

A Comparative study of Organisation Culture among faculty members of selected Engineering and Management institution of Rajasthan

*Bhumija Chouhan

*Faculty, International School of Informatics and Management, Rajasthan.

ABSTRACT

Engineering and Management is an exciting field where one can have an immediate impact on the operations of any business. The field of Engineering is a constantly changing hotbed of activities. New tools and techniques are continually being introduced to improve the efficiency, productivity, and profitability of any organization. All organizations and their departments, functions, or groups use technical methodologies, which include problem solving techniques and guidelines for various related activities. This research throws light on organization culture and its impact on engineering and management education of Rajasthan. It analyses the importance of healthy organization culture, improvement of employees and organizational affectivity and efficiency. The research paper proposes various ways of building an innovative organization culture and importance of quality of work life. The researcher has done a critical study of the impact of organization culture on faculty members of selected institution of Rajasthan. Professors, Readers and Lecturers working with selected engineering and management colleges of Rajasthan have been surveyed and their working condition, organization culture and satisfaction etc. has been deliberated. The purpose of research is to discover answers to the questions through the application of scientific procedures.

KEYWORDS

Correlation & Regression Analysis, Efficiency, Leadership Style, Organizational Culture, Work Satisfaction.

INTRODUCTION

The conceptualization of culture within the context of an organization is primarily adapted from the field of anthropology and sociology. Culture has typically been defined as the traditional ideas and values of a group of people. In other words, a group of people will develop a system of shared values that guides the activities of its members. S. A. Sackmann(1997) identifies three approaches as using a holistic perspective or a cognitive perspective, both of which describe the internal state of culture members. Not all cultures agree on what is good, what is normal, and how things “should be done.”

According to Kroeber and Kluckholn (1952), “Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment in artifacts. The essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their Artifacts and social Institutions Values, beliefs and assumptions Behavior of people attached values. Culture systems may, on the one hand, be considered as products of action, and on the other, as conditioning elements of further action.” The Indian perspective of culture given by Sinha (2000) suggests, “Culture consists of totality of assumptions, beliefs, values, social systems and institutions, physical artifacts and behavior of people, reflecting their desire to maintain continuity as well as to adapt to external demands.”

The culture is a hidden but unifying force that provides meaning and direction to a system of shared meanings, or systems of beliefs and values that ultimately shapes employee behavior. Schein (1985, 1992) defined organizational culture as a pattern of basic assumptions invented, discovered or developed by a given group as it learns to cope with its problem of external adaptation and internal integration. These values are then taught to new members in the organization as the correct way to think and feel in relation to those problems. For Schein (1999), culture is the sum of all the shared, taken for granted assumptions that a group has learnt throughout its history. Also, culture is determined to be the residue of success. Culture is also the structure and control system to generate behavioral standards.

A more formal definition of culture that the researcher identifies with is that “organizational culture is a pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be taught to new members as the correct way to perceive, think and feel in relation to those problems” (Schein, 2004).

Organization culture can be a set of key values, assumptions, understandings and norms that is shared by members of an organization. Organization values are fundamental beliefs that an organization considers being important, that are relatively stable over time, and they have an impact on employee’s behaviors and attitudes. Organization Norms are shared standards that define what behaviors are acceptable and desirable within organization. Shared assumptions are about how things are done in an organization. Understandings are coping with internal or external problems uniformly.

ENGINEERING EDUCATION IN RAJASTHAN

Engineering education is among the key enablers of growth for transforming India's economy. The quality of teaching and research in this sphere will play a critical role in the emergence of our country as a global knowledge leader. It will also provide vital inputs for enhancing productivity across sectors. In the past two decades, we have seen an eight-fold increase in the number of institutions imparting engineering education at the undergraduate level. Yet, there are some fundamental issues that need to be addressed.

A glaring regional imbalance has emerged in the availability of engineering education. Two-thirds of the engineering institutions are located in four southern states, plus Maharashtra, even though they account for less than one-third of the population. There is much less access for the youth in under-provided states, particularly because only 15 per cent of the total seats are available for those who come from outside the state. It would be worthwhile to study whether there are any cultural or region-specific factors that influence the choice of engineering as a career in some states and not elsewhere.

This could help make the spread of such colleges more even nationwide. Several recent studies have flagged the problem of unemployables of engineering graduates, largely because curriculum and syllabi are not quite compatible with industry requirements. Further, the standards of a very large proportion of institutions at the bottom of the pyramid have also been found to be abysmal. Even good institutions are plagued by deficiency of quality students at post-graduate and research level. The problems are complex and deep rooted. The situation calls for a new paradigm in regulation, accreditation, governance and faculty development.

