



PERCEPTION AND USE OF ICT ENABLED ENTREPRENEURS AND EMPLOYABILITY OPPORTUNITIES FOR RURAL WOMEN EMPOWERMENT: A SURVEY

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ABSTRACT

Women Empowerment, Especially in the rural and semi-rural areas provides greater opportunities not only for their families, but also to their country. ICT has been emerged as a platform to enable women's empowerment, particularly for underprivileged women. This research paper aims to study the awareness of ICT enabled knowledge resources on women entrepreneurship and employability, use of schemes and apps on women development and employability. A good number of relevant research variables on ICT enabled skills/ women empowerment and the IT companies' portal for Employability and its awareness use among the rural women has been analysed.

Key words: ICT, Women Empowerment, Employability, Entrepreneurship, Job Search, IT Companies, Women safety Apps.

Cite this Article: S. Srinivasaragavan and S. Gayathri, Perception and use of ICT Enabled Entrepreneurs and Employability Opportunities for Rural Women Empowerment: A Survey, *International Journal of Advanced Research in Engineering and Technology*, 11(12), 2020, pp. 3461-3473.

<https://iaeme.com/Home/issue/IJARET?Volume=11&Issue=12>

1. INTRODUCTION

Participation encourages individuals to be actively engaged in the development process, offer ideas, take the initiative to define needs and difficulties, and assert their autonomy, while information is a necessity for empowerment. (Obayelu & Ogunlade, 2006). Globalization, gender equality and empowerment of women were focused by the UN millennium development

project (2005) as an effective way to fight against poverty in an sustainable manner. It also further emphasis that improvement of their life standards by providing equal access to the information, particularly on ICT based socio economic and educational activities that enable them to contribute in business, professional and home based activities, thus make them as empowered women. "Though ICT is used for women's empowerment in many countries in Asia, Africa and other developing areas in the world, there is no rigorous method for measuring and tracking changes in levels of empowerment by means of ICT intervention. For example, multiple research methods (including participant observation, group interviews, individual interviews, analyses of selected email messages, feedback questionnaires that give qualitative and quantitative data, and statistical analysis of demographic and personal information) were used to investigate empowerment and disempowerment of rural women in Australia, a developed country" (Lennie, 2002). The key activities in the project were workshops, online conversation groups and audio conferences.

2. REVIEW OF LITERATURE

Women's empowerment has been proved to be enabled by Information and Communication Technology (ICTs), especially for underprivileged women. Policies relating to ICT and gender concerns have been developed. Because just 'transplanting' will not work, the success of such policy endeavours is heavily on adoption intention. (Chatterjee, S., et. al, 2020). The use of ICT in Self Help Group training programmes was deemed necessary in order to improve the entrepreneurial abilities of business women in both rural and urban locations. The programme not only improved entrepreneurial skills, but also promoted the habit of saving, as well as management skills, risk-taking capacity, self-funding ability, and a self-reliant mind-set among rural women. It also taught rural women that unity is strength. (Kishore, S., 2020)

Women in impoverished countries have a huge chance for business because of social media. Virtual platforms are being used by rural educated women to build their businesses 24 hours a day, seven days a week. The behavioural intention of female entrepreneurs is to utilise Facebook Live for entrepreneurship promotion. This study looked at the influence of complementarity, brand recognition, customer connection perceived ease of use, perceived utility, and intention in the context of women entrepreneurs. Sultan, (M. T., & Sharmin, F., 2020).

3. CRITICAL ISSUES OF WOMEN ENTREPRENEURSHIP

It is a well-known truth that women are the most fundamental and important human development resources. They have taken care of the obligations of child and family care, food management, and moral development to encourage men and children to strive for long-term survival since the Stone Age. Encouragement of women's entrepreneurship is one of the major concerns of the nation's overall economic development, but the society's and government's negligence over a long period of time has created a slew of issues in terms of establishing and encouraging entrepreneurship and employment for women, particularly in agrarian and rural-dominant developing countries. Along with traditional limitations such as balancing family and carrier obligations for women, ownership of ancestral property by on women, gender issues have to be used to collect precise data to evolve appropriate policies to overcome to work with enforce, lack of motivation and self-confidence, lack of education, institutional limitations such as financial institutions' apathy, financial institutions' discouragement of entrepreneurship, failure of government to make aware of employability and entrepreneurship possibilities, paradox of the Mobility limitations. Permitting greater contact with successful entrepreneurship in the region, and executing awareness programmes on online and offline training in both

prospective fields of business and employment are some of the essential aspects that drive women entrepreneurship.

4. OBJECTIVES OF THE STUDY

- To make aware on existing ICT potentials that can be used for employability and entrepreneurship among the rural women in the study area.
- To explore the possible potential areas, applications and tools of ICT for Use of Women Safety Apps for rural women.
- To assess the perceptions and capabilities of identified rural women on ICT and Schemes and Apps for Employability and Entrepreneurship in the study area.
- To know the Job Search Websites among the rural women for Employability and Entrepreneurship.
- To know the IT Companies Portals accessed among the rural women for Employability and Entrepreneurship.

