

Self Help Groups and the Role of ICT

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ABSTRACT

Self-help groups (SHGs) are fast emerging as powerful tool of socio-economic empowerment of the poor in our rural areas. The self-help group is a small body formed by the people for meeting their specific objectives, particularly credit. The social capital produced by the SHG as it matures through creation of new ties and linkages, strengthens the community's cooperative capacity to the achievement of group government. Role of SHGs in strengthening local governance and political democracy can be described by the fact that a number of SHGs members are being elected in the Panchayati Raj system in India, the lowest tier of local democratic governance. ICTs can play a significant role in combating rural and urban poverty and fostering sustainable development through creating information rich societies and supporting livelihoods. If ICTs are appropriately deployed and realize the differential needs of urban and rural people, they can become powerful tools of economic, social and political empowerment. In India ICT applications such as Warana, Dristee, Sari, Sks, E-Chaupal, Cybermohalla, Bhoomi, E-Mitra, Deesha, Star, Setu, Friends, E-Seva, Lokmitra, E-Post, Gramdoot, Dyandoot, Tarahaat, Dhan, Akshaya, Honeybee, Praja are in functioning for rural development. There are no studies regarding impact of ICT on SHG members. Hence this paper studies about the impact of ICT on SHGs in Rayalaseema Region.

1. Introduction

Self-help groups (SHGs) are fast emerging as powerful tool of socio-economic empowerment of the poor in our rural areas. The self-help group is a small body formed by the people for meeting their specific objectives, particularly credit. However Local literature shows that self-help groups have been developed for a wide range of populations, including the mentally ill and their families, persons with disabilities and their care-givers etc. SHGs are initially formed on the foundation of the accumulated endowment of bonding social capital already existing in the community. The social capital produced by the SHG as it matures through creation of new ties and linkages, strengthens the community's cooperative capacity to the achievement of group government. When the SHGs grow they begin to articulate the community demands as they become aware of their rights and therefore attitude of the government bureaucratic officials changes and they become more responsive to the needs of the community i.e., with the maturity of SHG the state-society relationship begin to change at the local level towards the better. In this way, SHGs which were originally established to produce economic benefits for members eventually became an associational framework for collaborative actions that produce public goods. As a result a range of other community-level organizations emerge where often members of the SHGs are recruited. Role of SHGs in strengthening local governance and political democracy can be described by the fact that a number of SHGs members are being elected in the Panchayati Raj system in India, the lowest tier of local democratic governance.

In self help groups it is assumed that all poor households need to save and have the inherent capacity to save small amount regularly; easy access to credit is more important than cheap subsidized credit which involves intricate bureaucratic

procedures, the poor are the best judge of their credit needs and are good users and re-payers of credit when formed in group. A notable feature of SHG is that before its linkage with any financial institution, credit discipline is imbibed among the member by way of SHG with banks has improved the socio-economic condition of its member by way of positive impact on income, saving, and self-confidence. The impact is more pronounced in the case of SHGS linked through NGOs. This and many other aspects of rural credit delivery system need to be studied in a greater depth. SHGs have proved to be successful in addressing the interests of women in a sustained manner. They are extremely useful in generating savings, ensuring successful delivery of credit to individual women and effecting recovery. In addition, they serve as an ideal mechanism for bringing women out of their homes, making them more articulate and honing their leadership qualities and their skills as motivators. Women led SHGs in Andhra Pradesh have won laurels for their exemplary performance.

Objectives Of SHG

1. To inculcate the savings and banking habits among members.
2. To secure them from financial, technical and moral strengths.
3. To enable availing of loan for productive purposes.
4. To gain economic prosperity through loan/credit.
5. To gain from collective wisdom in organising and managing their own finance and distributing the benefits among themselves.¹

All information can be digitized, transported, stored, retrieved, modified and then distributed. Emerging digital techniques, new network alternatives including intelligent networks, high bandwidth communication technology and

state-of-the-art software for network functions and services, are the new technology trends evident in the development of electronic communication systems. The swift emergence of a global "information society" is changing the way people live, learn, work and relate. An explosion in the free flow of information and ideas has brought knowledge and its myriad applications to many millions of people, creating new choices and opportunities in some of the most vital realms of human endeavor. Yet most of world's population remains untouched by this revolution.

