

ROLE AND EFFECTIVENESS OF ELECTRONIC MEDIA IN HIGHER EDUCATION-WITH SPECIAL REFERENCE TO TAMILNADU

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ABSTRACT

Radio has been the most economical, long-standing and the most widely present among various electronic media. Despite the arrival of various media options, radio continues to remain as one of the dominant media among the public. Reports confirm that it has supported educational programs in a wide range of subject areas in many different countries.

In this context, a research study was conducted on the patterns of radio listening among different categories of students such as urban and rural, male and female, distance and regular modes, English and other mediums of various branches of study. Examining notions on the possession, purpose, place, frequency, timing and duration of usage of radio programs in higher education in general and specific educational channel in particular, the study has assessed the outcomes indicated by user-satisfaction on radio.

Findings of the study revealed that there is inadequate knowledge among students about the existence of educational radio. Opinions on program quality suggested a number of improvements to be made in order to enhance the reach of the media. The suggestions include the need to make the programs more interactive, localized and curriculum-based.

Keywords: Educational Radio; Gyanvani; Listening pattern; Awareness of Radio; Possession of Radio; Mode of study, Anna University.

INTRODUCTION

Radio as a medium for information and communication to the masses is predicted to retain its relevance and potency. In particular its reach and efficacy as an educational medium is finding increasing relevance in the wake of information explosion and multiplication of choices available to a student in recent times.

Radio is by far the most extensive network. Radio signals cover almost the entire country. A parallel development sweeping the field of electronic audio media is a successful introduction, meteoric rise and spread of FM radio channels run by both public and private initiatives. Community radio is now booming through out India.

REVIEW OF LITERATURE

In 1956, India was the site of the famous Pune Radio Farm Forum Project. The United Nations Educational Science and Cultural Organizations (UNESCO) sponsored 'Pune' Project was inspired by Canada's experience with radio farm forums in the 1940s. The Pune Project was a field experiment to evaluate the effects of radio farm forums, each consisting of several dozens of villagers who gathered weekly to listen to a half-hour radio program (broadcast by AIR) and then to discuss its contents.

All India Radio's (AIR) development programming range is the use of entertainment - instruction serials. As defined previously, entertainment - instruction is the process of purposely designing and implementing a media message to both entertain and educate, in order to increase audience's knowledge about an educational issue, create favorable attitudes, and change overt behavior (Singhal 1999, Rogers 1999).

Entertainment-education seeks to capitalize on the popular appeal of entertainment media in order to show individuals how they can live safer, healthier, and happier lives. Since 1987, the Central Educational Broadcasting Unit (CEBU) of AIR has produced several entertainments - education.

The National Broadcasting Company (NBC) transmitted the experimental program from the third floor of the Radio Corporation of America (RCA) building to 25 receivers watched by the students on the 62nd floor in 1938. The show was 45 minutes long and students asked questions via a two-way radio communication and were answered by the instructor on the screen (Inglis 1990).

With the expanding and enormous capacity of radio to deliver their goods to the people many new channels have emerged. Moreover, they are working for almost 24 hours a day. This has encouraged the authorities to start Gyan Darshan (GD) on television and GV (GV) for radio. These channels are dedicated to transmit educational programs. As per the planning of GV in future to start more than hundred FM educational radio stations would come up in the country. In the later planning more FM stations are expected to be allocated for the purpose of education and development.

A study tried to gauge the situation pertaining to radio listening and number of FM sets. It also includes the concept of educational programs on radio. The study having sample of 100 FM radio household in urban area and equal number in rural was recently conducted by AIR Ahmedabad. This suggests that in urban areas, there was higher listening compared to rural area. The average listening among total respondents was 85%.

In a study conducted by Kumar, A. (2002), it was found that 15% of academic counselors in the Indira Gandhi National Open University (IGNOU) have been using radio programs including GV (GV) for their core academic activities.

Computers and Internet have started influencing the way we learn. Radio is still a dominant medium with wide access. All these media are very powerful to reach, teach and enrich. Basic tips to learn from broadcast (TV, Radio) and non-broadcast (Audio, Video) media have been provided (Singhal and Rogers 2001).

Reports confirm that it has supported educational programs in a wide range of subject areas in many different countries.

In Thailand, the radio is used to teach mathematics to school children (Galda, 1984), and for teacher training and other curricula (Faulder, 1984).