5. LIMITATIONS

The tool used for data collection is a structured questionnaire supplemented by selective interviews. The sample population for the present study was drawn from the five zones of Tamil Nadu. The sample covered under the present study included various categories such as housewives, unemployed, employed, farmer and women students were covered in the study. The data reflect the perception of the respondents surveyed during the study period.

6. METHODOLOGY

Out of 2400 respondents surveyed, 1319 had furnished all the information required for analysis intended in the study. Data was collected from women respondents randomly selected from colleges and university departments which represent five regions of the state by field visits and distributing the questionnaire developed for the study. The questionnaire was pre-tested and later modified for the final schedule. Structured Questionnaire is used to collect the primary data. Five point Likert scale and three point Likert scale were included in the questionnaire to know the level of perception and extent of familiarity and use of the variables studied.

The collected data were edited, codified, and entered into the MS Excel datasheet so as to import into the SPSS statistical software version “IBM SPSS 22.0.0”. Simple frequency percentage analyses with cross sectional tables have been prepared. The analysis of data by correlating and grouping the variables into various subheadings is presented in a set of 7 tables with graphic representations wherever necessary.

Data on the socio demographic variables such as age, occupation, place of domicile, rural/semi urban have been tabulated to obtain a comparative look in the context of various aspects of ICT and their use by the women entrepreneurs, employability skills, information needs and challenges faced by the women respondents.

6.1. Socio Demographic Variables by the Respondents

Age wise Distribution

Table 1 Age wise Distribution by the Respondents				
Age Group		Frequency	Percent	Cumulative Percent
Valid	18-25	1039	78.8	78.8
	26-35	168	12.7	91.5
	36-45	71	5.4	96.9
	46-55	38	2.9	99.8
	56 above	3	0.2	100.0
	Total	1319	100.0	

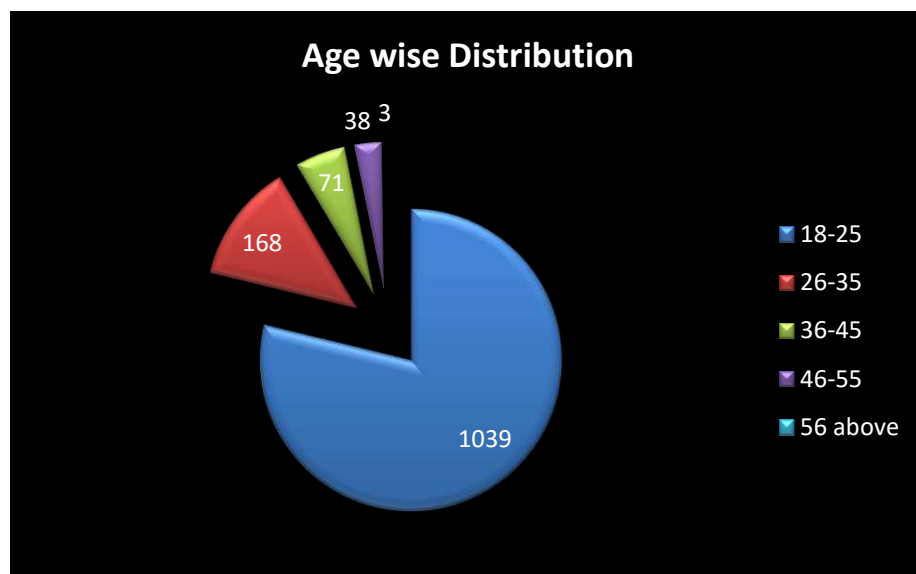


Figure 1 Age wise Distribution by the Respondents

Table 1 reveals the age-wise distribution of the respondents. It is found that a majority (78.8%) of the women respondents were found to be young as they all belonged to 18-25 age group. Second in rank were the respondents belonging to the 26-35 age groups that formed 12.7%, while 5.4% respondents belonging to the middle age group of 36-45 years formed 5.4%. There were respondents (n=38) belonging to 46-55 age group. The sample included 3 respondents belonging to the age group of 56 years of age and above.