ICT can be interpreted broadly as "technologies that facilitate communication and the processing and transmission of information by electronic means." ICT promises a fundamental change in all aspects of our lives, including knowledge dissemination, social interaction, economic and business practices, political engagement, media, education, health, leisure and entertainment. In India ICT applications such as Warana, Dristee, Sari, Sks, E-Chaupal, Cybermohalla, Bhoomi, E-Mitra, Deesha, Star, Setu, Friends, E-Seva, Lokmitra, E-Post, Gramdoot, Dyandoot, Tarahaat, Dhan, Akshaya, Honeybee, Praja are in functioning for rural development. ICTs can play a significant role in combating rural and urban poverty and fostering sustainable development through creating information rich societies and supporting livelihoods. If ICTs are appropriately deployed and realize the differential needs of urban and rural people, they can become powerful tools of economic, social and political empowerment.

2. Review of Literature

Thammi Raju and Sudhakar Rao (2007)² in their study reveal that the extension services are not reaching the needy farmers at the right time in right form in the traditional extension system due to various reasons or drawbacks such as high cost, irrelevance of message to a particular client, erosion of message, inability to cover all the farmers, low extension contact intensity etc. Information Technology (IT) is one of the new frontier areas, whose potential is unlimited in an agricultural sector, which is transforming into hi-tech commercial agriculture. The various issues pertaining to the planning, development and use of IT enabled services in farm extension viz, individual, institutional, situational, infrastructural, human resource development and extension system as a whole were analyzed, synthesized and discussed based on review of several research articles. The initiatives required are also discussed at appropriate places

Sami, Iffat and Shahida (2008)³ were discussed about the modern technology and the Information and Communication Technology which can be applied for the development of the rural areas in India. The authors suggest that development of a country depends on the development of all its parts. Since major part of India comprises the rural areas, the development of the country is possible only with the development of the rural areas. With the conventional methods, it is difficult to improve the rural areas. The paper also discusses some of the areas, where ICT could be applied and make the rural masses enlightened.

Manoj, (2008)⁴ in his article states that in the wake of information and communication technology (ICT) revolution sweeping across the world, the favorable situations of Kerala

economy makes it the ideal location to utilize its vast and unique socio-cultural and knowledge infrastructure for leveraging the immense potential of ICT. By means of a rural development network (RD Net), Computerisation of all the 152 Blocks in the State and its networking has already been initiated. In the present study the author suggest some strategies for rural development that Kerala might adopt in the knowledge era of today; consider its special features and also replicable developments elsewhere in the world.

Savitha Balasubramanian (2012)⁵ In his paper on "Self Help Groups and Their Role in Socio Economic Empowerment-A Study in the States of Andhra Pradesh and Tamil Nadu", appraised that the women face discrimination in most societies. The Microfinance movement was started with the objective of empowering women. The SHGs have played a very crucial role in the delivery of microcredit in India. They have emerged as support groups in enhancing women's ability in facing all kinds of problems in their domestic environment. Besides the availability of microcredit to these members from banks and microfinance institutions brings about a change in their household welfare and makes a significant impact on their socio economic status and their empowerment. In India, the two states of Andhra Pradesh and Tamil Nadu have been leading as far the microfinance movement is concerned. The present research paper compares the role of SHGs in these two states in bringing about social empowerment and also determining the factors which contribute to the socio economic status of these members.