It I used in India for rural development (Long, 1984). Swaziland, for public health purposes (Byram & Kidd, 1983), Columbia, for various programs. Nigeria, for management courses for the agriculture sector (Shears, 1984). Nicaragua, for health education and Phillipines uses the radio for nutrition education (Cooke 1977, Romweder 1977). Sri Lanka, for family planning and health (Academy for Educational Development, 1980). South Korea, in support of family planning (Park, 1967). Botswana, for civics education (Byram 1980, Kaute 1980, Matenge 1980). The Dominion Republic, in support of primary education (White, 1976) Paraguay, to offer primary school instruction (Academy for Educational Development, 1979).

Review of literature suggested that there are number of educational courses that rely on educational radio, more so in case of distance education. Education has become technology and media enabled worldwide. Given this backdrop, the study was conducted to examine the situation in Indian conditions.

The focus of the study was to trace the pattern of radio listening and its usage among graduate students, especially with regard to the exposure, place of access, purpose of use and perceived benefits. The study also attempted to find out the variations in the pattern of usage of radio among students of different demographic characteristics especially with regard to frequency and approximate time spent on radio.

METHODOLOGY

Methods play a major role in every research. This study has adopted the survey method. The research has adopted a descriptive research design, involving the portrayal of behavior patterns with regard to usage of educational media among different categories of students.

The study universe consisted of the entire set of student population in the graduate level in the state of Tamilnadu. The size of the universe has been estimated to be over 7 lakhs. According to the statistical handbook 2005, brought out by Department of Economics and Statistics, Government of Tamilnadu, a total of 7.02 lakhs students are studying in all the three to four years of under-graduation in various colleges. A total of 14,000 respondents (2%) of the universe have been covered as the sample.

Sample for this study was selected from among the under graduate students of regular and distance mode streams in Tamilnadu. The sample also comprised urban and rural students. Samples were drawn from different type of colleges like Arts, Science, Commerce, Engineering and Technology, Medicine and Agriculture.

Total numbers of respondents whose responses were taken up for analysis were 11,760. In total 5,880 from regular (2,940 samples from urban and 2,940 students from rural), and 5,880 from distance mode (2,940 samples from urban and 2,940 from rural) were selected.

Totally 14 places were selected for this study. All the seven major city areas in Tamilnadu were chosen. In comparison, seven small towns were also included. Data were gathered using a self-administered questionnaire prepared specially for these purpose. The variables used in the study have been derived from the contents of a focused group discussion held with a group of students on the theme of educational media.

Over 1,000 questionnaires were collected from colleges offering regular courses as well as from study centers under Distance Education in each of the places. Based on the average of incomplete responses, the researcher has taken up 840 respondents from each place for the final analysis.

The data was collected during the period from January 2005 to March 2006. The chi-square test, simple percentage, Friedman's two-way anova and cross-tabulation were used for the analysis of this study.

DATA EXPERIENCES

The researcher observed that many of the students had come to know for the first time, about some of the media opportunities available, only at the time of research, by going through the questionnaire.

The students expressed regret about the fact that no one had briefed them about the need to use various educational media. The researcher also found that management bodies of many colleges were quite averse to the idea of researching media usage among their students.

A notable facet that was exposed during the data collection was that many Principals and Faculty Members were ignorant about the latest educational media and programs available.

ANALYSIS (RESULTS AND DISCUSSION)

The ensuing part of the article presents the demographic details of the respondents in terms of their place of living, gender, age and academic details like the courses pursued by the candidates and their modes of study.

Respondents of the study were drawn from the districts of the entire state in order to make the study representative of the whole state.

DISTRIBUTION OF STUDENTS BY THEIR PLACE OF LIVING

The researcher felt that their place of living might have a significant bearing on their responses to various other questions of this study. Respondents for the purpose of this study were drawn from fourteen locations in the state of Tamilnadu an equal number of 840 have been drawn from each location.

The places of living are Chennai – I, Chennai – II, Kanchipuram, Thiruvannamalai, Villupuram, Salem, Erode, Kovai, Trichy, Tanjore, Dindigul, Madurai, Tirnelveli and Tuticorin respectively.

SAMPLE COMPOSITION

The Table: 1 reveals that there have been more male respondents than female. 56.90% were male while the remaining 43.10% were female.