6.2. Marital Status

Table 2 Frequency Distribution of the Marital Status by the Respondents				
Category		Frequency	Percent	Cumulative Percent
Valid	Married	296	22.4	22.4
	Unmarried	1023	77.6	100.0
	Total	1319	100.0	

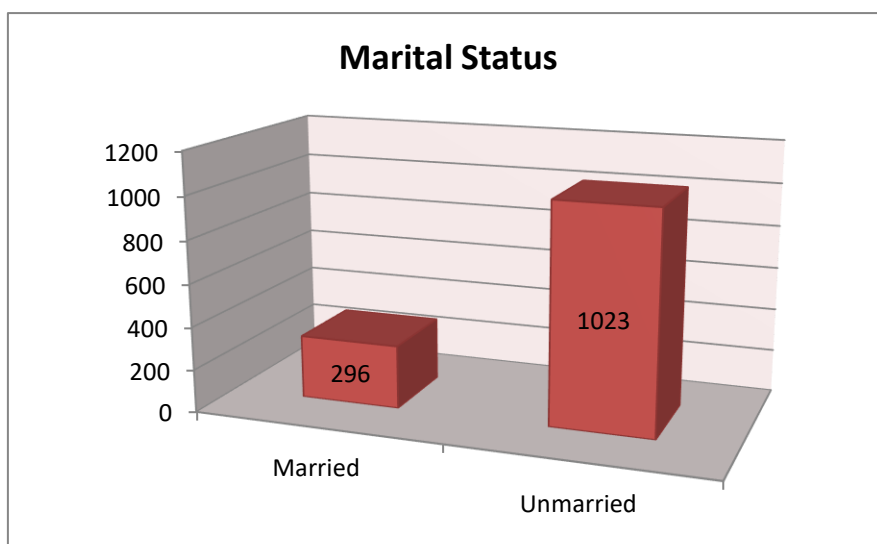


Figure 2 Marital Status of Respondents

Table 2 reveals the frequency distribution of the marital status of respondents. A majority of the rural women respondents included in the survey belonged to young age group. A little above $3/4^{\text{th}}$ of the rural women surveyed forming 77.6% happened to be bachelorette, while the remaining (22.4%) were found to be married.

6.3. Frequency Distribution of respondents as to their Educational Qualifications

Table 3 Age wise distribution by the Respondents				
Educational Qualification		Frequency	Percent	Cumulative Percent
Valid	10th -12th	136	10.3	10.3
	Above and Post Graduate	119	9.0	19.3
	Post Graduate	482	36.5	55.9
	Under Graduate	582	44.1	100.0
	Total	1319	100.0	

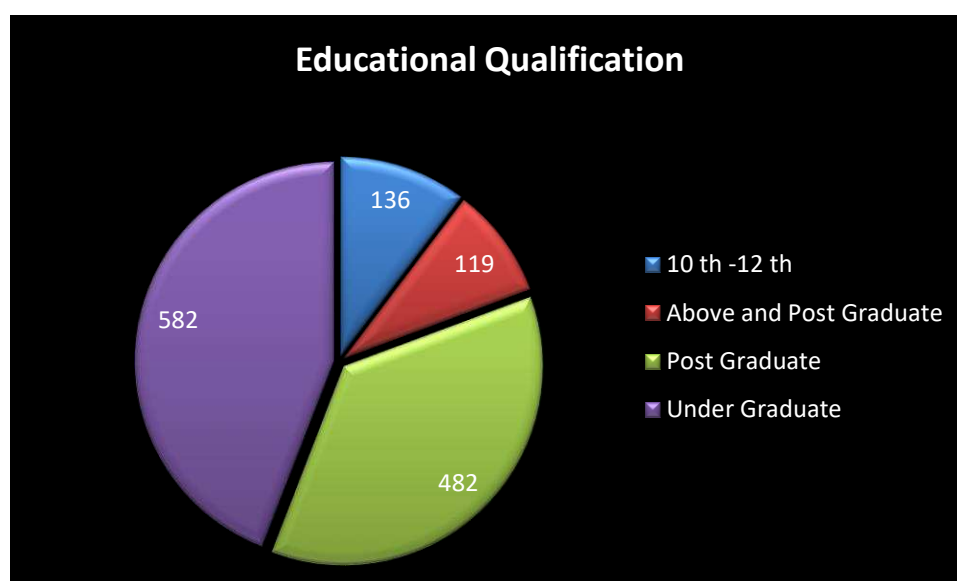


Figure 3 Educational Qualifications by the Respondents

Table 3 reveals the frequency distribution of the educational qualifications of the respondents. The rural women respondents surveyed were classified on the basis of the extent of their Educational Qualifications. It is found from the analyses that a majority of the respondents were pursuing under graduates forming 44.1%, followed by post graduates with 36.5%, while 10.3% of the respondents were matriculates. There were a good number of respondents with higher academic qualifications i.e., above post-graduation forming nine percent.