Engineering as a career option has to be finalized at an age when the student opting for is not very mature. Most of the times it's the parents choice, who undoubtedly think in the best interest of their ward or the students imitating the seniors. Not necessary, those furnishing the advice are engineers or have the complete idea of engineering as a profession. It's seldom that the one opting for the career is completely aware of Engineering as a profession

Engineering is amongst the few professions where creativity and ingenuity knows no bounds. Moreover if you are the one among those who look for challenging opportunities than probably, engineering is the most ideal profession to opt for. As an aerospace engineer you have the chance of developing cryogenics technology badly needed for the country to make advances in the space research, as a Civil Engineer you have the opportunity of developing earth quake resistant houses and as an electrical engineer the challenge lies in developing superconductors. The list is endless.

MANAGEMENT EDUCATION IN RAJASTHAN

Study of management is among one of the sectors in Rajasthan that is enjoying rapid development. Over the last few years, opportunities for students who aspire to pursue career in management has grown manifold. With the increasing number of management

institutes and improvement in the quality of education being imparted, local as well as multinational companies are finding the competence of management students in Rajasthan quite satisfactory. The proof of this fact is that most of the students are being hired directly through campus placement after completion of their management studies. In the modern economic scenario all over the world- “Management” – as a stream of education and training has acquired new dimensions.

Management is an exciting field where you can have an immediate impact on the operations of any business. The field of Management is a constantly changing hotbed of activities. New tools and techniques are continually being introduced to improve the efficiency, productivity, and profitability of any organization. All organizations and their departments, functions, or groups use Management methodologies, which include problem solving techniques and guidelines for various related activities.

The modern day Business Managers are required to have proficiency in:

- □Functional knowledge of a business organization.
- In-depth knowledge of minimum one discipline of Management.
- The ability to adapt to new environments at micro and macro levels.
- Problem analyzing and solving.
- Inter-personal skills.
- Knowledge of functional interdependencies and adaptability.
- Communication skills.
- Self-confidence and motivational skills.
- Drive to succeed and control with initiatives.

Management can be christened as an art of conducting and directing the modern day organizational, businesses and other related activities. It characterizes the process of leading and directing various organizational activities - often a business and its various resources like human, financial, material, intellectual and so on. Management encompasses five basic functions such as Planning, Organizing, Leading and Coordinating. An individual can achieve proper knowledge and training about management through management education. Educational institutions that teach management are usually called "Business Schools". A business school is normally a university-level institution that teaches topics such as accounting, finance, marketing, organizational behavior, strategic planning, quantitative methods, etc. These include schools of "business", "business administration", and "management".

OBJECTIVE OF STUDY

The purpose of research is to discover answers to the questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not being discovered yet. Though each research study has its own specific purpose, then also research objectives can be categorized into following groups:

- To gain familiarity with a phenomenon or to achieve new insights into it.
- To portray accurately the characteristics of a particular individual situation or a group.
- To determine the frequency with which something occurs or with which it is associated with something else.
- To test a hypothesis of a casual relationship between variables.

Therefore the objectives of proposed study are on the basis of portraying accurately the characteristic of faculty member's of selected engineering and management colleges of Rajasthan to know their organization culture. The objectives are as follows:

1. To study engineering education in Rajasthan
2. To study management education in Rajasthan
3. To study and compare organization culture for faculty members of engineering and management institutions of Rajasthan.
4. To suggest improvements in the organization culture of faculty members of selected engineering and management institutions of Rajasthan.

HYPOTHESIS OF STUDY

Hypothesis is usually considered as the principal instrument in research. Its main function is to suggest new experiments and observation. In fact, many experiments are carried out with the deliberate objective of testing hypothesis. Testing hypothesis enables researcher to make probability statements about population (Probability Distribution) or its parameter(s). The hypothesis may not be proved absolutely, but in practice it is accepted if it has withstood a critical testing. Hypothesis means mere assumption or some supposition to be proved or disproved. Hypothesis can even be defined as a propositions set forth as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or research, or it can also be accepted as highly probable in the light of established facts.

Hypotheses

- Faculty members of management institutes have better work satisfaction and organization culture as compared to engineering institutions.

METHODOLOGY

The current study aims at measuring the organization culture and its effect on Professors and Lecturer, and offering recommendations for improving the same and thus deductive methodology would be the appropriate choice as theory obtained from published works is tested empirically during the research. The inductive methodology is not chosen for this study because generation of new theory is not the purpose of this study.