This percentage, though unequal in numbers, could be stated to reflect the same proportion of men and women enrolling themselves for studies in the universe of the study. Needs and wants of people tend to differ with their age in general.

Further, age factor could heighten the level of exposure a person is likely to have. Since all the respondents were students, a vast majority of them would belong to a narrow range of age group, namely 17 to 30. Hence their age groups were grouped at narrow intervals.

6146 (52.26%) were under the age group 17 – 20, while 4438 (37.74%) were under the age group 21 – 25 and the remaining 1176 (10%) were under the age group above 25 yrs.

Thus it may be seen that the study has covered more of undergraduate students, reflecting their relative proportion in the actual student population.

Table: 1
Sample composition

<i>VARIABLE</i>	<i>FREQUENCY</i>	<i>PERCENTAGE</i>
<i>Mode of study</i>		
Regular	5880	50.00
Distance	5880	50.00
Total	11760	100.00
<i>Gender</i>		
Male	6692	56.90
Female	5068	43.10
Total	11760	100.00
<i>Age group</i>		
17 – 20	6146	52.26
21 – 25	4438	37.74
> 25	1176	10.00
Total	11760	100.00
<i>Course of study</i>		
B.A.	3304	28.10
B.Sc.	3920	33.33
B.E.	1778	15.12
B.Com.	1498	12.74
Others	1260	10.71
Total	11760	100.00
<i>Years of study</i>		
I year	1302	11.07
II year	4802	40.83
III year	5180	44.05
IV year	476	4.05
Total	11760	100.00
<i>Area of Institution</i>		
Rural	5880	50.00
Urban	5880	50.00
Total	11760	100.00
<i>Medium of instruction</i>		
English	10976	93.33
Tamil	784	6.67
Total	11760	100.00

The researcher felt the need for diversity of respondents in terms of the courses they pursue, so as to bring in the pluralist perspective on the usage of media.

Out of the total, 28% have their course of study as B. A. (Literature, History, Economics) while 33.33% have their course of study as B. Sc. (Math, Physics, Chemistry, Zoology, Botany, Electronic Media, Visual communication), and the rest of them were B.E, B.Com and other courses than those mentioned above.

Other courses include those that are pursued by a small segment of student population, such as business administration, library sciences, pharmacology, etc.

From the distribution of respondents in terms of the courses, it may be seen that no group has been left out or over represented in the study. More than nine of ten respondents 93.33% have had English as the medium of instruction while 6.67% have Tamil as the medium of instruction. Of the respondents, 50% belonged to Institutions located in rural area (towns and surroundings area) while the remaining 50% belong to Institutions located in urban area (cities and surrounding area).

POSSESSION OF RADIO

The Table: 2 show that vast majority of respondents (90.24%) own radio sets. Only 9.76% of respondents not own radio sets

Table: 2
Possession of Radio

<i>Possession</i>	<i>Frequency</i>	<i>Percentage</i>
Radio	10612	90.24
Yes	1148	9.76
No		
Total	11760	100.00

POSSESSION OF RADIO AND MODE OF STUDY, AREA OF INSTITUTION AND MEDIUM OF INSTRUCTION

Table: 3
Distribution of students by Possession of media Instruments and Mode of study, Area of Institution and Medium of Instruction

<i>Mode of study</i>	<i>POSSESSION OF RADIO</i>				<i>TOTAL</i>	
	<i>Regular</i>		<i>Distance</i>			
	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
	5236	49.34	5376	50.66	10612	100
<i>Area of Institution</i>	<i>Rural</i>		<i>Urban</i>			
	5236	49.34	5376	50.66	10612	100
<i>Medium of Instruction</i>	<i>English</i>		<i>Tamil</i>			
	9940	93.67	672	6.33	10612	100

The Table: 3 has revealed that majority (50.66%) of the students of distance education are in possession of radio, which is slightly higher than their counterparts in the regular streams of education.

With regard to the distribution of respondents as per their possession of radio, the majority (50.66%) of the students of urban areas are found to possess radio, while the rural students are slightly lesser in percentage in terms of ownership of radio. The ratio between the rural and urban students is the same as that of students of regular versus distance education.