Saravanan.M. (2016)⁶ in his paper entitled "The Impact of Self-Help Groups on the Socio-Economic Development of Rural Household Women in Tamil Nadu - A Study", has analyzed that to examine the role of SHG in developing socio economic status of rural women; to alleviate rural poverty and increase employment opportunity and to promote income generating activities in rural household women. This paper found that the participation of women in self-help group (SHGs) made a significant impact on their empowerment both in social and economic aspects this study addresses women empowerment through self-help groups in Tamil Nadu. It is concluded that the Self Help Group is an important tool which helps the rural women to acquire power for their self-supportive life. SHG Programme clearly plays a central role in the lives of the poor. Empowering women is not just for meeting their economic needs but also more holistic social development. There is evidence of increased household income. Standard of living for the program participants have increased and also the food security is much more for the program clients.

3. Research Methodology

The study sought to identify the relationships between the ICT tools attributes and SHG's' satisfaction, in order to analyze the differences in the attributes, and to investigate destination attributes and SHGs' overall satisfaction, controlling for SHGs' demographic and ICT tools behavioural characteristics.

4. Objectives

1. To know the behavioural characteristics of the SHG members using ICT tools.

2. To know the problems faced by the SHG members through usage of ICT tools.
3. To know the overall satisfaction level of SHG members with the ICT tools.

Variables of the Study

They are broadly classified into two categories:

1. SHGs ICT tools Usage attributes; and
2. Demographic` and ICT behavioural characteristics.

Both of these two sets of variables are independent variables.

Demographic / Economic Characteristics of Sample SHG members

They include age, marital status, total household incomes, educational level and occupation.

Behavioural Characteristics of the SHG members with usage of ICT tools

They include Mobile phone, TV, Newspaper, Computer and ATM (Internet banking etc). Those variables specified in sub-sections are independent variables of the study.

Sample Design

The sample taken for the study is 440 SHG women from 4 districts of Rayalaseema Region.

Table: 1
Variables of the Study

S. No	Category	Variables
1	2	3
1.	Dependent variable	SHGs' Overall satisfaction
2.	Independent variable	Creates strong relations with friends and neighbors; Talk with family members who are staying away; Book the gas; Children's' school information; About DWACRA meetings; Cash transactions; TV for news; TV for Cinemas; TV for Agriculture programs; TV for Debates; TV for Politics; Computer for Typing; Computer for Family members needs; Computer for Internet; Computer for Downloading songs and cinemas; Computers for Bank transactions; ATM is useful; ATM reduce customer cash deposit time; Complete hold on your ATM card; ATM charges as waste ; news read politics; news read business; news read cinemas; news read women and children; news read recipes;
3.	Control Variable	SHGs' Demographic Characteristics: Age, Marital status, Total Household Incomes, Education & Occupation
4.	ICT Tools Behavior Characteristics	Mobile Phone, Computer, Newspaper, TV and ATM

5. Results and Discussion

Out of 500 questionnaires, 440 were usable Unusable questionnaires included missing sections either expectation or satisfaction in the survey instrument. Therefore, the data from SHGs respondents were analyzed in this study.

Table: 2
Demographic Characteristics of the Respondents
(N = 440)

S.No	Variable	Freq.	Per cent
1.	Age(in Yrs)		
	Below 25 Years	42	9.5
	26- 35 Years	162	36.8
	36 – 50 Years	200	45.5
	Above 50 Years	36	8.2
	Total	440	100
2.	Marital Status		
	Married	426	96.8
	Unmarried	14	3.2
	Total	440	100
3.	Family Income		
	Below 25000	178	40.5
	Rs.25001 – Rs 50000	168	38.2
	Rs.50001 –Rs.75000	51	11.6
	Above 75000	43	9.8
	Total	440	100
4.	Occupation		
	House wife	244	55.5
	Agriculture	23	5.2
	Business	88	20.0
	Coolie	57	13.0
	Servant	28	6.4
	Total	440	100
5.	Educational Status		
	Illiterate	134	30.5
	Secondary School	204	46.4
	Intermediate	35	8.0
	Degree and Above	67	15.2
	Total	440	100

Source: Primary data.

The above table describes the demographic characteristics of the respondents. The total respondents are classified under different groups based on their age, marital

status, family income, occupation, educational status. As per the age the respondents are classified into four groups such as below 25 years, 26 to 35 years, 36 to 50 years and above 50

years. Majority of women respondents belong to the age group 36 to 50 years (45.5%) followed by 26 to 35 years (36.8%), less than 25 years (9.5%) and more than 50 years (8.2%). From the above it is clear that respondents are joining SHG at the age of 26 years or above.

