERVATIONS AND ANALYSIS

The results of the present study are presented below:

General profile of the respondents :

The adult learners were clientele from five adopted villages of KVK, Rudrur, Nizamabad district as part of the studying learning style profile the general characters like Age, Gender, Education, Occupation and Nature of ICT usage were studied by collecting information through interview schedule.

Based on Erikson's (1950) categorization, the age of the respondents were categorized as Young Adult Learners in age of 20-39 years (YAL), Middle Adult Learners 40-64 years (MAL) and Older Adult Learners 65 and above years (OAL). The highest composition of youth is evident from 3/4th of clientele (76.66%) of KVK, Rudrur were under the YAL category. The composition of MAL and OAL was 15.33% and 8%, respectively. The gender profile of the respondents includes 58.66% male and 41.33% female (Table 1).

It is interesting to note that 83% of KVK clientele were educated and only 11.33% had no education. Among the educated, highest composition was under graduation and above (45.33%), followed by intermediate whereas high school and upper primary education was found to be 14% and 8.66%, respectively.

Occupation was considered as the type of work the clientele was engaged in either to earn livelihood or to acquire skill. Farming could be inferred as important

livelihood from the data. Whether employed or self-employed the clientele were continuing with farming. This must be the reason, for their participation in KVK activities. Those who completed studies and preparing for competitive examinations to get employment, were considered as occupation aspirants, consists of 22% of clientele group.

ICT usage :

Whether rural or urban, the use of electronic gadgets has enlarged to a great extent with the advent of information and communication technology. That is evident from the Table 1.

Highest use of Television (88.66%) as ICT device, followed by mobile (78%) was evident from the data. Up to a considerable account (47.33 %) the apps use was existing. Use of radio was less (18.66%) than, the use of internet (26.66%), newspaper (22.66) and books (21.33%).

Television, as an edutainment device has deeply penetrated in to rural life. With the introduction of text SMS alerts to farmers regarding, weather, market intelligence, crop production, etc., both by the Government and Non-Government organization, usage of mobile has tremendously increased. Purohit (2015) remarked that India houses approximately 720 million mobile phone

Fomal education	Beerkur	Kistapur	Malkapur	Ranampally	Timmapur	Total
News paper	5 (16.66)	12 (40.00)	10 (33.33)	5 (16.66)	2 (6.66)	34 (22.66)
Books	5 (16.66)	12 (40.00)	4 (13.33)	5 (16.66)	6 (20.00)	32 (21.33)
Mobile phone	23 (76.66)	18 (60.00)	24 (80.00)	26 (86.66)	26 (86.66)	117 (78.00)
Tele vision	27 (90.00)	27 (90.00)	29 (96.66)	23 (76.66)	27 (90.00)	133 (88.66)
Radio	6 (20.00)	3 (10.00)	5 (16.66)	8 (26.66)	6 (20.00)	28 (18.66)
Internet	7 (23.33)	8 (26.66)	7 (23.33)	12 (40.00)	6 (20.00)	40 (26.66)
Apps	13 (43.33)	7 (23.33)	14 (46.66)	17 (56.66)	20 (66.66)	71 (47.33)

Figures in parentheses indicate percentage

n1 Beerkur, n2 Kistapur, n3 Malkapur, n4Ranampally, n5 Timmapur

Leaming style	ICT device usage		
	One	Two	Multi
Unimodal V	4.00	8.66	4.66
A	1.33	9.33	16.00
R	--	0.66	9.33
K	2.66	6.00	7.33
Bimodal	0.66	6.00	20.66
Trimodal	0.66	--	0.66
Multimodal	--	--	1.33
Total	9.33	30.66	60.00

users, out of which 320 million are rural mobile phone users- roughly 38 per cent of the rural population, which includes children and senior citizens also. According to Counterpoint Technology Market Research, this is an increase from 22 per cent penetration in 2010.

Arora (2016) published in The times of India, that rural mobile internet users are growing, yet only nine per cent of the rural area has access to internet. In comparison, 53% of urban areas had mobile internet connectivity and grew at 71% during the same period, thereby highlighting the urban-rural divide in the country. In the present study the use of internet was up to 47%. If access to mobile internet enlarges, internet as well as apps usage would go up. Use of more ICT devices may be predicted to need for new, timely, authentic and quality information. However, radio has to be brought to the forefront, because it covers entire geographical area. Paying no cost one can access information easily, that too in vernacular language.

Further analysis of data, revealed that around 60 % of the respondents used more than two ICT devices, while 30% and 10%, respectively were using two devices and single device. Mobile phone was found to be high under single device usage.

ICT usage on learning style :

In order to investigate to understand whether learning styles and number of ICT devices used by the respondents has any relation, the respondents were divided into one device, two device and multi device users. Multi device users were those who were using more than two devices.

It can be inferred from the above table, that multi device users were high (60.00%), followed by two (30.66%) and remaining were (9.33%) device users. Among multi device users, bimodal learning style was predominant (20.66%), followed by auditory (16%). Visual and auditory learners were more on two device user category. Multi learning style respondents were using multi device users.

Adults need a practical approach to learning. They may understand the importance of keeping up with changes impacting their life or their profession, but they are rarely satisfied to learn about some skill or information for future use. They want immediate applicability. They learn best when they perceive there is a connection between the training and their goals. Because of this reason, the respondents who are adult learners were

using many devices either to access information or for any other communication. More over the need for multi ICT devices is also increasing almost in proportion to their availability in market. Being the learners with more than one learning style, they might be using multi devices. In course of time the learning style may also change as found by Gulpinar *et al.* (2011). They found that changes in learning styles occurred in two years of duration, however at varied degree depending on the curriculum. The learning style change was reported to be high in problem based learning curriculum.

Conclusion :

More over the need for multi ICT devices is also increasing almost in proportion to their availability in market. Being the learners with more than one learning style, they might be using multi devices. It can be concluded that multi ICT device users were more among male than single and devices two users. With regard to female both two and multi device users were equal. Among multi ICT users, YAL were very high than MAL and OAL. With the level of formal education, multi users were increasing. In the context of occupation, those who were engaged in two occupations out of which one is farming, using multi devices. Overall, the clientele group was felt potential and making use of KVK services and taking part in its activities.

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