

A Study on Issues and Challenges Faced by Women Researchers

Dr. T. Mary Jones¹, R. Suvarna², and T. Sravanthi³

¹Associate Professor & Head, Department of MBA, PACE Institute of Technology & Sciences, Ongole., Andhra Pradesh, India

^{2,3}Assistant Professor, Department of MBA, PACE Institute of Technology & Sciences, Ongole., Andhra Pradesh, India

Correspondence should be addressed to Dr. T. Mary Jones; mary_jones@pace.ac.in

Copyright © 2022 Made to Dr. T. Mary Jones et al. This is an open-access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT- Women are going ahead in all the fields from kitchen to space. They are establishing their mark wherever they go and are paving way for many others to join. But still many women are not able to enter into the field of research. Women are encountering many problems during their journey to become a researcher from all dimensions. Thus this study focused on identifying the issues and challenges of women during their research activities and observed that lack of financial resources and lack of facilities are the main problems hindering their growth.

KEYWORDS- Women Researchers; Issues of Women researchers; Henry Garrett Ranking.

I. INTRODUCTION

The greatest break down in the fight of India with COVID 19 came with the introduction of a local made testing kit PATHO DETECT. The testing kit was developed in Pune based diagnostic firm which tests and gives the result in less than half of the time that the foreign kits are taking six hours. All the credit of developing the kit is credited to R & D Chief - Minal Dakhava Bhosale who along with her team developed the kit in just six weeks. And the special attribute of Mrs. Minal Dakhava Bhosale is that she handed over the kit just one day before her delivery. A great researcher of our country contributed at the most needed time for the nation.

Ms. Nagaraj, started a simple Facebook group Caremongers India, in times of COVID 19, an idea to help the vulnerable people. She along with her team is supporting many elderly, disabled people who are not having any support during this lockdown.

Women researchers are playing a great job during this crisis of COVID 19, a global pandemic. Woman is a great researcher in all fields. Research is the systematic inquiry into the detailed investigation of concepts, materials or sources to extract the facts and arrive at new conclusions. Women are unknowingly conducting research in their day to day lives in every aspect. They do research in cooking, decorating the house, nurturing children, managing financial issues, etc. in everything they work towards bringing the best in an innovative way. That is why people in most economically backward countries also live happily for most of the times.

In recent past the women researchers are entering into all fields of research. But even then the share of men research is

very high compared to women. India accounts to only 14% of 2.8 lakh scientists, engineers and technologists involved in R & D Institutes. Globally women researchers are only 30%. Thus we can observe that the recent past rapid growth have resulted in bringing up these meager figures. In this regard a study is conducted on problems faced by women in research.

II. LITERATURE REVIEW

(Shettar, 2015) Shettar studied about the issues faced by women to be empowered in 21st century. The study concentrated on the upliftment of women and to protect them from violence faced by them inside and outside the houses. This is possible only by giving more access to education and employment.

L. Prathiba (2017) concluded from her study that women are less empowered than men. The decision making in the house is also given to men when compared to women even with education and employment. The gender gap can be observed in all areas including politics. The study observes that a woman can act as a trigger for instilling value system into the family. A good nation is built by good families. Thus women should be given priority in the houses.

Subrahmanyam (2011) conducted a study to compare the education of women in the past and present. When compared to the olden days the number of girl students in schools is going on increasing consistently. This will help women to be empowered in decision making in all the dimensions of a family and society at large.

M. Bhavani Sankara Rao (2011) observed that the women are improving in maintaining their health especially among the self help groups. The members are discussing about their health conditions and are giving advices to other women to improve their family health.

Doepke M. Tertilt M. (2011) This study is focused on the economic empowerment of women. The study is suggesting that the money in the hands of the mother will only benefit children. It studied about the family bargaining models.

Duflo E. (2011) This study was trying to establish the relationship between the empowerment of women and the development of women. The relationship is too weak in terms of self sustenance. Hence, much support is required for women to develop in terms of policies, freedom and reducing the gender gap.

Sethuraman K.(2008) Sethuraman studied about the

challenges faced by women in rural and tribal areas. A longitudinal study was conducted in Karnataka. The study focused on women empowerment and domestic violence.