The Table reveals that students tend to vastly differ in their possession, when categorized as English and Tamil medium students. It is seen that a vast majority of

93.67% of the students of English medium are in possession of radio, while those of Tamil medium constitute a mere 6.33% of the total number of students in possession of radio.

USAGE PATTERN OF VARIOUS ELECTRONIC MEDIA BY HIGHER EDUCATION STUDENTS

Table: 4
Distribution of students by Radio listening pattern

<i>VARIABLE</i>	<i>FREQUENCY</i>	<i>PERCENTAGE</i>
<i>Listening to radio</i>		
Everyday in a week	4200	35.71
4 to 5 days in a week	1778	15.12
2 to 3 days in a week	1092	9.29
Once a week	1050	8.93
Rarely	1512	12.86
Never listen	2128	18.10
Total	11760	100.00
<i>Approximate time</i>		
Above than 120 min.	1204	10.24
60 – 120 min.	1596	13.57
30 – 60 min.	3262	27.74
Less than 30 min.	3570	30.36
Do not listen	2128	18.10
Total	11760	100.00
<i>Place of listening to radio</i>		
Home	8414	87.35
Study Place	854	8.87
Friends place	2226	23.11
Office	266	2.76
Cyber cafes	462	4.80
<i>Programs generally listened on radio</i>		
Education	3570	37.06
Entertainment	8120	84.30
Science	2800	29.07
Others	504	5.23
<i>Aware of GV radio programs</i>		
Yes	1904	19.77
No	7728	80.23
Total	9632	100.00

While 35.71% of the respondents who listen to radio everyday in a week form the maximum listening group (see Table:4), 15.12% listen to radio 4 to 5 days in a week, 8.93% listen to radio once a week and 12.86% listen to radio rarely.

It is found that 18.10% never listen to radio. Combining the segment listening to radio every day and at least 4 to 5 times a week, it may be stated that majority of the respondents tend to be frequent listeners of radio.

However, there remains to be a sizeable segment of nearly one third of the total respondents whose radio usage is almost non-existent to produce any impact.

While 30.36% listen to radio less than 30 min. (see Table: 4), 27.74% listen to radio 30–60 min., 18.10% do not listen to radio, 13.57% listen to radio 60–120 min. and 10.24% listen to radio above than 120 min.

With regard to the time spent on listening to radio, the emergent data shows a divergence among respondents, with respondents' time ranging from nothing to two hours a week, which could be interpreted to be offering a considerable scope for increase.

Summing up the responses, it is found that 87.35% listen to radio at home, 23.11% listen to radio at friends place (see Table: 4) and others listen to radio at their office, friends' places or at cyber cafes.

Data indicate that home is the most common place where respondents have been listening to radio, thereby suggesting that timing of the educational programs through radio should match with the time when people remain at their homes. With a view to ascertain the purpose of listening to radio, respondents' listening patterns were further enquired.

It was found that 37.06% listen to radio for education (see Table: 4), 84.30% listen to radio for entertainment, 29.07% listen to radio for science and 5.23% listen to radio for purposes other than those mentioned above.

Analyzing the data on the purposes of listening to radio, there seems to be a lot to be desired as the majority of respondents have reported that they do not listen to radio for education or for science programs.

At present, educational radio programs are brought out predominantly by the state run Aakash vaani, with the unique title of GV. A question was put forth before the respondents as to whether they tune in to these programs.

It was found that only 19.77% were aware of GV radio programs (see Table:4), while 80.23% were not aware of GV radio programs.

From the analysis it is seen that a vast majority have not even been aware of the existence of such a program, which could render the programs grossly underutilized.

The purpose of the study was to examine the media usage among students with a view to enhance the reach, effectiveness and utilization of these media. Independent variables like the place of study and mode of study of the respondents have been correlated with their media usage patterns, so that educational media planners could be offered sound bases.

Modes of study, namely regular and distance modes differ vastly in their nature and style of education.

As frequency of interaction with teachers and geographical proximity to the institutes are greater in the regular mode than in the distance mode, there is a general expectation that the latter would opt for sourcing academic inputs from mass media like radio and TV, the two types of media found to be used by most of the respondents.

In the light of the above discussion, the researcher proceeded to analyze the possible correlation between the modes of education with the usage of radio. Chi-square analysis was done to understand the relation.