6.4. ICT Enabled Knowledge Resources on Women Entrepreneurship and Employability

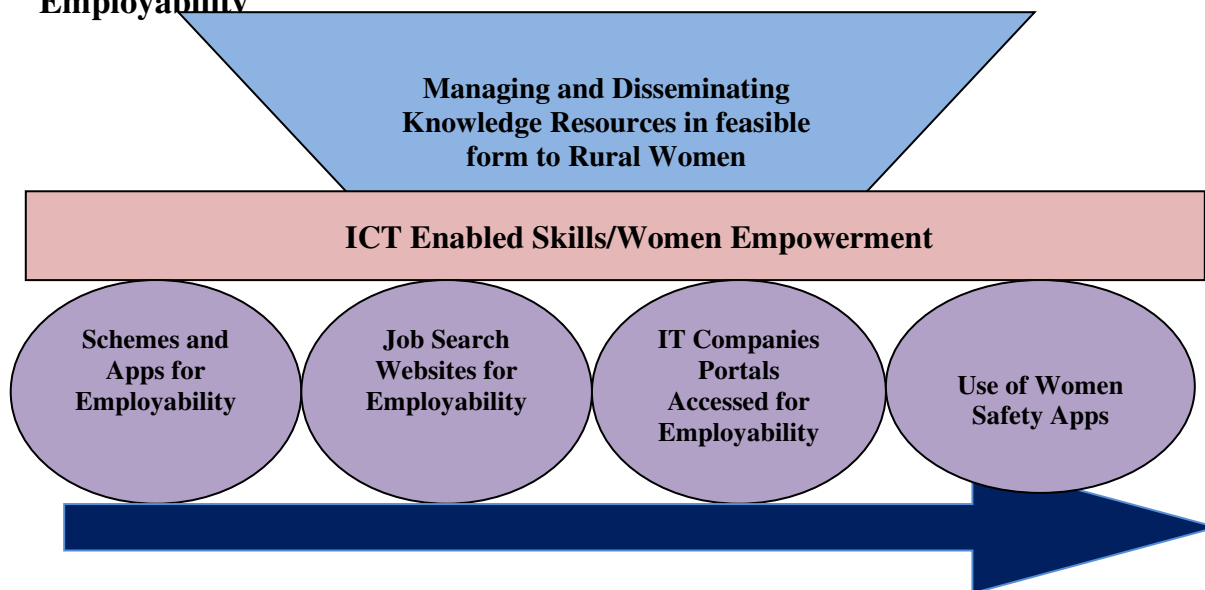


Figure 4 ICT Enabled Skills/Women Empowerment

6.5. Use of Schemes and Apps on Women Development and Employability *Welfare schemes and apps used*

Table 4 Types of Schemes and Apps for Employability and Entrepreneurship

Sl. No.	Types of Schemes, Websites and Apps for Employability and Entrepreneurship	1	2	3
1	WCD Anganwadi	1057 (80.1%)	205 (15.5%)	57 (4.3%)
2	Swayamsiddha Scheme by Ministry of Women and Child Development	942 (71.4%)	280 (21.2%)	97 (7.4%)
3	Support to Training and Employment Programme for Women	933 (70.7%)	307 (23.3%)	79 (6%)
4	BalikaSamriddhiYojana by the Ministry of Women and Child Development	997 (75.6%)	259 (19.6%)	63 (4.8%)
5	Women Welfare Policy, 2006	961 (72.9%)	294 (22.3%)	64 (4.9%)
6	National Commission for Women	1017 (77.1%)	255 (19.3%)	47 (3.6%)
7	Tamilnadu Mercantile Bank Mahalir Loan	1051 (79.7%)	207 (15.7%)	61 (4.6%)
8	Ministry of Women & Child Development	999 (75.7%)	262 (19.9%)	58 (4.4%)
9	MSME and Women Entrepreneurship and Employability	1009 (76.5%)	262 (19.9%)	48 (3.6%)
10	Women Entrepreneurs India (WEI)	952	292	75

		(72.2%)	(22.1%)	(5.7%)
11	Tamil Nadu Backward classes Economic Development Corporation LTD (TABCEDCO)	973 (73.8%)	259 (19.6%)	87 (6.6%)
12	Micro Credit scheme (MahilaSamridhiYojana)	1015 (77%)	268 (20.3%)	36 (2.7%)
13	New Swarnima Scheme	1053 (79.8%)	210 (15.9%)	56 (4.2%)
14	Dena Shakti Scheme	986 (74.8%)	280 (21.2%)	53 (4%)
15	The Tamilnadu Industrial Investment Corporation Ltd	1043 (79.1%)	234 (17.7%)	42 (3.2%)
16	Centre for Entrepreneurship Development (CED)	1024 (77.6%)	240 (18.2%)	55 (4.2%)
17	Women Entrepreneurs Welfare Association (WEWA)	984 (74.6%)	272 (20.6%)	63 (4.8%)