A. Objectives of the Study

To examine the factors affecting the contribution of women in research
 To suggest the measures for improving the number of women researchers.

B. Hypothesis of the Study

H0: There is no statistically significant relationship between financial capability and the growth of women in research.
 H1: There is statistically significant relationship between financial capability and the growth of women in research.

C. Research Methodology

The present study is a descriptive study to establish the relationship between the various factors affecting women in conducting research.

D. Methods of Data Collection

1) Primary Data

Data collected from the women researchers using semi structured interview process with the support of structured questionnaire.

2) Secondary Data

Data is collected from various sources of print (newspapers, magazines, journals, research reports and books) and electronic media (websites, e-journals and databases).

3) Research Instrument

Structured questionnaire in google forms.

III. SAMPLE DESIGN

A. Sampling Universe and Sample Unit

The population for the study is all women researchers. Thus for the study women working as faculty who are pursuing research studies or who are interested to do research study are selected.

B. Sampling Procedure

The samples are drawn using non-probability method of sampling.

Sample Size: The sample was selected on convenience basis. In total responses of 67, the responses were collected from women and used for data analysis are 51.

IV. DATA ANALYSIS

The data analysis is being done by frequency analysis followed by Henry Garrett Ranking method.

A. Limitations of the Study

- The study is limited to a sample of 51.
- The respondents are from the field of engineering and management only.
- Majority of the focused group are having low experience.
- The respondents are confined to Prakasam District,

Andhra Pradesh.

V. RESULTS AND DISCUSSION

A. Demographic Status of Sample Respondents

- Most of the sample respondents are from 25 – 30 years of age group(see table 1 and figure 1).

Table 1: Sample respondents are from 25 – 30 years of age group

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 25 Years	15	29.4	29.4
	25 - 30 Years	21	41.2	70.6
	31 - 40 Years	12	23.5	94.1
	40 - 50 Years	3	5.9	100.0
	Total	51	100.0	100.0

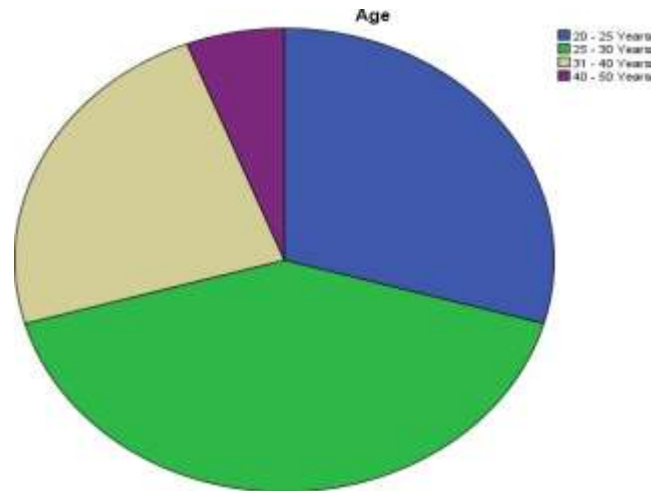


Figure 1: Age of Respondents

- 58.8 % of the respondents are pursuing their Ph. D (see table 2 and figure 2).

Table 2: Highest Qualification

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PG	21	41.2	41.2
	Pursuing Ph. D	30	58.8	100.0
	Total	51	100.0	100.0

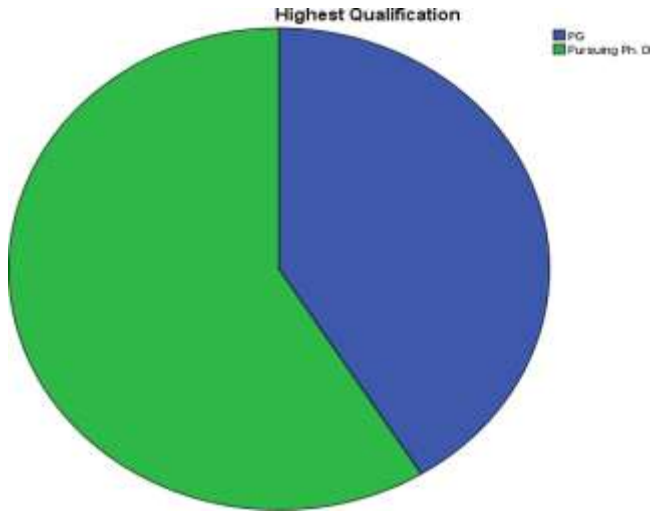


Figure 2: Highest Qualification

- Most of the sample respondents are interested to conduct research on the area of management experience (see table 3 and figure 3).

