



A STUDY ON THE FACULTY DEVELOPMENT PROGRAMMES-PROMOTING RESEARCH AND DEVELOPMENT ACTIVITY AMONG FACULTY MEMBERS IN THE HIGHER EDUCATION INSTITUTIONS.

AUTHORS

- 1. DR. S. SRINIVASA PADMAKAR**, M.Com., MBA., M. Phil., Ph. D., PGDCA. Associate Professor of Commerce., A.V. College of Arts, Science and Commerce, Domal Guda, Gagan Mahal Road Hyderabad
- 2. Dr. D. Yugandhar**, M. P. Ed. M. Phil., Ph. D., Physical Director SRR & CVR College, Karl Marx Road, Machavaram, Vijayawada

DOI: <https://doi.org/10.56975/ijrar.v13i2.331618>

Abstract:

Research and Development, project work activities are very significant in higher Education institutions for the faculty members on par with the academic instruction work. Undertaking the Research projects work is part of academic activity to the faculty in the higher educational institutions.

Faculty members subject knowledge, analytical skills, critical thinking, Research skills shall be improved and developed, if they deeply involve in the Research works like Minor and Major Research Projects, sponsored by the UGC, ICSSR organisations. Also, the faculty members actively be involved in Research paper publications, subject books authoring, and research articles publications. As such, the research activity is the backbone to the academic profession.

The Higher Education departments, and Higher education Institutions must develop the Research curriculum to the U.G. and P.G. Level students in their academic courses and faculty must involve in the instruction and Research project guidance to the U G and P.G. Level Students as a part of their course completion. It is a foundation course of Research and development to the students so that they can do their research course like M. Phil and Ph. D courses in future after their P.G. Courses.

Higher education organisations, University Grants Commission, ICSSR, like organisations must and sponsor and conduct the orientation courses and refresh courses and Faculty Development Programmes (FDPs), and Research Project Workshops, to the faculty members of high education to upgrade their research, analytical skills, authoring and publications of Research works.

This paper is prepared to recognise the significance, and importance of Research and Developmental activities, Research Publications works and Research paper publications, book writing works and number of workshops, F. D. Ps, Refresher courses, and Orientation Programme in the higher education organisations. The problems and challenges during the research process to the faculty researchers also have been discussed. They shall frequently be conducted to the faculty members of higher education institutions to habituate the research works

Key Words:

Research and Development., Research and analytical Skills, Project works guidance, Refresher courses, Orientation Course, Faculty Development Programme, Research Project works

INTRODUCTION:

Faculty dealing with various subjects to students as per the curriculum design, must have thorough knowledge well, in the subject beyond the syllabus prescribed to deal the subject in depth with the students. Research experience, paper publication experience, subject books writing practice to the faculty will have an additional advantage.

Moreover, attending or participating national or international conferences and Faculty development programmes on Research Methodology also will be useful to the faculty in getting motivation to habituate the research publication works.

Academicians, along with teaching in the concerned subject must do the research publication works. Both the teaching and research is a parallel journey to the faculty members. Doing the Ph. D, post-doctoral research fellowship, in the concerned subjects, writing of articles on the subject concerned, authoring the subject books and writing chapters as co-author for the prescribed text books for the university, or with the leading publishers will have additional command on the subject.

Therefore, the universities, Higher educational institutions, must encourage the faculty to attend the Research Orientation course, and Refresher courses to the concerned Universities, and research organisations to do their research works as on duty, as a part of Faculty Development Programme (FDP).

University grants Commission (UGC), ICSSR, CESS is the research organisation support financially the faculty members and sanctions the Minor Research and Major Research projects to the faculty with financial support. It is also a good opportunity to the faculty to do the research development projects at the government financial support.

Further attempting, and qualifying the NET-national level Examination and A.P. State level SET examination will also update the faculty knowledge in the concerned subject to qualify for the faculty position in the universities.

SIGNIFICANCE OF THE STUDY:

Research and Development wings if opened in the Higher Educational institutions, and Universities will motivate the faculty members with all the resources like, library with advanced reference and Research works, practical case studies, and separate research lab with computerised software technology, hiring the research data analysis software.

At the university level, or higher education college level a separate Official Research journal with ISSN number recognition must be obtained and publish the faculty research papers periodically. The official organ will inculcate the research publication attitude among faculty. In their career advance programmes, and in their promotion and incentive sanctioning programme, these research publications will very much be useful.

