

A study on Impact of selected Human Resource practices on retention of research employees in research institutes.

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Abstract:

Retention of talented research employees is herculean task. Due to globalization every country wants to focus on development of science and technology which necessitates more numbers of researchers to join research organization and remain there so that continuous development is sustained. Research in various fields is well thought and ongoing process across the globe. The country's development depends on the technological and research development. Every country wants to design and develop a research programme by involving expert people to contribute in the national or international development with their novel ideas and innovations. The goal of every Research Institute is to engage young students in the field of research and development. These institutes implement the monetary and non-monetary aspects to motivate and retain such talented employees. Research Institutes, in addition to the routine office facilities, provide certain welfare facilities to research employees i.e. housing, medical, book grant allowances, update allowance, Leave Travel Concessions, Study leave, flexible hours, laptops, etc. This helps research employees to concentrate on their research work. This is part of their retention programme.

One of the important factors for career development and retention is Job Security. Everyone wants to settle in the working life. If Job Security is provided or assured, then employees try to devote more time on their work. The same is the case of research employees. If job security is provided, the research employees work hard, put extra efforts on their research activities. They do not have to find other institute for better and secured job position. However, if job security is not given, the research employees leave the research institutes. In addition, there are various other reasons for research employees leaving the research institutes.

The topic selected for research paper is more focused to the Retention of Research Employees carrying out their research in the selected Research Institutes. The topic is trying to bring out the obvious reasons why research employees leave such organization and steps for retention of such researchers working in selected research institutes.

Key Words: Retention, Research Employee, Research Institute

1. Introduction:

In India there are several Research Institutes in various research areas. Majority of them are functioning under various departments. The Research Employees or Researchers plays crucial part in the globalization and due to extreme demand for talented researchers across the globe, every organization face a problem of retaining talented researchers in their own institutes. These Institutes are in the field of basic research. They are engaging research employees in the institute to carry out various research activities. Research employees are selected after a structured and well-designed recruitment process. They have well defined career path in such institutes. These institutes have well organized career development programme. The human resource development practices ensure that these

research employees get motivation from time to time. Since the fundamental research institutes function under the government of India, their monetary aspects are more or less same. However, every institute has an unique programme to retain such research employees. Though they try every effort to retain such talented employees, there are some reasons for research employees to leave the research organisations.

1.1 Terminology:

There is a need to clarify certain interpretations of the following words used in this study:

1.1.1 Research Employee:

“Research Employees” means and includes the officials or personnel working in research

institutes and carrying out their research activities continuously.

1.1.2 Selected Research Institute:

“Selected Research Institute” are autonomous bodies under various departments of the Government of India. These Institutes are selected from Pune. The data is collected for narrating their profiles and needful inputs for this research study purpose. Also the data is collected from samples (Research Employees - working or doing their research in these Institutes).

1.2 Career Path in Research Institute

Research Scholar — Post Doc — Fellow — Reader — Asst. Professor — Associate Professor — Professor — Senior Professor

In some organizations they are called as Junior Scientist/Scientist B, Scientist C, Scientist D/Senior Scientist, Scientific Officers, etc.

Some of the senior professors get additional academic-cum-administrative responsibility on the positions like Dean, Director, Chairman, etc.

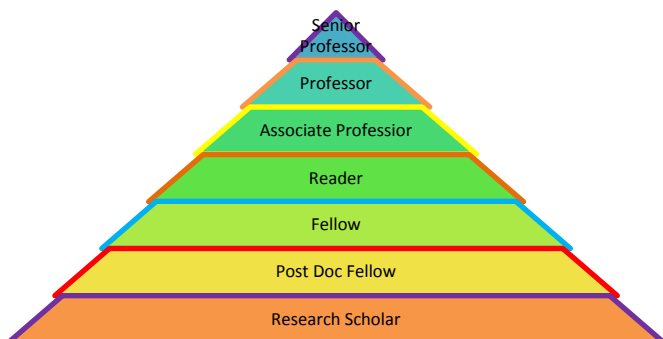


Fig. 1: Career path of Research Employee in an organization

The progress in their career from one position to other depends on their performance and research work in the said organization. Sometimes these people get good opportunity in other institutes and they join in the senior position. This is how they develop themselves in their working life.