Various methodologies like graphs, matrices, comparison tables for analyses of responses of various questions is being used after questionnaire survey. The research is under descriptive study which includes large population studies in which data on lots of different variables is being collected.

The statistical techniques which are being used are:

- Descriptive Statistics (Univariate & Bivariate Data-Analysis)
- Test of Significance

The variables like leadership skills, power, decision making authority, suggestions in strategy making, value of accountability, employee –employer relationship, involvement and commitment, personal responsibility, trust, sharing of information and factors of OCTAPACE is taken into consideration to analyze the data collected during research work.

SAMPLING METHOD

Data is collected from the academicians of most of the Engineering and Management Institutions of Rajasthan, on the basis of questionnaire prepared with the help of instruments like Organizational Climate Survey and Organization Diagnosis & Instruments for HRD and OD of Late Professor Udai Pareek published by Tata Mc Graw Hill etc.

Probability and non-probability sampling are the two methods that are used for social researches.. Since all the selected Engineering and Management Institutions are felt behaving in a similar manner because they all are governed by the common Government body AICTE (All India Council of Technical Education). Thus need, to apply a certain sampling technique for the collection of data, was not considered so important. But the criteria of random selection of respondent, was considered in different manner. The questionnaire was distributed to all the existing teaching staff and a dead line is fixed to receive the responses. Those entire respondents, who responded within the deadline, have been considered as part of the study. Due to the limitation of resources, time and the availability of coverage area, convenience sampling have been considered a better alternative to be used for collecting information from the respondents. It was earlier decided that a sample of 450 will be considered as an appropriate sample for the study. But unfortunately some of the respondent's response was contradictory so they were rejected from the sample and hence 400 faculty members including both the streams of engineering and management institutions responded within the deadline.

Therefore, the sample of size 400 academicians was considered in this study consisting of Professors, Associate Professors, Assistant Professors and other teaching staff of various AICTE approved institutions of Rajasthan. It is understandable that the sample represents the population as the number of actual faculty members working in these institutions. The institutes which were selected for the data collections are performing well in Rajasthan are mentioned in Appendix A.

SCALE

The study has used a variety of questions to find out the complete information about the topic under research. Apart from dichotomous and multiple-choice answers of the questions, interviews which include statements of the respondents required to rate on the basis of different scales like the likert scale, rating scale etc are also being used.

SCOPE OF STUDY

Organization Culture plays an important role to identify and examine the internal environment of any organization. Organization Culture tells information of the employees working. Organization culture is today's hot issue to be discussed by various famous companies to increase the productivity of employees because work culture is the major player which puts impact on the working style and art of employees.

Organization culture performs a number of functions in an organization.

- It has a boundary defining role i.e. it creates of distinctions between one organization and others.
- It conveys a sense of identity for organization member.
- It facilitates the generation of commitment to something larger than ones individual self interest.
- It enhances the stability of the social system.
- It lays the stability impact on attitude and behavior.

The complete knowledge of these facts about organization culture and its impact on employees is given the effectiveness and efficiency of both organization; and employees which can list them among the top organization and employees which can list among top organization. So this study holds importance in today's scenario because work culture is directly related with the satisfaction of employees and productivity of employee.

LIMITATIONS OF STUDY

1. The collection of data was prolonged because it was lingered by respondents to an extent.
2. Respondents were less cooperative and were more conscious for getting their identity disclosed.
3. Respondents were hesitating to respond openly to the questionnaire.
4. Respondents may be biased and may not be sincerely responding to the questionnaire survey.

ANALYSIS AND INTERPRETATION

According to the study conducted the hypothesis of research can be tested by testing of the equality of mean responses after applying scaling by using t-test (as sample is large for statistical point of view the population can be easily considered as normally distributed & t-test can be replaced by z-test). The testing technique will differ in different situations so we can consider some of the important situations. A statistical

software SPSS (Statistical Packages for Social Sciences) version 16.0 has been used for all statistical analysis.