According to marital status the respondents are classified in two groups married and unmarried. Majority of the respondents are married (96.8%) followed by unmarried (3.2%). That means the respondents are joining the SHGs after marriage.

With regard to family income respondents are categorized under four groups such as less than Rs 25000, between Rs

25001 and Rs 50000, between Rs 50001 and Rs75000 and more than Rs 75000 and more than Rs 75000 majority of respondents (40.5%) income is less than Rs25000, followed by 25001 and Rs 50000 (38.2%), Rs 50001 to Rs 75000 (11.6%) and more than Rs 75000 (9.8%).

Based on the educational status total respondents 440 members are categorized into four heads are illiterates, secondary education, intermediate and graduation and above. Majority of the respondents (46.4%) studied up to secondary level education followed by illiterates (30.5%), degree and above (15.2%) and up to intermediate education (8%). Majority SHG members are completed at least secondary education. This reduces the women illiteracy rate in the country.

Table: 3
Behavioral Characteristics of the Respondents towards ICT tools

(N=440)

S.No	Variable	Freq.	Per cent
1.	Mobile Phone		
a	Yes	296	67.3
b	No	144	32.7
2	Computer		
a	Yes	37	8.4
b	No	403	91.6
3.	TV		
a	Yes	430	97.7
b	No	10	2.3
4.	Newspaper		
a	Yes	309	70.2
b	No	131	29.8
5.	Bank Cards		
a	Yes	87	19.8
b	No	353	80.2

Source : Primary data.

Respondents are opined about the possessiveness and usage of different electronic gadgets. Such as Mobile, Computer, Television, News paper, ATM cards ect., Out of total 440 respondents majority possessed Television (97.7%), followed by ATM (70.2%) Mobile (67.3%), Newspaper (19.6%) and Computer (8.4%).

From the above it is clear that respondents are using Television for multipurpose i.e, to watch different programs including news. They are interested to watch Television than reading newspaper 70.2 percent of SHG respondents are using ATM cards. That means they have their personal bank accounts apart from the group account and are using ATM cards for the bank transactions. Further 67.3 percent of the total respondents are possessed mobile phones and are using for communication and also for other purposes. 19.6 percent of

the respondents are reading newspapers. It means that they are engaged in agriculture work for many hours in a day. The data collected discloses the fact that only 8.4 percent of the respondents are possessed computer. It may be because of lack of computer knowledge or lack of necessary, they are not using computers. On the other side they are using mobile phones for making different transactions by using mobile network.

Description of problems faced by the SHG members with ICT Tools

Descriptive statistics was used to explore the data and to obtain the insight into the Problems faced with ICT tools of the respondents.

Table: 4
Age wise problems faced by the SHG members with ICT tools

S.No	Age	Freq	Mobile	TV	Computer	ATM	Newspaper
1	Below 25 Years	42	3.35	2.60	3.10	3.50	3.93
2	26- 35 Years	162	3.46	3.52	3.50	3.55	3.78
3	36 – 50 Years	200	3.63	3.48	3.66	3.58	3.73
4	Above 50 Years	36	3.67	3.37	3.33	3.38	3.57
5	F-value		0.633 [@]	3.493 [*]	2.956 [*]	0.148 [@]	0.517 [@]
6	Sig.		0.597	0.011	0.018	0.931	0.672

Note : @ - Not significant; *significant at 5 per cent level

It is also noted that the respondents belonging to the age group of above 50 years obtained maximum mean value of 3.67 on the problems with mobile. This indicates that the SHGs belonging to this age group have faced high level of problems on the dimension of operational problems with mobiles, however respondents belonging to the age group below 25 years showed that they have low level of problems ($m=3.35$) as compared to other age group respondents. The result of one way ANOVA test shows that F -value = 0.633 and $sig = 0.597$ which is greater than 0.5 (at 95% level of problems), which indicates there is no significant difference between the *problems with mobile* of different age group of SHGs in Rayalaseema Region.