1.3 HR practices:

The research Institutes organizes various types of lectures, training and motivational programmes for research employees for his development. It is also true that in an employee develops then the organization also develops. Seminars, conferences, meetings, workshops, colloquiums,

etc. help research employees to gain extra knowledge required for him to develop. While many times these programmes are arranged within the institutes or countries, some of them are organized at institutes outside India. Research employee gets a chance to participate in such conference if they are nominated by the institutes. Research Institutes pay contributions for such employees to enable them to participate in an international conference. This kind of non-monetary recognitions results in employee satisfaction.

1.4 Programmes for retention:

Research Institutes, in addition to the routine office facilities, provide certain welfare facilities to research employees i.e. housing, medical, book grant allowances, update allowance, Leave Travel Concessions, Study leave, flexible hours, laptops, etc. This helps research employees to concentrate on their research work.

One of the important factors for career development is Job Security. Everyone wants to settle in the working life. If Job Security is provided or assured, then employees try to devote more time on their work. The same is the case of research employees. If job security is provided, the research employees work hard, put extra efforts on their research activities. They do not have to find other institute for better and secured job position. However, if job security is not given, the research employees leave the research institutes. In addition, there are various other reasons for research employees leaving the research institutes.

Another important factor is flexible working hours which motivates research employees on a very high scale. The have to sit late night to work. Research Employees are more concerned about their research work and they get job satisfaction through their research work.

2. Literature Review:

Retention:

The Institutes` reputation depends on the quality of talented personnel they have in the research Institute. The Research Institutes apply various strategies for providing better working conditions, improving research facilities, providing other facilities like housing, medical, welfare, updated library, electronic equipments, etc. required for research activities; to retain the research employees in their own institute. Both the research centres and the grant-in-aid

institutions carry out research and development. While the research centres focus more sharply on technology and product development, the grant-in-aid institutions concentrate relatively more on basic research.

Having and retaining skilled employees plays an important role in this process, because employees' knowledge and skills have become the key for companies to be economically competitive (Hiltrop 1999). Therefore, it is important that employers give employees the opportunity to develop and learn (Arnold 2005; Bernsen et al. 2009; Herman 2005) such that the workers maintain their capacities as effective employees, resist redundancy, and are retained by their companies. If employees feel they aren't learning and growing, they feel they are not remaining competitive with their industry peers for promotion opportunities and career advancement. Once top employees feel they are no longer growing, they begin to look externally for new job opportunities. Several studies have investigated the relationship between job satisfaction and turnover and found a clear negative relationship (e.g., Cotton and Tuttle 1986; Muchinsky and Morrow 1980; Tett and Meyer 1993; Trevor 2001), meaning that when employees do not feel satisfied in their job, the turnover is high and they are likely to leave the company. Tett and Meyer's meta-analysis also found that intention to leave was predicted more strongly by job satisfaction than organizational commitment and that intention to leave mediated the linkages between these attitudes and actual turnover.

The Scientific Advisory Committee to the Government of India, submitted a detailed report highlighting need of retaining research employees in the research institutes. The Prime Minister of India also responded." Today we in India are experiencing the benefits of the reverse flow of income, investment and expertise from the global Indian Diaspora. The problem of "brain drain" has been converted happily into the opportunity of "brain gain." –Manmohan Singh, Prime Minister of India

Attracting and retaining talented researchers from anywhere in the world to a career in Research Institute is one of the most crucial factors.

3. Need for selecting the topic for research:

- i. Selected research institutes are the autonomous bodies under various departments of the Government of India and so far there is no study carried out about retention of research employees.
- ii. Though monetary benefits are fixed for all selected research institutes as per the government norms, there are other reasons why Research employees leave research organisations.
- iii. Selected Research Institutes depends on government funding for creating research facilities, which are very much essential for research employees for their career development and retention in the research area.
- iv. It is essential to bring out an information about retention programmes for researchers who are carrying out research activities in these institutes. Human Resource practices followed in such organization for retention.
- v. As far as the topic is concerned, we hardly find any research done on this topic in the social science particularly related to Research Employees from selected research institutes and their retention. Few Research Institutes have themselves come out with report and need to have researchers in the pure research.
- vi. The Advisory committee of India also gave a status report to the Government of India highlighting need of researchers in the country.
- vii. Due to this gap, this topic is selected for research study.