INTERPRETATIVE ANALYSIS ON RADIO LISTENING LISTENING TO RADIO AND MODE OF STUDY

Table: 5
Listening to radio and Mode of study

<i>LISTENING TO RADIO</i>	<i>MODE OF STUDY</i>		<i>Total</i>	<i>Chi-square value</i>	<i>p value</i>
	<i>Regular</i>	<i>Distance</i>			
Every day in a week	2254 (2100.0)	1946 (2100.0)	4200	363.50	0.000**
4 to 5 days in a week	672 (889.0)	1106 (889.0)	1778		
2 to 3 days in a week	350 (546.0)	742 (546.0)	1092		
Once in a week	504 (525.0)	546 (525.0)	1050		
Rarely	910 (756.0)	602 (756.0)	1512		
Never listen	1190 (1064.0)	938 (1064.0)	2128		
Total	5880	5880	11760		

Note: The value within bracket refers to Expected frequency. ** denotes significant at 1% level. Since *p* value is less than 0.01 the null hypothesis is rejected at 1% level of significance.

LISTENING TO RADIO AND AREA OF INSTITUTION

Table: 6
Listening to radio and Area of institution

<i>LISTENING TO RADIO</i>	<i>AREA OF INSTITUTION</i>		<i>Total</i>	<i>Chi-square value</i>	<i>P value</i>
	<i>Rural</i>	<i>Urban</i>			
Every day in a week	2128 (2100.0)	2072 (2100.0)	4200	65.63	0.000* *
4 to 5 days in a week	938 (889.0)	840 (889.0)	1778		
2 to 3 days in a week	490 (546.0)	602 (546.0)	1092		
Once in a week	602 (525.0)	448 (525.0)	1050		
Rarely	658 (756.0)	854 (756.0)	1512		
Never listen	1064 (1064.0)	1064 (1064.0)	2128		
Total	5880	5880	11760		

Hence it can be concluded that there is significant relationship between mode of study and listening to radio (see Table: 5). This could mean that the two streams would differ in their usage of radio, as they have similar syllabus but dissimilar teaching-interaction process.

Urban and rural milieu of students tend to differ in the available levels of exposure to co-curricular events, access to educational services like counseling and library services. In the absence of multiple forms of educational assistance, there is a greater likelihood of students becoming dependent on the mass media as a one-stop source for the fulfillment of their educational needs. It was with this assumption that the researcher endeavored to examine the correlation between place of study and the patterns of listening to radio.

The variables were put through a chi-square analysis. It was also concluded that there is significant relationship between area of institution and listening to radio (see Table:6), The result of this analysis could mean that media planners would have to focus on the target audience according to their place of study. Programs might have to be tailor made to suit the specific needs of the two categories of students.

LISTENING TO RADIO AND MEDIUM OF INSTRUCTION

Medium of instruction in higher education in most of the cases remains to be English, while the mass media offer contents both in regional languages and in English. In order to identify the possibility that mass media like radio caters to students with concerns about the medium of instructions, chi-square analysis was done to find out if there is absence of any relationship between the two variables.

There is significant relationship between medium of instruction and listening to radio, which could indicate that language plays a vital role in out-of-classroom learning. Media planners need to carefully address the issue of medium of instruction used in radio as well. On a similar note, It was also concluded that there is significant relationship between course of study and listening to radio.

The relationship could be interpreted as arising out of the differing life situations between the two types of students or the unique features of a distance learning system.

Having established the fact that radio usage is unmatched with the supply, the researcher has undertaken to analyze the various factors that could further influence the increase or decrease in the usage patterns.

This analysis is carried out in order to find clues that could be valuable in making students listen more actively to the medium. The analysis revealed that there is significant relationship between mode of study and approximate time to listen to the radio. The implication of this finding might be that different strategies would be necessary to address the distance and on-campus learners, as far as improving the time spent on listening to radio.

Hence it can be concluded that there is significant relationship between area of institution and approximate time to listen to radio. Rural and urban students spend different amount of time listening to radio, and within the attention spans of each of the categories, programs should be able to convey the important messages.

There was significant relationship also between medium of instruction and approximate time to listen to radio. Hence it is felt necessary to look into the familiar lingua franca of the local population if the average duration of listening has to be increased.

A significant relationship existed between course of study and approximate time to listen to radio. This implies that the media planners should conduct audience research and find out the subjects for which the demand for radio programs are higher and broadcast them accordingly.