Testing of Hypothesis

The Null Hypothesis for the research to be carried out was

- (i). Faculty members of management institutes do not have better organization culture as compared to engineering institutions.(H_{o1})

And the Alternate Hypothesis for the research to be carried out was

- (ii) Faculty members of management institutes have better organization culture as compared to engineering institutions.(H_{a1})

Management College Faculty Members V/s Engineering College Faculty Members

Table 5.1 Mean, Standard Deviation and number of population for Faculty members of Management and Engineering colleges (Group Statistics)

| Group | TYPE | N | Mean | Standard Deviation | Standard Error Mean |
|-----------------|------|-----|---------|--------------------|---------------------|
| Management | m | 190 | 27.3952 | 2.2048 | 0.1600 |
| V/s Engineering | e | 210 | 26.8868 | 3.0620 | 0.2113 |

Analysis

Z-test

$$z = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{\sigma_{p_1}^2}{n_1} + \frac{\sigma_{p_2}^2}{n_2}}}$$

- Where \bar{x}_1 = Mean of Management College members
- \bar{x}_2 = Mean of Engineering College members
- σ_{p_1} = Population Variance of Management College members
- σ_{p_2} = Population Variance of Engineering College members
- n_1 = Number of Management College members
- n_2 = Number of Engineering College members

As σ_{p_1} and σ_{p_2} are not known, we use σ_{s_1} and σ_{s_2}

$$z = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{\sigma_{s_1}^2}{n_1} + \frac{\sigma_{s_2}^2}{n_2}}}$$

Where σ_{s_1} = Standard Deviation of Management College members

σ_{s_2} = Standard Deviation of Engineering College members

Table 5.2 showing data for number of population, mean and standard deviation

| | |
|-------------------------|-------------------------|
| $n_1 = 190$ | $n_2 = 210$ |
| $\bar{x}_1 = 27.3952$ | $\bar{x}_2 = 26.8868$ |
| $\sigma_{s_1} = 2.2048$ | $\sigma_{s_2} = 3.0620$ |

$$z = \frac{27.3952 - 26.8868}{\sqrt{\frac{(2.2048)^2}{190} + \frac{(3.0620)^2}{210}}}$$

$$z = \frac{0.5084}{\sqrt{0.0255 + 0.0446}}$$

$$z = \frac{0.5084}{0.2648}$$

$$z = 1.9199$$

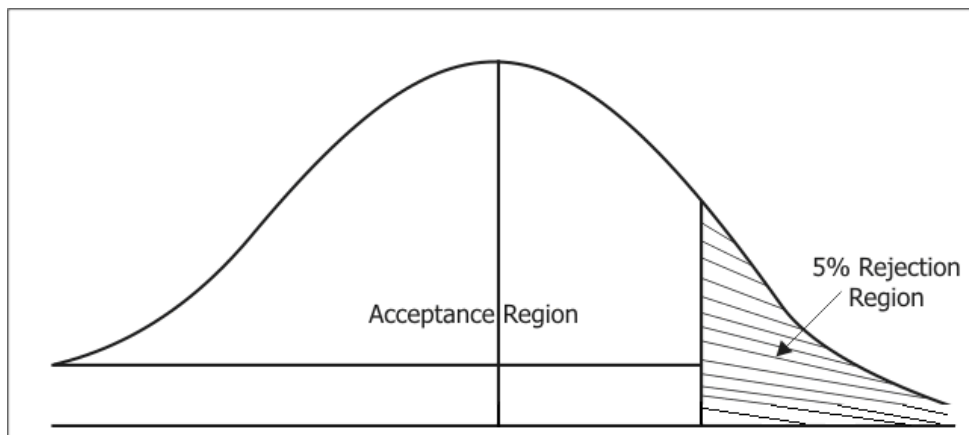


Figure 5.1 Showing Acceptance and Rejection regions in case of one-tailed test with 5% significance

Table value of Z at 5% level of significance, one tail test

Z (Table Value) = 1.645

Z (Calculated Value) = 1.9199

As calculated value is slightly higher than the table value, so the null hypothesis is rejected and the alternative hypothesis is accepted.

CONCLUSION

The major objectives kept in mind by the researcher while conducting the research was to gain insights about organization culture with special reference to the faculty members of various engineering and management institutions. The aim was also to compare the organization culture of faculty members and find the influence of it on their working efficiency.

To obtain the result on the above stated objective the hypotheses was portrayed and statistically tested with help of generating Karl Pearson correlation and diverse stacked diagram among different parameters of organization culture within the various categories of faculty members. The correlation found to establish the relationship was not higher but significantly correlated. The value of correlation was not very high but significantly positive to drive the conclusion of being related to each other.