1. Never 2. Occasionally 3. Regularly

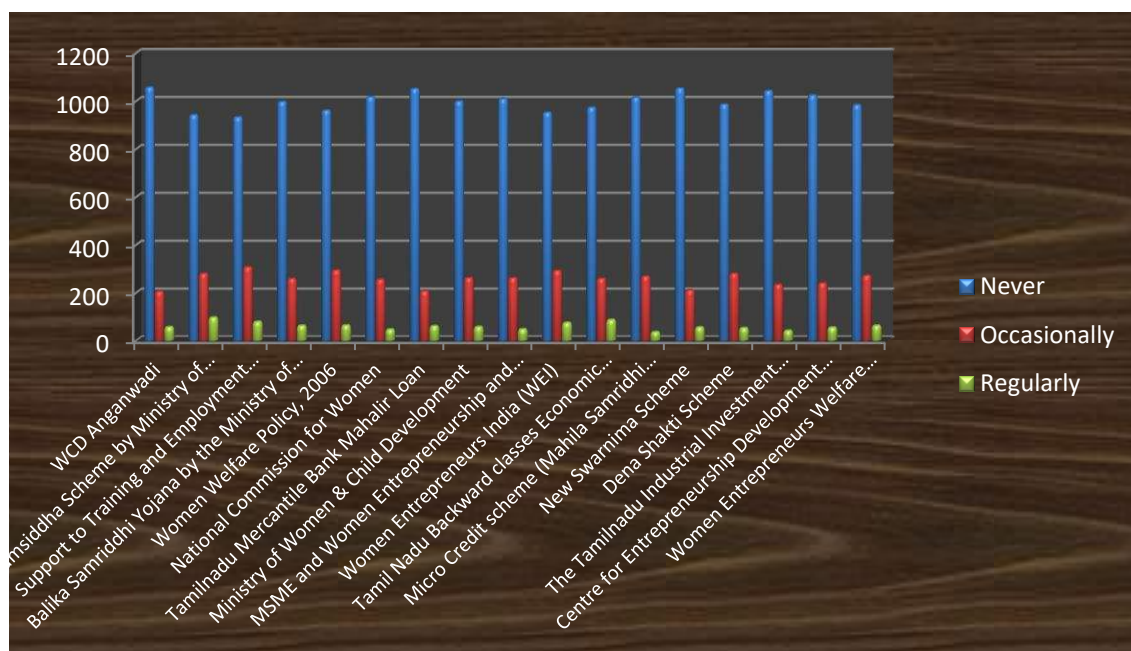


Figure 5 Types of Schemes and Apps for Employability and Entrepreneurship

There are good number of women welfare schemes for employability and entrepreneurship and also websites and apps used by the surveyed rural women are presented. It is found that very few of the surveyed respondents regularly used the relevant websites, schemes, pertinent to employment and entrepreneurship. While only 25% and below of respondents were using occasionally the schemes enlisted in the questionnaire. Of the varied use of schemes Women Entrepreneurship India (WEI) topped the list with a score of 22.1 %, followed by Micro Small Medium and Enterprises (MSME) 19.9%, Mahila Samridhi Yojana (20.3%), New Swarnima Scheme (15.9%), Balika Samridhi Yojana (19.6%) by the Ministry of Women and Child Development, Swayam siddha Scheme (21.2%) by Ministry of Women and Child Development, Women Entrepreneurs Welfare Association (WEWA) (20.6%) and WCD Anganwadi (15.5%). Of the total, 70% - 80% of the surveyed rural women respondents revealed that they never used any of the welfare schemes apps and relevant website towards entrepreneurship and career prospects. The overall look at the use performance reveals that the frequency distribution of the use of welfare schemes fell within a range between 15% and 23%.

It is inferred that there must be awareness among the rural women through various modes in addition to the respective ministries websites.

Job Search Websites for Employability

Table 5 Job Search Websites for Employability

Sl. No.	Job Search Websites for Employability	1	2	3
1	naukri.com	725 (54.9%)	397 (30.1%)	196 (14.8%)
2	freejobalert.com	374 (28.3%)	133 (10.0%)	838 (63.5%)
3	internshala.com	838 (63.5%)	314 (23.8%)	167 (12.6%)
4	Indeed	884 (67.0%)	287 (21.7%)	148 (11.2%)
5	Monster	966 (73.2%)	269 (20.3%)	84 (6.3%)
6	Glassdoor	1045 (79.2%)	195 (14.7%)	79 (5.9%)
7	FlexJobs	1024 (77.6%)	228 (17.2%)	67 (5.0%)
8	The Ladders	1040 (78.8%)	210 (15.9%)	69 (5.2%)
9	AngelList	1066 (80.8%)	212 (16.0%)	41 (3.1%)
10	LinkedIn	780 (59.1%)	374 (28.3%)	165 (12.5%)
11	LinkUp	993 (75.2%)	237 (17.9%)	89 (6.7%)
12	Scouted	1065 (80.7%)	207 (15.6%)	47 (3.5%)
13	Snagajob	1075 (81.5%)	197 (14.9%)	47 (3.5%)