Table 3: Area of Research

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Management	39	76.5	76.5	76.5
	Engineering	6	11.8	11.8	88.2
	Science	3	5.9	5.9	94.1
	Other	3	5.9	5.9	100.0
	Total	51	100.0	100.0	

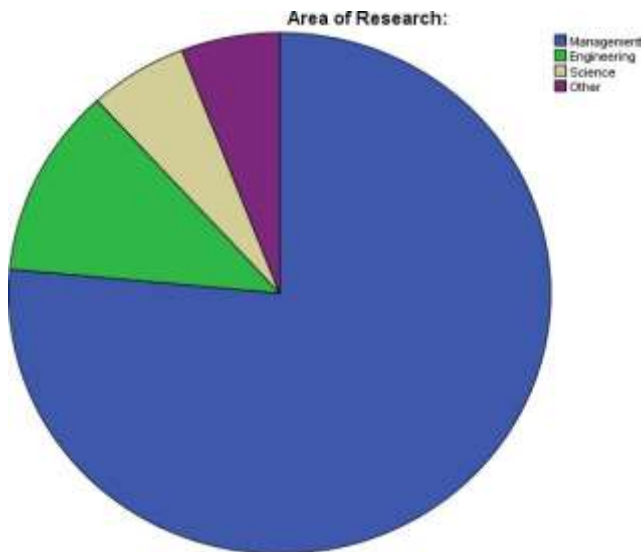


Figure 3: Area of Research

- The majority of the people responded are with less than five years of experience (see table 4 and figure 4).

Table 4: Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 – 5 Years	39	76.5	76.5	76.5
	6 – 10 Years	3	5.9	5.9	82.4
	11 – 15 Years	6	11.8	11.8	94.1
	16 – 20 Years	3	5.9	5.9	100.0
	Total	51	100.0	100.0	

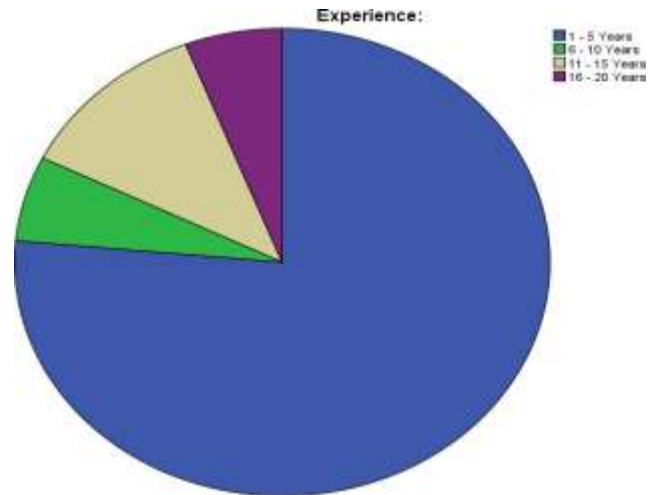


Figure 4: Experience

- 66.7% of women are strongly agreeing for women to do research but 17.6% of the women are not ready to suggest women to conduct research (see table 5).

Table 5: Do you suggest women to conduct research

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	11.8	11.8	11.8
	Disagree	0	0	0	11.8
	Neutral	3	5.9	5.9	17.6
	Agree	8	15.7	15.7	33.3
	Strongly Agree	34	66.7	66.7	100.0
	Total	51	100.0	100.0	

B. Problems Faced by Women During the Research

From the literature review eight factors were identified that hinders the growth of women. They are:

- Financial Problems
- Facilities
- Travelling
- Time
- Guidance

- No clear idea of research
- Sexual abuse
- Family

The factors are many, but identifying the most important problem is very important to remove the obstacles for the growth of women in research fields. In this regard Henry Garrett ranking method is used to identify the most important factor(see table 6 to table 10).