Higher Education institutions, universities must encourage the faculty members for the publication works with free publication or with incentives, and A.P.I scoring and also recognising faculty for the research publications they made in the official, national and international journal with, "Double Blind Peer Review, Web of Science, Scopus, ABDC journals".

REVIEW OF THE LITERATURE:

1. Research is an Academic activity and it is part of academic work of an academician. According to **Clifford Woody** research comprises defining and redefining problems, formulating the Hypothesis or to suggest the solutions to the long pending issues. By collecting the data from either primary or secondary sources, organising the data systematically and evaluating the dates for arriving the conclusions.
2. **D Slesinger and M Stephenson in the encyclopaedia of social sciences** defined the research as "Manipulation of things, concepts or symbols for the purpose of generalising to extend, to correct or verify knowledge whether that knowledge helps in the construction of theory or in the practice of an art." Research is therefore is an original contribution of researcher to the existing of stock of subject knowledge making for the advancement. The research is possible out of investigation, to invent something new. All Progress and the growth and development of an organisation is born of enquiry and research outcome.
3. A famous researcher **Hudson Maxim** in the context of which the significance of the research can easily be understood. Research inculcates scientific and inductive thinking and it promotes the development of logical habits of thinking and organisation. 'Research has its special significance in solving various operational and planning problems of business and industry. "Decision making of management in an organisation is also because of research analytical process" of business data related to the topic, sampling and hypothesis. "Research provides the basis for all government policies of our economic system"
4. According to **Robert Ross** "Research is essentially an investigation recording and analysis of evidence for the purpose of gaining knowledge". As opined by **C. C. Crawford, Research. According to C.C. Crawford of the University of southern California, Research simply is a fact-finding process after thorough investigation** in the field level ground realities with material evidences collected by the Researcher and investigator.
5. Research involves the collection of relevant data of the problem related to sampling and hypothesis. The principal investigator requires the skills, creative thinking and innovative statistical application mind of the faculty research to find a solution to a long pending burning problem of the society. The research must have investigating skills and technological applications and subject knowledge and awareness and understanding in the concerned field in which he is doing research.
6. The data should be collected either from the primary sources or the secondary sources. Among the primary sources, through the well-structured questionnaire, from the respondents, in the field level observation method of situation with the ground reality and by conducting the interview oral and telephonic. Secondary source of data collection is from the published or unpublished, annual returns

of the branch or head office, production, sales and profit statements prepared by the Head office or branch offices. These can be used for the analysis and for the decision making by the management.

7. "Research should be objective and logical" The findings should be derived from the data analysis, data processing with an appropriate statistical tool. **Shashi K. Gupta and Praneet Rangi Kalyani publishers. As observed and opined by Zina O Leary** the research as a creative and strategic thinking process that involves constantly assessing, reassessing and making the decisions about the best possible means for obtaining trustworthy I credible solutions. information, carrying out appropriate analysis.

OVERALL REVIEW:

The research activity is an innovative thinking process. The researcher with sufficient subject knowledge, and with statistical and analytical applications he will get the results from the data analysis. In such a way the research activity is problem finding technique. The researcher must have creative thinking, analytical capability and investigating skills and field level subject knowledge. He must be able to identify the problem where it is exactly, when started, with whom the problem is, and how long the problem is to find the solutions examining the various alternatives. Where there is a problem there will be a solution if observed and searched systematically and scientifically. That is research.

RESEARCH GAP:

To find out a solution to an identified problem, what are the sources available to the faculty researcher and to the principal investigator? Keeping in view of the qualities, characteristics of the researcher as mentioned earlier., the tools and techniques, skills and the appropriate sources from academic and Research organisations, and from the higher education institutions shall be discussed further in the paper.

STATEMENT OF THE PROBLEM:

The research knowledge, statistical tools and techniques and required analytical knowledge, and the supportive role to be played by the research and statistical organisation, and the academic institutions to the faculty researchers is a main problem today. The principal investigator and the faculty Researcher must find out the supporting sources for encouraging his research work.

OBJECTIVES OF THE STUDY:

1. To examine the significance of the research to the faculty of higher education institutions. forensic and crime investigations and to the lab scientists
2. To examine the Supportive role played the research organisation like ICSSR, UGC, to encourage the research activity among the faculty who involves the research.
3. To Study the problems and challenges during the research activity faced by the faculty researchers with suggestions and recommendations.

METHODOLOGY:

The required data to prepare this paper has been gathered from the existing literature available from the secondary source of journals, magazines and the previous research work of the experts. Suitable appropriate research tools and techniques were used as self-explanatory of the concepts to the readers.