1. Never 2. Occasionally 3. Regularly

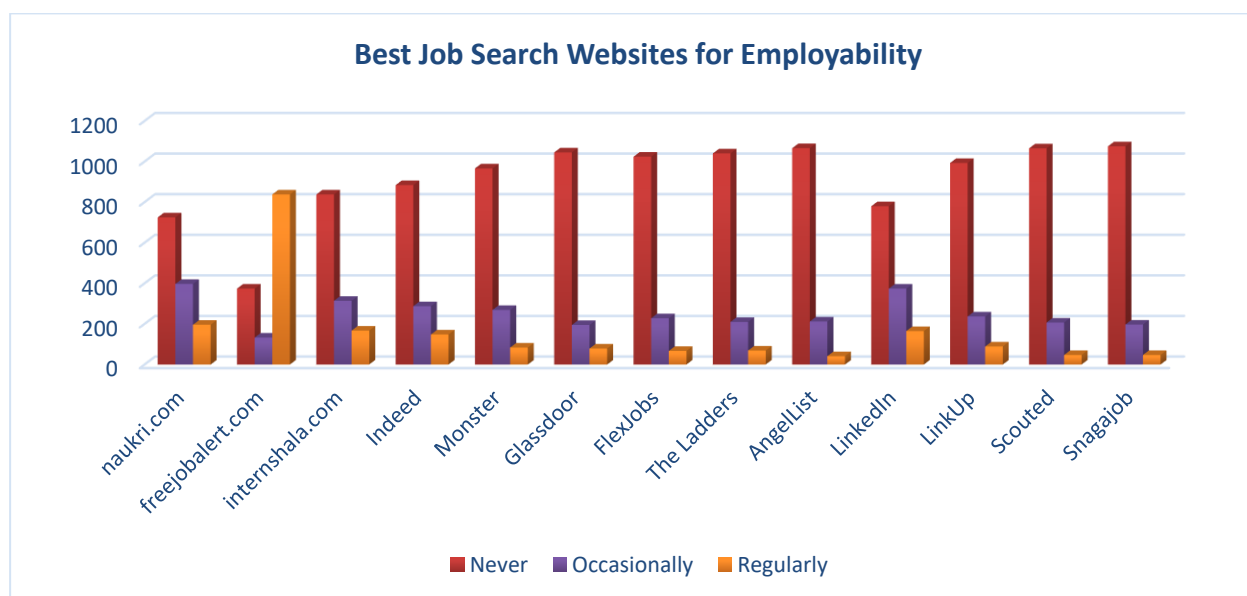


Figure 6 Job Search Websites for Employability

There are a good number of job search websites exist and are popular among the people. The survey intended to trace the familiarity and use of job search engines among the rural respondents.

Table 5 reveals the Best Job Search websites for employability of the Respondents. Among those websites, Freejobalert.com topped the list with a high score of 70%, followed by Naukri.com with 16%, Internshipshala.com with 13% and Monster 12%.

The same trend prevailed among the rural women respondents for occasional use of search engines Naukri.com (35%), Internshipshala.com (26%), Indeed (24%) and Monster (25%).

IT Companies Portals Accessed

Table 6 IT Companies Portals Accessed for Employability

Sl. No.	IT Companies Portals for Employability	1	2	3
1	Infosys - Consulting	745 (56.4%)	338 (25.6%)	236 (17.8%)
2	Tata Consultancy Services	668 (50.6%)	416 (31.5%)	235 (17.8%)
3	Oracle Corporation	889 (67.4%)	275 (31.5%)	155 (11.7%)
4	Accentiv' India Limited	938 (71.1%)	288 (21.8%)	93 (7.0%)
5	Wipro	752 (57.0%)	382 (28.9%)	185 (14.0%)
6	Mphasis	937 (71.0%)	304 (23.0%)	78 (5.9%)
7	Tech Mahindra	833 (63.1%)	327 (24.7%)	159 (12.0%)
8	Capgemini India Pvt ltd	893 (67.7%)	329 (24.9%)	97 (7.3%)
9	Accenture	915 (69.37%)	275 (20.8%)	129 (9.7%)
10	HData Systems	923 (69.9%)	307 (23.2%)	89 (6.7%)
11	HCL Technologies	765 (58%)	379 (28.7%)	175 (13.2%)
12	Hyperlink InfoSystem	904 (68.5%)	302 (22.9%)	113 (8.5%)
13	Honeywell Multinational Conglomerate Company	956 (72.4%)	280 (21.23%)	83 (6.29%)