4. Objective of this research:

- i. To find out various reasons for research employees to leave research institutes
- ii. To study impacts of selected human resource practices on retention of research employees.
- iii. To study effects of monetary and non-monetary aspects on retention of research employees
- iv. To study whether non-monetary recognitions results in satisfaction of research employees.

5. Hypotheses formulation:

- i. Research Employees feel that salary is more important than research work

- ii. Non-monetary recognition to research work result in satisfaction.

6. Research Methodology:

- a. Research Approach — Pragmatic (both qualitative and quantitative), Research Method - Inductive , Research Type — Descriptive
- b. Research Institutes Selected for Study: Selected Research Institutes are Autonomous Research Institutes from Pune. A physical survey was made in Pune City and seven (7) institutes are selected based on the possibility of getting data and information.
- c. Data collection Methods & Instruments
 - a. Primary Data Collection: The primary data collected from these Selected Research Institutes in Pune from official sources. The following methods used to collect the data.
 - i. Questionnaire
 - ii. Personal discussions and interviews
 - iii. Information from employees
 - b. Secondary data collected from relevant information sources such as:
 - i. Published material, books, etc.
 - ii. Information from Library
 - iii. Documents and records
 - iv. Internet, etc.
 - c. The detailed information from the Institutes was obtained from their website and also through telephonic interview and personal contacts, about pay, employee strength, human resource practices followed, retention programmes, etc.
 - d. Sampling Design:
 - i. Sampling Method: Non Probability Sampling
 - ii. Sample Type: Convenient Sampling type
 - iii. Total Population form the above institutes 225 – Samples selected 142, using Morgan sample size table; Confidence level 95%, Confidence Interval – 5.
 - e. Data Analysis Methods:

- i. For Central tendency of the data Statistical Technique like Mean, Mode
- ii. For Dispersion of data: Standard Deviation & for Volatility of response Coefficient of variation is used.
- iii. Testing Hypothesis: Chi Square Test one way table – equal distribution.
- iv. Software used : MS Excel
- v. Results are interpreted by graphs & Pie charts
- vi. Five (5) point Likert Scale questionnaire, sent to Research Employees was codified in numerical format for statistical analysis.

7. Data Presentation:

This was further classified in their age group and income group wise, for getting information, for better presentation.

Table 1: Graph showing Age group wise respondents

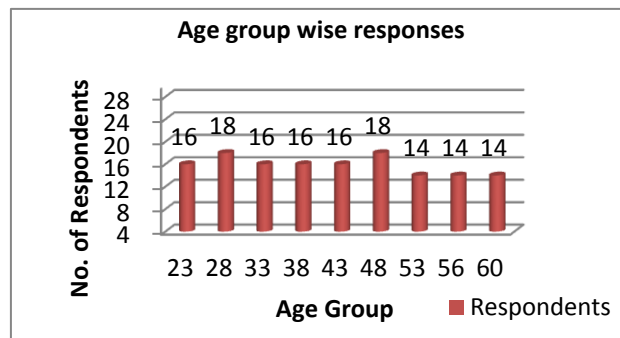


Table 2: Graph showing Gender wise responses

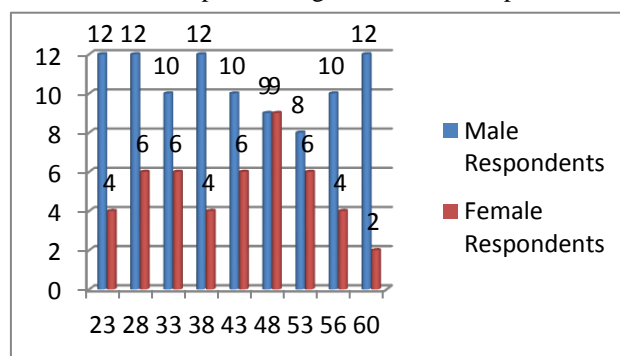
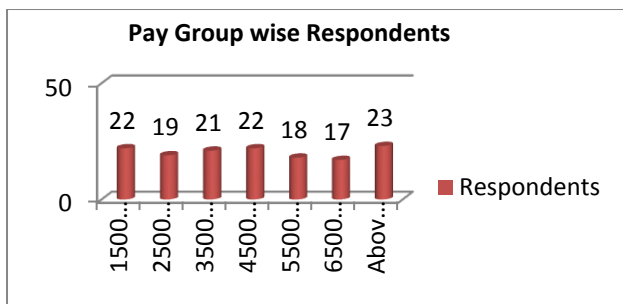