Table 6: Important factor

Factors	1st	2nd	3rd	4th	5th	6th	7th	8th
F1	27	6	3	3	9	0	0	3
F2	6	9	6	15	0	0	9	6
F3	3	15	6	6	9	6	6	0
F4	3	6	9	3	9	15	0	6
F5	9	6	6	12	3	3	3	9
F6	0	0	6	9	15	3	9	9
F7	0	9	9	0	6	9	9	9
F8	3	3	0	6	6	12	12	9

Table 7: Important factor

Rank	Percent Position	
	$100(R_{ij} - 0.5)/N_j$	Garrett Value
1	6.25	80
2	18.75	68
3	31.25	60
4	43.75	53
5	56.25	47
6	68.75	40
7	81.25	32
8	93.75	20

Table 8: Important factor

Fact ors	1st * 80	2nd * 68	3rd *	4th *	5th *	6th *	7th * 32	8th *
			60	53	47	40		20
F1	27	6	3	3	9	0	0	3
F2	6	9	6	15	0	0	9	6
F3	3	15	6	6	9	6	6	0
F4	3	6	9	3	9	15	0	6
F5	9	6	6	12	3	3	3	9
F6	0	0	6	9	15	3	9	9
F7	0	9	9	0	6	9	9	9
F8	3	3	0	6	6	12	12	9

Table 9: Important Factor

Fact ors	1st * 80	2nd * 68	3rd * 60	4th * 53	5th * 47	6th * 40	7th * 32	8th * 20	TOT AL	TOT A L/N	RA NK
F1	2160	408	180	159	423	0	0	60	3390	66.47 0	1
F2	480	612	360	795	0	0	288	120	2655	52.05 8	4
F3	240	1020	360	318	423	240	192	0	2793	54.76 4	2
F4	240	408	540	159	423	600	0	120	2490	48.82 3	5
F5	720	408	360	636	141	120	96	180	2661	52.17 6	3
F6	0	0	360	477	705	120	288	180	2130	41.76 4	7
F7	0	612	540	0	282	360	288	180	2262	44.35 2	6
F8	240	204	0	318	282	480	384	180	2088	40.94 1	8

Table 10: Important factor

S. No	Rank	Factor	Factor
1	1	F1	Financial problem
2	2	F3	Lack of Facilities
3	3	F5	Travelling
4	4	F2	Time
5	5	F4	Guidance
6	6	F7	No clear idea of research
7	7	F6	Sexual Abuse
8	8	F8	Family

The most important problem faced by women researchers is the financial problem followed by lack of facilities and travelling.

- **Financial Problems:** Research is process incurs huge amount of expenditure and the return of investment is to be waited for a long time. Thus conducting research first involves the financial resources. The research may take long time to get results. Scientist around the world are working for generating the vaccine for COVID 19 for the past four months but their efforts are in vain. Thus we are investing our time which requires more financial resources. But women do not have financial freedom in many countries, and the family members also will not be ready to grant women the expenditure. Thus lack of financial resources is a big problem for women.
- **Lack of Facilities:** As the financial resources are limited, the facilities to conduct research cannot be procured by women. They may not have access to go out to get access to public resources.
- **Travelling:** Most of the premier research institutes are

located in urban and advanced areas or are located far from the cities. Thus it is becoming difficult to women to travel and reach the research institutions frequently. Travelling incurs financial expenses, takes time and most importantly safety issues. Sometimes the visit may be an emergency which makes it very difficult to travel for women.

VI. SUGGESTIVE MEASURES

A Scholarships for Conducting Research

It is a request to the government of our country to increase the aid of financial support to women at the level of research activities. Our government is already providing many schemes for women empowerment. But these schemes are not sufficient and all women are not eligible for these schemes. Thus we request the government to provide more financial support.

B Awareness of Financial Aid Provided for Women

Government of India is providing many schemes like Women Scientist Scheme but most of the people are not aware of the schemes. Thus they should be proper communication about the steps government is taking for the development of women especially in research.

C Establish of Research Institutes

It is very important for the establishment of more research institutes. The presence of institutes will give rise to more opportunities for women. It reduces the travelling problem and the lack of facilities to conduct research.