AWARE OF GV PROGRAMS

Secondary data collected by the researcher showed that during later planning periods, FM radio programs are expected to be allocated for the purpose of education and development. This prompted the researcher to raise questions about the present listening patterns of these programs.

Table: 7
Aware of GV programs and variables

<i>MODE OF STUDY</i>	<i>AWARENESS OF GV PROGRAMS</i>		<i>Total</i>	<i>Chi-square value</i>	<i>p value</i>			
	<i>Regular</i>	<i>Distance</i>						
Yes	868 (927.1)	1036 (976.9)	1904	9.15	0.002**			
No	3822 (3762.9)	3906 (3965.1)	7728					
Total	4690	4942	9632					
<i>AREA OF INSTITUTION</i>	<i>Rural</i>	<i>Urban</i>						
	Yes	644 (952.0)	1260 (952.0)	1904	248.39	0.000**		
No	4172 (3864.0)	3556 (3864.0)	7728					
Total	4816	4816	9632					
<i>MEDIUM OF STUDY</i>	<i>English</i>	<i>Tamil</i>						
	Yes	1820 (1773.9)	84 (130.1)	1904	21.83	0.000**		
No	7154 (7200.1)	574 (527.9)	7728					
Total	8974	658	9632					
<i>COURSE OF STUDY</i>	<i>B.A.</i>	<i>B.Sc.</i>	<i>B.E.</i>	<i>B.Com.</i>	<i>Others</i>	<i>Total</i>		
	Yes	406 (559.0)	476 (639.3)	238 (279.5)	182 (238.0)	602 (188.2)	1904	1262.45
No	2422 (2269.0)	2758 (2594.7)	1176 (1134.5)	1022 (966.0)	350 (763.8)	7728		
Total	2828	3234	1414	1204	952	9632		

The Table: 7 have reveals that there is significant relationship between mode of study and awareness of GV radio program. The awareness could mean that there has been

a greater need for these programs in one of the modes or that more opportunities to become aware of these programs have been made available to the students of the sector.

Joshi, I (2001) in a survey found that in urban areas, there was higher listening to GV programs compared to rural areas. In order to verify this with regard to the state of Tamilnadu, the researcher has put the respondents' views on GV, to statistical test. Hence it can be concluded that there is significant relationship between area of institution and awareness of GV radio program.

This is similar to the earlier result pertaining to mode of study. Such outcomes of the research tend to stress the need to take GV to the students of those institutional areas and that mode of study which remain to be unreachable.

Since teaching-learning process is dependent on the language, a lot of schemes associated with the educational media could also be dependent on the language used for instruction in a course.

Keeping this in mind, the researcher proceeds to analyze the association of medium of instruction and awareness of GV program. Hence it can be concluded that there is significant relationship between medium of instruction and awareness of GV radio program. Previous research surveys in 1998 showed a whopping 11.6 crores of radio listeners in India.

Though the numbers of radio listeners are large, the present study shows that the percentage of students from one of the two mediums of instruction has not matched with the other in listening to educational radio broadcasts. Hence it can be concluded that there is significant relationship between course of study and awareness of GV radio program. Like the other indicators of usage of GV, awareness of GV is also found to be in need of more uniformity in terms of students' exposure and equitable access, irrespective of the variations in the modalities of education.

PERCEPTION OF GV AS HELPFUL AND AS FULFILLING REQUIREMENTS

Table: 8
Perception of GV as Helpful and as Fulfilling Requirements

<i>VARIABLES</i>	<i>FREQUENCY</i>	<i>PERCENTAGE</i>
<i>Perception of GV as Helpful</i>		
80 % - 100 %	193	10.1
60 % - 80 %	291	15.3
40 % - 60 %	462	24.3
20 % - 40 %	455	23.9
< = 20 %	503	26.4
Total	1904	100.00
<i>GV as Fulfilling Requirements</i>		
Yes	746	39.19
No	1158	60.81
Total	1904	100.00

Opinions on the exact extent of helpfulness of GV have been divided among the respondents. While there has been no majority viewpoint on this, a sizeable segment of the respondents have presented their opinions below the midpoint of 50% helpfulness (see Table: 8).