Table 3: Graph showing pay group wise responses.



7.1 Data Analysis:

The data was tabulated in Ms Excel and values for Frequency Distribution, Mean, Mode, Standard Deviation and Coefficient of variation have been drawn from the data using MS Excel.

Table 4: Frequency distribution for important HR practices received from sample data

Q. No.	Question	Strongly Agreed	Agreed	Neutral	Disagreed	Strongly disagreed
1	Frequent Training & Development programmes do not motivate Research Employees	6 (4.23%)	30 (21.13%)	38 (26.76%)	58 (40.85%)	10 (7.04%)
2	Provision of welfare facilities may help retention of employees	16 (11.27%)	100 (70.42%)	20 (14.08%)	6 (4.23%)	0 (0%)
3	Institute pays more attention on research facilities than career development	8 (5.63%)	44 (30.99%)	70 (49.3%)	18 (12.68%)	2 (1.41%)
4	State-of-art research facility is more important than Welfare facilities	34 (23.94%)	60 (42.25%)	32 (22.54%)	16 (11.27%)	0 (0%)

Table 5: Frequency distribution for reasons for leaving research institutes - received from sample data

Q. No.	Question	Strongly Agreed (5)	Agreed (4)	Neutral (3)	Disagreed (2)	Strongly disagreed (1)
1	Research Employees leave because they get better research facilities elsewhere	30 (21.13%)	70 (49.3%)	24 (16.9%)	16 (11.27%)	2 (1.41%)
2	Research Employees leave because they aspire to go abroad for research	14 (9.86%)	66 (46.48%)	44 (30.99%)	16 (11.27%)	2 (1.41%)
3	Research Employees leave the Institute if Job Security is not provided	20 (14.08%)	52 (36.62%)	34 (23.94%)	32 (22.54%)	4 (2.82%)
4	Research Employees leave if they are not provided other facilities like Housing, medical, etc.	12 (8.45%)	64 (45.07%)	42 (29.58%)	22 (15.49%)	2 (1.41%)
5	Research Employees leave because they get better monetary benefits	8 (5.63%)	44 (30.99%)	58 (40.85%)	32 (22.54%)	0 (0%)

Table 6: Data analysis showing mean, mode, standard deviations and CV for HR practices

Q. No.	Question	Mean	Mode	Standard Deviations	Coefficient of Variations
1	Frequent Training & Development programmes do not motivate Research Employees	2.766479	2	1.006621	0.36651
2	Provision of welfare facilities may help retention of employees	3.887324	4	0.642453	0.16526
3	Institute pays more attention on research facilities than career development	2.746479	2	1.006621	0.36651
4	State-of-art research facility is more important than Welfare facilities	3.788732	4	0.936502	0.24718

Table 7: Data analysis showing mean, mode, standard deviations and CV for reasons for leaving

Q. No.	Question	Mean	Mode	Standard Deviations	Coefficient of Variations
1	Research Employees leave because they get better research facilities elsewhere	3.774648	4	0.955717	0.25319
2	Research Employees leave because they aspire to go abroad for research	3.521127	4	0.872904	0.24790
3	Research Employees leave the Institute if Job Security is not provided	3.366147	4	1.068431	0.31740
4	Research Employees leave if they are not provided other facilities like Housing, medical, etc.	3.43662	4	0.902831	0.26270
5	Research Employees leave because they get better monetary benefits	3.197183	3	0.852526	0.26664

8. HYPOTHESIS TESTING:

8.1 Hypothesis 1 – Research Employee feel that salary is more important than research work.

In order to determine whether there is a significant difference between the agreements of the respondents whether the research employee feel that salary is more important than research work, a chi square test for equal proportions was applied by using MS-Excel.