In table 4 shows that the respondents belonging to the age group of below 26-35 years obtained maximum mean value on the dimension of problems with mobile. This indicates that the SHGs belonging to this age group have faced high level of problems on the dimension of TV problems due to obstacles for children's education, however the respondents belonging to the age group below 25 years showed that they have low level of problems ($m=2.60$) as compared to other age group respondents. It is found that F -value = 3.493 and $sig. = 0.011$ which is less than 0.05 (at 95% level of confidence), which indicated that there is significant difference between the *problems with TV* of different age group of SHG's in Rayalaseema Region .

It was noted that the table 4 respondents belonging to the age group of 36- 50 years obtained maximum mean value of 3.66 on the dimension of problems with computer. This indicates that the SHGs belonging to this age group have faced high level of problems on the dimension of computers due to lack of awareness problems, however the respondents

belonging to the age group below 25 years showed that they have low level of problems ($m=3.10$) as compared to other age group respondents. The result of one way ANOVA test shows that value $F= 2.956$ and $sig = 0.018$ which is less than 0.05(at 95% level of confidence) which indicates that there is a significant difference between the *problems with computer* of different age group of SHGs respondents.

It Digital cash that the respondents belonging to the age group of 36 -50 years obtained maximum mean value of 3.58 on the dimension of problems with ATM. This indicates that the SHGs belonging to this age group have faced high level of problems on the dimension of Digital cash not working of ATM in times of need of money, however the respondents belonging to the age group above 45 years showed that they have low level of problems ($m=3.38$) as compared to other age group respondents. The result of one-way ANOVA test shows $F=0.148$ and $sig = 0.931$ which is more than 0.05 level, which indicates that there is no significant difference between the *problems with ATM* of different age group of SHGs respondents.

It was noted that the respondents belonging to the age group of below 25 years obtained maximum mean value of 3.9275 on the dimension of problems with news paper. This indicates that the SHGs belonging to this age group have faced high level of problems on dimension of news paper problem in due to lack SHGs information, however, the respondents belonging to the age group above 50 years showed that they have low level of problems ($m=3.57$) as compared to other age group respondents. The result one way ANOVA test shows $F= 0.517$ and $sig =0.672$ which is more than 0.05 level. Which indicates that there is no significant difference between the *problems with News paper* of SHGs in Rayalaseema Region.

Table: 5
Education wise problems faced by the SHG members with ICT tools

S.No	Education	Freq	Mobile	TV	Computer	ATM	Newspaper
1	Primary	134	3.35	2.60	3.10	3.50	3.99
2	Secondary School	204	3.46	3.52	3.50	3.55	3.61
3	Intermediate	35	3.64	3.45	3.63	3.57	3.51
4	Degree and Above	67	3.60	3.48	3.40	3.35	3.72
	F-value		0.632 [@]	3.440*	3.592*	0.158 [@]	4.480**
	Sig.		0.598	0.05	0.03	0.924	0.001

Note: @-Not significant;*significant at 5 per cent level;**significant at 1 per cent level;

To analyse the differences in a mean value of ICT problems as a dimension of SHGs problems on the basis of educational qualification one-way ANOVA was applied.

Table 5 shows the education problems faced by the SHG members with ICT Tools in Rayalaseema Region. One can observe from the above table that the SHG members with intermediate qualification obtained highest mean value of 3.64 on the mobile phone. This indicates that the SHG members belonging to intermediate qualification have faced high level of problems with mobile. However, respondents belonging to the primary education showed that they have low level of problems ($m= 3.35$) as compared to other education respondents. The result of one way ANOVA test shows that F - value = 0.632 and

$sig =0.598$ which is greater than 0.5 (at 95% level of problems), which indicates there is no significant difference among the problems with mobile of different educational qualification of sample SHGs in Rayalaseema Region.