The same trend is found to be reflected in their opinion on GV whether it is fulfilling requirements of the respondents. A majority (60.81%) of the respondents have decided that GV is not fulfilling their requirements, thus indicating a matter of concern to the stakeholders of the system.

INTERPRETATIVE ANALYSIS ON RADIO PERCEPTION PERCEPTION OF GV AS HELPFULL

Table: 9
Perception of GV as helpful and Mode of study

<i>Perception of GV as Helpful</i>	<i>Mode of study</i>		<i>Total</i>	<i>Chi-square value</i>	<i>p value</i>
	<i>Regular</i>	<i>Distance</i>			
< =20%	206 (229.3)	297 (273.7)	503	16.01783	.00300
20%-40%	228 (207.4)	227 (247.6)	455		
40%-60%	196 (210.6)	266 (251.4)	46		
60%- 80%	133 (132.7)	158 (158.3)	291		
80%-100%	105 (88.0)	88 (105.0)	193		
Total	868	1036	1904		

The Regular-distance education modes' divide is felt significantly among those who have found very poor helpfulness of GV but not among those respondents rating the programs to be useful more than 20% (see Table:9).

There have been greater number of respondents who among the distance education mode who have given poor ratings to the programs. That implies that the most important target group of distance education is more particularly feeling the absence of satisfaction with the program.

PERCEPTION OF GV AS HELPFUL AND AREA OF INSTITUTION

With regard to the rural-urban divide, the differences are significant among the category of respondents opining least helpfulness of the programs. More urban students than their rural counterparts have found the programs to be least useful. This trend is found to be similar to that of the pattern with regard to the mode of education, where the most important target audience is finding the program to be least useful in nature.

This adds yet another concern to the media planners. The extremely critical responses about GV programs have emerged from the English medium students, than their counterparts in Tamil Medium.

The GV program is using English as one of the main language of expression and yet results of the study shows that the least satisfaction is found to be most common among English medium sections. Analysis showed that there exists a significant association between the course of study of the respondents and their perception of GV as helpful. The size of the segments viewing the program at a particular level of helpfulness is not constant or similar among all the courses.

This implies that a lot of probing would be necessary in the future to ascertain the exact nature of the association between the course of study and perception of helpfulness of the program.

FULFILLMENT OF NEEDS DUE TO GV PROGRAMS

There was no association between the perceived fulfillment of requirements by GV programs among respondents on the one hand and the mode of study on the other. This pattern is in contrast to the bi-variate analysis of the same type of students with the perception on the helpfulness of the program or between the area of institution and GV fulfilling the requirements. Significant association was found to exist between the medium of instruction and Perception of GV to be fulfilling the requirements. The difference between the perceived usefulness and fulfillment of requirements of course is not quite apparent from the analysis.

GV FULFILLING THE REQUIREMENT AND COURSE OF STUDY

The course of study is found to be significantly associated with the perception of GV as fulfilling requirements of respondents. In this regard, there exists a similarity between this outcome and the output pertaining to the helpfulness of the program.

STUDENTS' SUGGESTIONS TO IMPROVE THE RADIO FOR HIGHER EDUCATION

In order to seek information beyond the confines of the questions, respondents were encouraged to express themselves through open ended questions. Students have responded in large numbers to questions that sought their suggestions for further enhancing the scope and reach of the electronic media in the field of education. They have expressed their needs and desires which they would like to get fulfilled through the electronic media. The number of suggestions varied according to the questions.

The wide variety of data secured through open ended, questions were listed out separately and were grouped logically based on the shared connotations of the responses and the commonality of subject topics around which the suggestions have been made. The grouped data were quantified for further understanding and interpretation. The details are discussed elaborately in the forthcoming passages of this chapter.

Primarily the suggestions focused on two areas namely the programs needed and the areas of improvement in the existing programs. Evaluation of communication programs, projects and experiments have repeatedly shown that radio can teach and that it can present new concepts and information according to Galda & Searle, (1980). With this backdrop, respondents' views were sought to see if they shared the belief on the potential of radio as educating medium and to know the kind of educational programs they needed.