SIGNIFICANCE OF THE RESEARCH ACTIVITY TO THE

HIGHER EDUCATION FACULTY, FORENSIC, AND FOR CRIME INVESTIGATION

A. The Academic faculty staff members of the higher education institutions along with their subject instructional activity must also have the research activity to develop in their subject knowledge. Not only on their subject knowledge, faculty must improve the research skills towards finding the solution to the problems faced by the society.

B. Teaching faculty and the Researchers and the scientists will completely transform the shape of the world mould the future of their students by giving the subject knowledge. Research knowledge of the faculties will be useful to the society in finding the society problems and encourage towards the development of nations economically and industrially.

C. Therefore, the research activity is very important not only to the faculty, but also to the academic staff and researchers, investigators, and crime detectors, forensic lab technicians, and crime investigation process.

D. For inculcating the habit of research, for the improvement of research activity, the principal researchers, investigators must know the problem on which the research is needed.

E. For the academic instruction with the updated subject knowledge, and with the research papers publication works. And with authoring experience of books and their publication also the faculty will expertise in the subjects.

F. Also, the participation in the national and international level seminars conferences, with research papers presentations and the papers published will improve the command over the subject.

G. Frequent lecturing, as visiting professors to the top-level educational institutions research workshops and on different subject also improve the research knowledge of faculty and it is also sharing of his research and subject experience to the other colleges faculty members. It is also a part of his research activity.

H. Further, the faculty with doctoral degrees, must do the post-doctoral fellowships and Minor and Major research projects with I.C.S.S.R., U.G.C Sponsored financial Assistance with the research organisations and with Pharma company organisations, Banking and other service organisations., Industrial Research & Development organisations, as such they can continue their research publications works.

I. The faculty with doctoral degrees having the experience or with research publications can guide and supervise the Ph. D research scholars in the research works., so that they can improve the quality research works and quick completion of their research projects and doctoral theses submission.

J. Research works of the professors in science technology with science subjects Physics, Chemistry and electronic and Information technology, and in Artificial intelligence, they can do the crime detection, crime investigation and fact finding investigation in forensic labs cases and cyber crime cases now very burning issue to find a solution traffic signal problems, drunken drive cases, police investigation cases, CBI, ACB., CID., ED investigation cases, technology is being widely used.

2. **ROLE OF RESEARCH ORGANISATIONS, UNIVERSITIES LIBRARIES AND GOVERNMENT SERVICE ORGANISATIONS, AND RESEARCH AGENCIES:**

Research organisations, agencies, medical pathology labs, M/s. Vijaya diagnostics. M/s. Lupin Labs, Chemistry labs, Zoology, Physics labs in educational institutions are doing lab demonstrations and lab experiments for finding of results mixing various chemicals and using lab equipment. It is for Students lab works as a part of the academic curriculum. These lab experiments only useful to their academic purposes and in their examination marks scoring.

For the Researchers and research faculties, the ICSSR, CESS, UGC are sanctioning funding and with financial sponsoring for undertaking their minor and major research projects with time bound programme. They can make use of the funds provided by the government the above research organisations for the purchase of tools and equipment computers and printers. References books, appointment of Staff Research Assistant, Research Analyst, and as enumerators, and data entry operators. and data analyst.

Central Libraries like Anna Centenary Library, Oxford central Library and university and university, JNTU, Osmania Central library's having lakhs together research and reference books, and theses submitted will be kept in the library, reference books. research thesis or and the reference books, for the verification and do their research works mentioning.

Research scholars can take the help of experienced Ph D awardees, supervisors and retired professor for certain clarification either in Proposal submission, or state, analysis state, pre-submission part and in case of final submission part. And doubts o research scholars shall be clarified. Experienced researchers can take research methodology classes to the educational institutions.

Experienced researchers, supervisor, guides can review the research process of the researches, very frequently and offer the suggestions for the modifications and make their research work rectified.

3. **STUDY ON THE PROBLEMS AND CHALLENGES OF RESEARCH SCOLARS:**

1. For the research scholars, today they have no awareness and understanding on the selection of research topics, or no idea on the identification of research topics and on the no idea on the usage of technology in the research works. They must have thorough idea on the field of their research, on the topics, on the place and areas and to select the samples, fix the objectives of research and on the formulation of hypothesis and on their statistical tests.

2. The fresh researchers who joined in the research works PhD., M. Phils must get their research doubts are to be clarified. They must have Research orientations and workshops. Fresh researchers must attend the orientations, workshops., conferences, and national and international seminars for understanding the concepts.