1. Never 2. Occasionally 3. Regularly

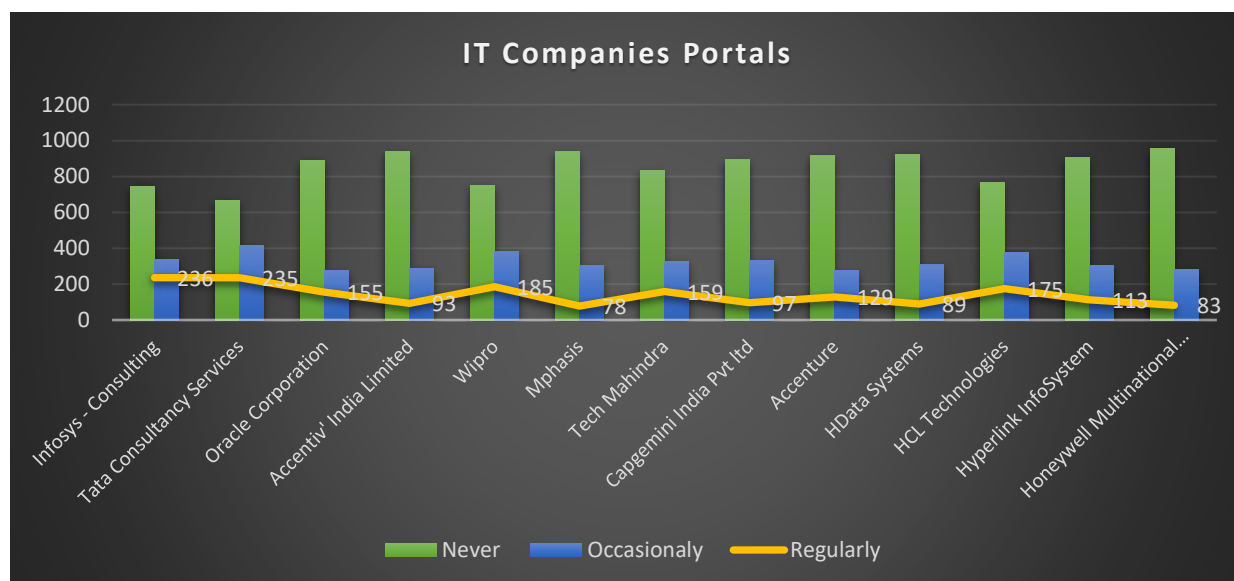


Figure 7 IT Companies Portals for Employability

There is a large number of IT companies and corporate extend their vistas for employability even in second tier cities and middle towns targeting the young potential job seekers with ICT knowhow. The present research aimed at assessing the awareness and access of IT portals towards employability among the surveyed rural women.

It is found that the respondents regularly accessed different portals of which Infosys and TCS had an equal score of 22% each, followed by Oracle Corporation with 12%, Tec-Mahindra 12%, HCL Technologies 15% while a majority of respondents were ignorant of the portals.

Use of Women Safety Apps

Table 7 Use of Women Safety Apps by the Respondents

Sl. No.	Use of Women Safety Apps	1	2	3
1	Himmat	1133 (85.9%)	131 (9.9%)	55 (4.2%)
2	My Safetipin	1048 (79.5%)	195 (14.8%)	76 (5.8%)
3	Hawk Eye	1108 (84%)	141 (10.7%)	70 (5.3%)
4	Tell Tail	1109 (84.1%)	165 (12.5%)	45 (3.4%)
5	Kavalan	879 (66.6%)	302 (22.9%)	138 (10.5%)
6	Disha SOS	1065 (80.7%)	203 (15.4%)	51 (3.9%)
7	Namola	1136 (86.1%)	140 (10.6%)	43 (3.3%)
8	Grannus	1118 (84.8%)	170 (12.9%)	31 (2.4%)
9	bSafe	1122 (85.1%)	144 (10.9%)	53 (4%)
10	Women Safety	986 (74.8%)	237 (18%)	96 (7.3%)
11	Shake2Safety	1123 (85.1%)	138 (10.5%)	58 (4.4%)
12	Chilla	1138 (86.3%)	165 (12.5%)	16 (1.2%)