Table 8: Chi Square value for the Hypothesis 1

O	E	O-E	O-Esqr	O-Esqr/E
31	28.4	2.6	6.76	0.238028
52	28.4	23.6	556.96	19.61127
46	28.4	17.6	309.76	10.90704
11	28.4	-17.4	302.76	10.66056
2	28.4	-26.4	696.96	24.54085
142	142			65.95775

P Value for DF 4 and sig level 0.05 = 9.488

From the table above we can observe that the value of chi square value is 65.958 and its corresponding p value is 9.488. Since the p value is less than 65.958, the hypothesis is rejected.

8.2 Hypothesis 2: Non-monetary recognition to research work result in satisfaction.

In order to determine whether there is a significant difference between the agreements of the respondents whether the non-monetary recognitions result in employee satisfaction or no, a chi square test for equal proportions was applied by using MS-Excel.

Table 9: Chi Square value for Hypothesis 3

O	E	O-E	O-Esqr	O-Esqr/2
19	28.4	-9.4	88.36	3.111268
24	28.4	-4.4	19.36	0.68169
26	28.4	-2.4	5.76	0.202817
37	28.4	8.6	73.96	2.604225
36	28.4	7.6	57.76	2.033803
142				8.633803

P Value fo DF 4 and sig level 0.05 = 9.488

From the table above we can observe that the value of chi square value is 8.633803 and its corresponding p value is 9.488. Since the p value is more than 8.633803, the hypothesis is accepted.

9. Findings:

- i. In the study, it is found that Research Employees are more concerned about their research work. They feel that research work is more important than salary. They are satisfied with the salary paid to them and they never compare their work with the money aspect. However, the study also indicated that fewer research employees felt that salary part is also equally important along with research work. The research employees working in such research institutes are paid lesser salary than those people working in other private organizations but having similar education. This gives a scope to evaluate that research employee needs to be paid more for their research work which is important not only from the national point of view but also from an international one.
- ii. The study revealed that research employees give importance to job satisfaction more than monetary allowances. Their research work gives them more satisfaction than monetary benefits. They continue in their research area and try to discover new things and also share their knowledge with across the scientific community. This kind of their work gives more satisfaction. The feel happy if their research work gets recognition.
- iii. It is observed that Research Institutes find it difficult to provide state-of-art research facilities due to unavailability of sufficient funds and procedural delay. It is revealed that the research institutes pay more attention to develop research facilities than career development of research employees. This creates difficulty in attracting

and getting research employees. Also this has been one of the reasons for research employees to leave the research institute. Absence of state of research facilities and non-exposure to such facilities may result in research employees leaving the research institute.

- iv. It is found after the study that Job Security is very much needed for research employee as their research work depends on job security. If the job security is not provided the research employees leave the institute and join somewhere else.
- v. Research Institutes which are not providing housing and Medical facilities to research employees face difficulties to retain research employees in their research institutes. Research Employees have to devote their maximum time in their research work and hence they prefer housing facilities nearby their institutes. Medical facilities for themselves and for their families are equally important. Provision of welfare facilities help retention of research employees and research Institutes.
- vi. Due to government policies and bureaucratic procedure, the research institutes find difficulties in organizing more conferences and seminars where research employees can share their knowledge and research work. This kind of non-monetary recognition results in motivation and job satisfaction of research employees.
- vii. It is also found that research employees aspire to go abroad for doing research work. This is also one of the reasons for research employees leaving the organization.

10. Suggestions:

- i. Research Institutes need to provide Job security for career development and retention of research employees
- ii. Research Institutes should provide welfare facilities like Housing, Medical, etc. for retentions of research employees.
- iii. Research Institute should organize frequent Training and Development programmes for motivation of research employees.
- iv. Research Institute need to recognize research work of their research employee as they feel satisfied and motivated.

11. Limitations:

The study is carried out only in selected research institutes (autonomous bodies under Govt. of India) from Pune city and research Employees working in these institutes. This can be carried out in private research institutes.

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