One can observe from the same table that the sample SHG members with secondary education have highest mean value of 3.52 on the problems with TV. This indicates that the SHG members belonging to secondary education have faced high level of problems with TV. On the other hand, respondents belonging to the primary education qualification showed that they have low level of problems ($m=2.60$) as compared to other education respondents. The results of one way ANOVA shows that F - value =3.440 and $Sig. =0.05$ which is less than 0.5 (at

95% level of problems) which indicates that, there is a significant difference among the SHG members who are facing problems with TV.

The sample SHG members with intermediate education have highest mean value of 3.63 on problems with computer. This indicates that the SHG members with intermediate education have faced high level of problems. On the other hand respondents with primary education showed that they have low level of problems (m = 3.10) as compared to other education respondents. The result of one way ANOVA shows that the F- value=3.592 and Sig. =0.03 which indicates that

there is a significant difference among SHG members with various educational qualification problems with computer.

The SHG members with intermediate education having highest mean value of 3.57 on problems with ATM. This indicates that the SHGs belonging to intermediate education have faced high level of problems with ATMs. On the other hand respondents with degree and above education showed that they have low level of problems (m= 3.35) as compared to other education respondents. The result of one way ANOVA shows that the F-value=0.158 and Sig. = 0.924 which is greater than 0.5 (at 95% level of problems) which indicates that there is no significant difference among SHG members with various educational qualification problems with ATM.

Table: 6
Results of Paired t-test between SHGs' Satisfaction and Compare basic information and communication technology with Attributes (N = 296)

S.No	Attribute	Perception Mean1	Expectation Mean 2	Mean Difference	t-Value
1	2	3	4	5 (3-4)	6
1	Friends and neighbors	3.15 (1.212)	3.39 (1.099)	-0.24	2.524*
2	Family matters with relatives	3.17 (1.229)	2.95 (1.267)	0.22	2.600*
3	Family members who are stay away	3.39 (1.118)	2.99 (1.281)	0.4	4.757*
4	Daily necessities like milk, vegetables. Etc.	3.69 (0.987)	3.35 (1.219)	0.34	4.599*
5	Book the gas	2.82 (1.146)	2.56 (1.206)	0.26	3.544*
6	Book the travel tickets	3.42 (1.236)	3.39 (1.200)	0.03	0.368
7	Travelling facilities	2.97 (1.237)	3.16 (1.083)	-0.19	-2.350*
8	Entertainment	3.29 (1.153)	3.31 (1.172)	-0.02	-0.380*
9	Children's school information	3.18 (1.206)	3.23 (1.223)	-0.05	0.568
10	DWACRA meetings	3.18(1.280)	3.05(1.232)	0.13	1.620
11	Cash transactions	3.38(1.66)	3.165(1.567)	0.215	1.620
12	Weather reports	2.987(1.47)	3.152(1.599)	-0.165	1.3070
13	Latest agriculture methods	3.039(1.55)	3.029(1.574)	0.01	0.0779
14	Children education	3.268(1.63)	2.806(1.747)	0.462	3.327**
15	Health information	2.854(1.76)	3.058(1.691)	-0.204	1.438
16	Information about accidents and inform to the relatives	3.207(1.45)	2.479(1.757)	0.728	5.498**

Notes: 1. Standard deviations are in parentheses.
 2. Perception mean ranges from 1 (high dissatisfied) to 5 (Highly satisfied).
 3. Expectations mean ranges from 1 (very low) to 5 (very high). * p< 0.05
Source: Primary data.

Satisfying, Indifferent and Dissatisfying Attributes

Table presents 16 ICT attributes of SHG's respondents in Rayalaseema region. These attributes are broadly categorized, on the basis of study results, into satisfying, indifferent and dissatisfying attributes.

Satisfying Attributes

"Satisfying" attributes are those with perceptual scores, when compared to expectations scores, having positive mean difference with t-values significant at the .05 level. Results indicate that SHG's were satisfied with "Family matters with relatives", "Family members who are stay away", "Daily necessities like milk, vegetables. Etc", "Book the gas," "Book the travel tickets." "Children education", "Information about accidents and inform to the relatives. The respondents' perceptions with these 7 attributes were positively disconfirmed, which led to their satisfaction with these attributes.