TYPES OF RADIO EDUCATIONAL PROGRAMS NEEDED BY STUDENTS

Of the 3570 who responded to this open-ended question, 2800 (78.43%) answered that they need subject-based programs out of the electronic media, while 760

(21.28%) answered they were in need of programs on scientific advancements and 1400 (39.21%) answered they need expert lectures. Besides the aforesaid responses, 2220 (61.62%) answered that they need interactive programs, 3250 (91.03%) answered that they need previous information and advertisement of the programs. 1054 (29.52%) answered that they need career guidance and higher education and information through radio programs. Based on the expressions of the end-users, education planners might have to refashion their content, structure and styles of the radio programs. The suggestions also indicate a perceived lacuna that the programs are low in their interactivity.

Radio has been used extensively as an educational medium in developing countries. Reports confirm that it has supported educational programs in a wide range of subject areas in many different countries. In India radio is used for rural development (Long, 1984). The present study could be stated to have already verified this fact in the south Indian context.

From the Table it is seen that programs announcing the details of educational program is expressed as required by a vast majority of those who have expressed at least one viewpoint on programs needed through the radio. Programs entirely based on subjects are also seen to be preferred by majority of the respondents, over those that indirectly aid the understanding of syllabus.

STUDENTS' SUGGESTIONS/IDEAS FOR ENHANCING THE EFFECTIVENESS OF RADIO PROGRAMS

Table: 10
Students' suggestions/ideas for enhancing the effectiveness of radio programs

<i>Particulars</i>	<i>Yes</i>		<i>No</i>		<i>Total</i>
	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	
To make more interactive, more information, latest information	1870	52.38	1700	47.61	3570
To give complete subject lectures.	1490	41.73	2080	58.26	3570
Exam oriented lectures and consultations.	2004	56.13	1566	43.86	3570
Psychological advices.	680	19.04	2890	80.95	3570
Small programs with short time, with Good music background and interesting	2600	72.82	970	27.17	3570

Apart from a wish list of what one needs from radio programs, students have also made suggestions/ideas for making more effective radio programs: Of 3570 respondents 1870 (52.38%) suggested that the programs be made more interactive (see Table:10), with more information, latest information for being effective in educating students. 1490 (41.73%) suggested to give complete subject lectures for effective radio programs, 2004 (56.13%) suggested exam oriented lectures and consultations for effective radio programs.

While 680 (19.04%) suggested psychological advices for effective radio programs, 2600 (72.82%) suggested small programs within shorter time slots, with good music background for effective radio programs.

From the suggestions made for improvement, it can be interpreted that radio listeners expect a greater role to be played by the radio corporations as providers of instructional material and in providing psychosocial support to the students.

FINDINGS AND CONCLUSION

A vast majority of respondents possess radio sets. Only 35.71% of the respondents who are listening radio everyday. Data shows a divergence among respondents, with respondents' time ranging from nothing to two hours a week, which could be interpreted to be offering a considerable scope for increase. Only 19.77% were aware of GV radio programs while 80.23% were not aware of GV radio programs. There is significant relationship between mode of study and listening to radio. This could mean that the two streams would differ in their usage of radio, as they have similar syllabus but dissimilar teaching-interaction process.

There is significant relationship between area of institution and listening to radio. There is significant relationship between medium of instruction and listening to radio, which could indicate that language plays a vital role in out-of-classroom learning.

There is significant relationship between mode of study and approximate time to listen to the radio. The implication of this finding might be that different strategies would be necessary to address the distance and on-campus learners, as far as improving the time spent on listening to radio. A majority (60.81%) of the respondents have decried that GV is not fulfilling their requirements, thus indicating a matter of concern to the stakeholders of the system. There is significant relationship between area of institution and approximate time to listen to radio.

SUGGESTIONS

The time and frequency of usage of radio should be increased by adopting innovative measures such as interactive radio and a variety of listener promotion strategies. The relationship between course of study and listening to radio arises out of the differing life situations between the two types of students or the unique features of a distance learning system. Hence efforts should be on to bridge the lack of equivalency among the various groups of students.

Media planners need to carefully address the issue of medium of instruction used in radio as well. More importance should be given to the language understood by the majority of population in a particular region. The usefulness of GV and other educational programs in the radio need to be strengthened significantly above the present level.

Awareness on GV programs need to be enhanced through advertisements and publicity. Encouragement has to be given towards the creation of more educational FM stations to be established and run at college levels throughout the country. Local inputs and interaction should be made a regular feature in the educational radio programs. Programs in regional and locally understood languages should be featured for more duration and frequency than it is being done at present.

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