D Awareness of Research Activities

Creating awareness among the people is very vital. If all the people are aware of the importance of research, it helps the women to get support and help from family and friends also.

E Family Support

Family plays a key role in the activities of women. But most of the times family considers that the research is not required for women. And that too, with the growing sexual abuse cases in India, family is not ready to allow women to move freely in the various industries. Thus it is the responsibility of family to support and encourage women.

F Scope for Further Research

The present research can be extended to women working in scientific research institutes dealing with real time problems.

VII. CONCLUSION

Women are 49.6% of the world's population. They have been contributing from the research in space to every small aspect of life. They are very talented and multitaskers. They manage the things effectively. Thus women should be encourage to take up the research. Most of the problems will be solved by simple principles and common sense. Women are having more patience and persistence. Hence, these qualities of women will definitely support the efforts of women in the field of research. Women should be encouraged by giving the required financial and moral support to stand up and work and achieve great results.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

- [1] L. Prathiba. (2017). A Study on Issues and Challenges of Women Empowerment in India .
- [2] GJRA - GLOBAL JOURNAL FOR RESEARCH ANALYSIS , 138-140.
- [3] Sara Pavanello, P. P. (2015). Qualitative research on women's economic empowerment and social protection . Rome: FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS .
- [4] Shettar, D. (. (2015). A Study on Issues and Challenges of Women Empowerment in India . IOSR Journal of Business and Management (IOSR-JBM) , 13-19.
- [5] <https://timesofindia.indiatimes.com/india/there-are-too-few-women-in-science/articleshow/63575929.cms>
- [6] C. R. Kothari, "Research Methodology", Second Revised Edition, New Age International Publishers.
- [7] <https://www.weforum.org/agenda/2019/10/indian-women-employment-entrepreneurs-change>.
- [8] Duflo E. (2011) Women's Empowerment and Economic Development, National Bureau of Economic Research, Cambridge.
- [9] India: Women's Empowerment - IFAD / OE, 2000. The Republic of India; TamilNadu Women's Development Project : Completion Evaluation, Report 340 – IN Rome, April.
- [10] Baruah B. (2013) Role of Electronic Media in Empowering Rural.
- [11] Goswami, L. (2013). Education for Women Empowerment. ABHIBYAKTI: Annual Journal, 1, 17-18.
- [12] Baruah, B. (2013). Role of Electronic Media in Empowering Rural Women Education of N.E. India. ABHIBYAKTI: Annual Journal, 1, 23-26.
- [13] Kadam, R. N. (2012). Empowerment of Women in India- An Attempt to Fill the Gender Gap. International Journal of Scientific and Research Publications, 2(6), 11-13.
- [14] Nagaraja, B. (2013). Empowerment of Women in India: A Critical Analysis. Journal of Humanities and Social Science (IOSRJHSS), 9(2), 45-52 [WWW page]. URL <http://www.Iosrjournals.Org/empowerment.html>.
- [15] Deshpande, S., and Sethi, S., (2010). Role and Position of Women Empowerment in Indian Society. International Referred Research Journal, 1(17), 10-12.
- [16] Kishor, S. and Gupta, K. (2009), Gender Equality and Women's Empowerment in India, NATIONAL FAMILY HEALTH SURVEY (NFHS-3) INDIA, 2005-06, International Institute for Population Sciences, Deonar, Mumbai.
- [17] Suguna, M., (2011). Education and Women Empowerment in India. ZENITH: International Journal of Multidisciplinary Research, 1(8), 19-21.
- [18] Dr. Dasarati Bhuyan "Empowerment of Indian Women: A challenge of 21st Century" Orissa Review, 2006
- [19] Vinze, Medha Dubashi (1987) "Women Empowerment of Indian: A Sociol-Economic study of Delhi" Mittal Publications, Delhi.
- [20] Dhruba Hazarika "Women Empowerment in India: a Brief Discussion" International Journal of Educational Planning & Administration. Volume 1, Number 3 (2011)
- [21] Pankaj Kumar Baro1 & Rahul Sarania "Employment and Educational Status: Challenges of Women Empowerment in India", A Peer-Reviewed Indexed International Journal of Humanities & Social Science.
- [22] <http://www.slideshare.net/puneetsharma5688/women-empowermentpuneet-sharma>.