Indifferent Attributes

Indifferent attributes are those attributes with non-significant t-values (p ≥0.05), regardless of a positive or negative mean differences. Attributes namely "Book the travel tickets", "DWACRA meetings" "Cash transactions" and "Latest agriculture methods" are indifferent attributes. This showed that respondents perceptions were confirmed with their exceptions, which resulted in neutral feelings of the respondents.

Dissatisfying Attributes

Dissatisfying attributes are those attributes with expectation scores out weighing perception scores, that is, with negative mean scores, regardless of a significant or non-significant t-value at the .05 level or below. Results indicate that SHGs were dissatisfied with "Friends and Neighbors", "Travelling facilities", "Entertainment" "Weather reports" "Children's school information" and "Health information". These indicate further that respondents 'perception in relation to those attributes were negatively disconfirmed with their expectations, which resulted in dissatisfaction.

Table: 7
Factor Analysis: Underlying Dimensions of SHGs' Perceptions of Attributes

(N= 440)

Attributes	Factor Loading				Communality
	Factor 1	Factor 2	Factor 3	Factor 4	
Factor 1: internet facilities					
Computer for Downloading songs and cinemas	.844				0.713
Computers for Bank transactions	.821				0.694
Computer for Family members needs	.813				0.674
Computer for Internet	.810				0.680
ATM is useful	.700				0.647
Computer for Typing	.671				0.494
TV for Politics	.507				0.421
ATM reduce customer cash deposit time	.434				0.406
TV for Agriculture programs	.324				0.213
Factor 2: Support Services					
TV for news		.623			0.523
Cash transactions		.605			0.507
Talk with family members who are staying away		.592			0.485
Book the gas		.534			0.498
TV for Cinemas		.507			0.437
About DWACRA meetings		.487			0.493
TV for Debates		.431			0.451
Children's' school information					
Creates strong relations with friends and neighbors		.353			0.358
Factor 3: Dissatisfaction services					
complete hold on your ATM card			.708		0.565
news read politics			.653		0.479
ATM charges as waste			.640		0.529
Factor 4 News Services					
news read cinemas				.603	0.429
news read women and children				.541	0.470
news read business				.517	0.433
news read recipes				.340	0.446
Eigen Value	5.203	2.527	1.896	1.488	
Variance (%)	20.812	10.110	7.586	5.951	
Cumulative variance (%)	20.812	30.922	38.508	44.458	
Reliability Alpha (%) (0.350)	81.3	76.8	79.3	68.1	
Number of items (Total = 25)	9	9	3	4	

Note: Extraction Method – Principal Component Analysis
Rotation Method – Varimax with Kaiser Normalization
KMO (Kaiser-Meyer- Olkim Measure of Sampling Adequacy) = 0.782
Bartlett's Test of Sphericity: $p = 0.000$ ($\chi^2 = 3402.027$, $df = 300$)

The principal components factor method was used to generate the initial solution. The eigen values suggested that a four- factor solution explained 44.46% of the overall variance before the rotation. The factors with eigen values greater than or equal to 1.0 and attributes with factor loadings greater than 0.4 were reported. Table 7 illustrates the results of the factor analysis. The four factors were: Internet facilities, support services, dissatisfaction services and news services.

The overall significance of the correlation matrix was 0.000, with a Bartlett test of sphericity value of 3402.027. The statistical probability and the test indicated that there was a significant correlation between the variables, and the use of factor analysis was appropriate. The Kaiser-Meyer-Olkin overall measure of sampling adequacy was 0.782, which was meritorious (Hair, Anderson, and Black 1999).

From the varimax-rotated factor matrix, four factors with 22 variables were defined by the original 25 variables that loaded

most heavily on them (loading ≥ 0.4) (see Table 7). Three attributes were dropped due to the failure of loading on any factor at the level of 0.40 (or higher). These were "TV for agriculture programs", "children school information" and "creates strong relation with friends and neighbors". The communality of each variable ranged from 0.406 to 0.713.