SUGGESTIONS

There were some suggestions given by faculty members to improve the organization culture in long course of time. These are as follows:

- The vision, mission, and outcomes should be clear and well defined to have better organization culture.
- Delegation of decision making authority should be done to get the things done accurately and in time this can also form a support to improve organization culture.
- There should collaboration of individual and organizational goals so that staff members can work in harmony to improve the work conditions of the colleges as well as their own.
- □Leadership supporting a quality culture should be implemented in government colleges which can be a motivation for staff members to improve their organization culture.
- The information about rules and regulation should be given well in advance to inculcate good and healthy organization culture in the institution.
- Suggestion of employees should be welcomed and implemented at its earliest to make the work environment outstanding,
- Team work where every member of the team should perform his/her duties.
- There should be monthly interaction among staff members to discuss on various issues and future planning which can be good for the institution as well as bring

- the staff together building strong relationship among the members and the management.
- Social gathering is the best medicine for any to hold in a strong bond so social staff gathering can show the way to good and strong relationship with each other which is very necessary for maintaining good work environment and organization culture.
 - Well defined job objectives with indicators can always guide to better organization culture and satisfied staff members so it should often be performed in management institutions.
 - Appraisal is the key for success of any operation so constant monitoring and feedback system should be sustained in the institutions to maintain excellent organization culture. As on basis of appraisal the problem areas can be identified and lacunae's can be eradicated by group discussions, but appraisal should be always handled sophisticatedly.
 - There should be proper distribution of workload and non performance of assigned duties should be taken strictly into notification without any biasness.
 - Remuneration system should be improved to attract competent and qualified people in education sector.

REFERENCES

1. Kroeber, A. L. and Kluckhohn, C. (1952), Culture: a critical review of concepts and definitions, Vintage Books.
2. Sackmann, S. A. (Ed.). (1997). Cultural complexity in organizations: Inherent contrasts and contradictions. Thousand Oaks, CA: Sage Publications
3. Schein, E. H. (1985), Organisational culture and leadership(1st Edition),San Fancisco, Jossey – Bass, (*Vidyasagar University Journal of Commerce*).
4. Schein, Edger H.(1992), Organisational Culture and Leadership (2nd Edition), San Fransisco, Jossey-Bass.
5. Schein, Edger H.(1999),Business Consultants; Social Psychology, Addison Wisley
6. Schein, Edger H.(2004), Organisational Culture and Leadership (3rd Edition), San Fransisco, Jossey-Bass.
7. White,H.D, & McCain,K.W. (2000), In memory of Belver C. Griffith, Journal of the American Society for Information Science, Volume 51, Issue 10, pages 959–962.

APPENDIX A

1. Compucom Institute of Information Technology & Management, Jaipur.
2. Apex Institute of management & Science, Jaipur
3. International School of Informatics & Management, Jaipur
4. The Institute of Certified Management Accountants of India, Jaipur
5. Subodh Institutes of Management & Career Studies, Jaipur
6. M.K.M. Institute of Management, Jaipur
7. Jaipur Institute of Integrated Learning in Management, Jaipur
8. Jaipuria Institute of Management, Jaipur
9. Institute of Information and Management Sciences, Jaipur
10. Deepshikha College of Technical Education, Jaipur
11. Jaipur Engineering College, Jaipur
12. Yagyavalkya Institute of Technology, Jaipur
13. Arya College of Engineering & Information Technology, Jaipur
14. Gyan Vihar School of Engineering and Technology, Jaipur
15. Maharshi Arvind institute of Engineering & Technology, Jaipur
16. Seedling Academy of Design, Technology & Management, Jaipur
17. Global Institute of Technology, Jaipur
18. Shankara Institute of Technology, Jaipur
19. Jaipur Engineering College & Research Centre, Jaipur
20. Rajasthan Institute of Engineering and Technology, Jaipur
21. Kautilya Institute of Technology & Engineering, Jaipur
22. Swami Keshavanand Institute of Technology Management & Gramothan, Jaipur.
23. Poornima School of Management, Jaipur
24. Baldev Ram Mirdha Institute of Technology, Jaipur
25. Regional Colleges for Education Research & Technology, Jaipur
26. Modi Institute of Management & Technology, Kota
27. Vardhman Mahaveer Kota open University, Kota
28. Commerce & Management Department, University of Kota
29. Om Kothari Institute of Management & Research, Kota
30. Jodhpur Institute of Management, Jodhpur
31. Jodhpur Institute of Engineering & Technology, Jodhpur
32. Engineering College Ajmer, Ajmer
33. Faculty of Management Studies, M.L.S. University Udaipur
34. Pacific Institute of Management, Udaipur
35. Management & Commerce Institute of Global synergy, Ajmer
36. Department of Management & Technology, Engineering College, Bikaner
37. Sobhasaria Engineering College, Sikar
38. Alwar Institute of Management, Alwar
39. Mody Institute of Technology and Science, Laxmangarh
40. Laxmi Devi Institute of Engineering and Technology, Alwar