3 University funding, ICSSR, UGC funding, for the processing of the research works and to meet the salaries to the appointed enumerators, experts, data entry operators. Research analyst.

4. For many researchers and research scholars, selection of the topic, field, journal selection is a major problem. Today fake journals, predatory journals, substandard journals Fake UGC, SAGE., ABDC, and FAKE Scopus journals are in the publication market.

5. Selection of appropriate journal for the paper publications are very critical problem. After publication, if it is submitted to the evaluators., it will be a big problem to the research scholars. Then and there it will be big problem.

6. There are number of Peer Review. Double blind Peer review, Open Access multi-disciplinary National and International level journals are available abundantly, but which journal is authenticated or standards is very difficult to find out and to select for publication.
7. Selection of guide, and Research supervisor is also problematic. Experienced and knowledgeable research supervisor is required to guide the researcher and to give time and valid suggestion to complete the Research theses.
8. Preparation of theses, using the appropriate statistical tools and techniques, Research analysis part results discussion part. tabulation, data analysis works, to arrive the findings results very big problem. All are not experts in the application of Research analysis. For the core topic chapter, researcher must be get the help of statistical analyst and get the work completed within the time frame.
9. Research scholars, must be very careful in the drafting, process of theses. It must be free from mistakes, spell checks grammar checks and in verification process, and finally in proof reading proof-reading process. Draft theses must be refined one or two times after thorough verification.
10. Researcher must follow the continuation linkage between the topics and chapters, coherence, connectivity while drafting, verification and in proof reading process.
11. All preliminary pages like acknowledgements, self-declaration, guide certificates, index, and final pages, like plagiarism report certificate, copy of the questionnaire, list of tables, images, graphs, tables, glossary, technical words; must be listed and arranged systematically.
12. Plagiarism should not exceed 10% overall as per the U.G.C Gridlines.

POINTS TO BE OBSERVED:

1. Academic faculty along with routine teaching instruction, Research work also should continue on his subject and other than subjects to enrich knowledge in many subjects.
2. Research is part of human life to know solution to the problems in daily life. Research is continuous process.
3. Research is a team work. And It is a synchronisation of many activities.
4. Research is an Investigation process for a fact finding, enquiry to know the facts.
5. Research is creative thinking and Innovative process with new idea in finding a solution to the long pending burning problem.
6. Research is involved with data collection, data processing and data analysis and with results discussion. It is a systematic and scientific way of approach to find a solution to an identified research problem.
7. It is related to the faculty, researchers, scientists, business related managers. Where there is problem there is solution through the process of research. CBI, ACB, CID, FORENSIC, CYBER CRIMES AND E.D for the detection of crimes. Using the various research methods.
8. Technology, artificial intelligence, Information Technology using ICT Tools and techniques for the fact-finding process., and in statistical data analysis. Computerised software, EXCELL., SPSS. TURNITIN, and other technological tools are being used.

CONCLUSIONS:

This paper has been prepared for creating the awareness among the researchers, research scholars, on identifying the research problem, selection of research topic, research design, methodology, framing the objectives of the study and formulating the hypothesis.

While collecting the data, the method of data collection, data processing methods, selection of sampling etc, the tabulation work, application of statistical tools, results finding discussion of findings, the systematic and scientific drafting the thesis, verification, following the connectivity, linkage in drafting and finalising the draft. In this paper.

Significance of the Research to the faculties, teachers and role of organisation, research institutes and agencies in the research works, and also the challenges. problems raised during the research process have been discussed in this paper to create awareness among the researchers.

REFERENCES:

1. Shashi K Gupta, Praneet Gupta (2025) – Research Methodology and Project Work- published by Kalyani publishers, Noida, Ludhiana.
2. Muralikrishna, Naidu M.B. (2012) -Research Methodology – published by Student Helpline Publishing(P)Ltd, Hyderabad.
3. Kothari C.R. (1990) – Research Methodology -Methods & Techniques published by K. K. Gupta for New Age International (P) Ltd.
4. Patrick, Santhi Vedula, and Swathi Kumari (2022) Research Methodology and Project work published by Himalaya publishing House, New Delhi, Hyderabad.
5. Shashi K. Gupta, Praneet Rangi (2017) Research Methodology Methods, Tools and Techniques Published by Kalyani publishers, New Delhi Hyderabad.
6. Srinivasa Padmakar. S Pavani Durga, T (2025)- A Study on the Application of Statistical Tools and techniques in the Research Analysis. Published by International Journal of Research Analysis vide Vol.No.4 issue 7 P.No.9 to 18 in July 2025.