To test the reliability and internal consistency of each factor, the Cronbach's alpha of each was determined. The results showed that the alpha coefficients ranged from 0.681 to 0.813 for the four factors. The results were considered more than reliable, since 0.50 is the minimum value for accepting the reliability test (Nunnally, 1967).

The four factors underlying SHGs' perceptions of ICT attributes in the Rayalseema region were as follows.

Internet facilities (Factor 1) contained Eight attributes and explained 20.812% of the variance in the data, with an eigen

value of 5.203 and a reliability of 81.3%. The attributes associated with this factor dealt with related internet items, including "Computer for Downloading songs and cinemas," "Computers for Bank transactions," "Computer for Family members needs," "Computer for Internet," "ATM is useful," "Computer for Typing," "TV for Politics," and "ATM reduce customer cash deposit time."

Support Services (Factor 2) accounted for 10.11% of the variance, with an eigen value of 2.527, and a reliability of 76.8%. This factor was loaded with seven attributes that referred to support service. The seven attributes were "TV for news," "Cash transactions," "Talk with family members who are

staying away, "Book the gas," "TV for Cinemas," "About DWACRA meetings," and "TV for Debates."

Dissatisfaction services (Factor 3) loaded with three attributes. This factor accounted for 7.586% of the variance, with an eigen value of 1.896, and a reliability of 79.3%. These attributes were "complete hold on your ATM card," "news read politics," and "ATM charges as waste."

News services (Factor 4) contained four attributes. This factor explained 5.95 per cent of the variance, with an eigen value of 1.488 and a reliability of 68.1. These attributes are "news read cinemas" "news read women and children," "news read business, and "news read recipes."

Table: 8
SHG's Overall level of satisfaction with the ICT attributes (N=440)

Variable	Frequency	Percentage
Strongly Disagree	12	2.73
Disagree	18	4.09
More or less disagree	16	3.64
Undecided	108	24.55
More or less agree	62	14.09
agree	81	18.41
Strongly agree	143	32.50
Total	440	100.00

Respondents were also questioned about their overall level of satisfaction with the ICT attributes. The results were summarized in Table no. 8 From the research findings, 65.0% of the respondents indicated that they were strongly agree, agree, or more or less agree with the ICT attributes; 24.6 % were neutral in their opinions, and 10.46% of the respondents were strongly disagree, disagree, or more or less disagree. The mean value of respondents' overall perceived level of satisfaction was 5.454, which tended toward the above moderate end of the satisfaction scale. This suggests that the ICT Attributes provides SHG's with a satisfactory experience.

6. Conclusion

The purposes of the study were to identify the relationship between ICT attributes and the overall satisfaction of SHGs who are using ICT tools daily and analyze the differences in the level of overall satisfaction of SHGs' with respect to demographic and behavior characteristics. Earlier studies of SHGs Impact on finance on banks have focused on identifying the characteristics, development, and Govt. departments, as well as on investigating the demographic and behavior characteristics of SHGs who are ICT attributes some studies have investigated the relationship between the attributes and overall level of satisfaction.

Based upon the results of this study, several findings discussed can be made to increase SHGs' satisfaction with the Rayalaseema Region. The results of the study revealed that even if four factors (Internet services, Support services, dissatisfaction services and news services) have a significant relationship with the overall satisfaction of SHGs, Support services and internet services were more important factors that influenced overall SHGs satisfaction than dissatisfaction services and news services. This finding can be useful to the planners and marketers of SHGs in formulating strategies to maintain or enhance their ICT awareness. . In other words, they should focus more on maintaining or improving factors that contribute to the overall satisfaction of SHGs.

In conclusion, ICTs hold great promise for economic development and the empowerment of this advantaged group in the SHGs. Awareness of the gender dimension of access, need and use of information technologies, however, is crucial for an effective deployment of new technologies to ensure that women and men benefit equally from the tremendous potential of the information superhighway.

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