1. Never 2. Occasionally 3. Regularly

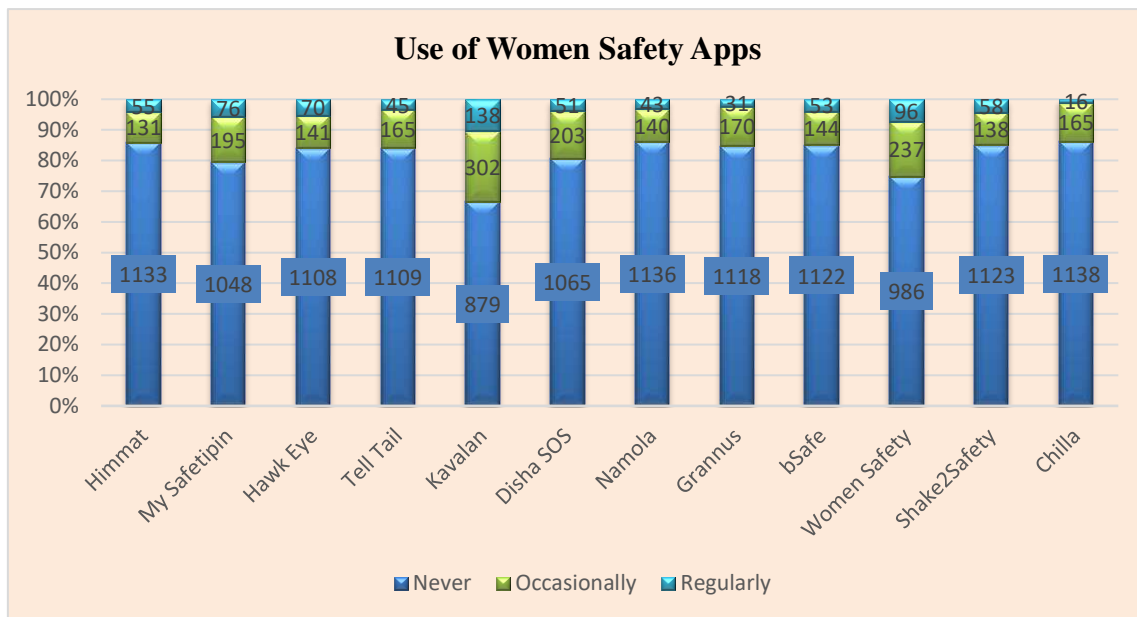


Figure 8 Use of Women Safety Apps

Women's safety consist of strategies, practices and policies which aim to reduce gender-based violence (or violence against women), including women's fear of crime. It also involves creating safe environment, liberty from poverty; enhance financial security and autonomy, self-worthiness of women and forming a safer and healthier community for everyone. The scholar has assessed the surveyed rural women defendants with respect to their use of women safety apps.

Table 7 reveals the frequency distribution of use of women safety apps by the respondents. It is found that the respondents regularly used women safety apps that included Kavalan (10.5%), Women Safety (7.3%), My Safetipin (5.8%) and Hawk Eye (5.3%). It is shocking to note that the surveyed rural women respondents were not familiar with the women safety apps such as Chilla (86.3%), Namola (86.1%), Himmat (85.9%), bSafe (85.1%) and Shake2safety (85.1%). In the awareness lacking women safety apps Awareness and Training programs should be provided both online and offline periodically.

7. FINDINGS

- The overall look at the use performance reveals that the frequency distribution of the use of welfare schemes fell within a range between 15% and 23%. It is inferred that there must be awareness among the rural women through various modes in addition to the respective ministries websites.
- The normal trend should have been that the rural women respondents should have displayed a better performance with good score in the use of the job search websites. The number of respondents accessing Naukri and Monster in specific displayed a poor performance score. This item also should be included in the list scheduled for training programs.
- In this case also, the normal trend should have been that the rural women respondents should have displayed a better performance of search on the IT companies' portals. The highest score of respondent's did not exceed 22%. The resulting environment needs a strong package for educating the rural women in good number in effectively searching the IT corporate portals that too inclusive of many.

- The use practice of women safety apps is smaller not only in the number of respondents but also in the number of women safety apps available in this field. The percentage of respondents who never used many items of women safety apps is at an alarming rate and rise high above 85% in any single item enlisted.

8. CONCLUSION

Information and Communication Technology has much potential that enable our nation to enhance the overall performance in all walks of employment and entrepreneurship. It is also evident that the inflow of foreign exchange got increased for the past two decades through IT oriented trade practices. Empowering women, particularly from the rural and semi-urban zones, bring more prospects to their family, their locale and the nation. Leveraging ICT Knowhow among the rural women towards achieving the right purposes contribute sustained socio-economic development. In this context, the present study divulged that the surveyed rural women fairly aware of ICT potentials and make use them for various stakeholders to conduct these kind of surveys and awareness programmes both online media and onsite events. Many of the countryside women in the study area need to understand and get aware the employability and self-employability opportunities by acquiring appropriate skills through ICT. There are certain areas, such as, Digital Marketing, Online Transactions, MSME (Micro, Small and Medium Enterprises) Startups, Consumer Product Intermediaries, Apparel and Fashion Design, Horticulture and Floriculture, Desktop Publishing Tools and Leadership, Employability and Entrepreneurship Skills where employability and business possibilities viable to ICT.as the outcome of the study, it is suggested to the educational institutes to have a well decided policy and implications strategies to impart training on ICT enabled entrepreneurial skills, awareness on opportunities and motivates at graduate level.

ACKNOWLEDGEMENT

We have acknowledged that, this paper publication is one of the outcome of the research work of the project funded and sanctioned by ICSSR-IMPRESS vide letter: IMPRESS/P1275/648/2018-19/ICSSR Dated 17th September, 2019 MHRD (IMPRESS Scheme) and ICSSR

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