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Comparison of Employee Retention Strategies in Self Financing Engineering Colleges and Arts and Science Colleges in Kerala

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Abstract

It is very clear that pulling in and holding key workers is the first concern for any organization deserving at least some respect. This article mainly focus on the difference between the employee retention strategies in self-financing arts and science and engineering colleges in Kerala. Primary and secondary data was collected using structured questionnaire. Thirteen variables are used to measure retention strategies in self financing colleges. The main retention strategies are work environment, teamwork, management effectiveness, competency, organization commitment, performance appraisal, management involvement, gender bias, financial compensation, career growth, work stress, leadership practices and work life balance. Mann witney U test is used to compare the means. The paper give way for the self-financing educational institutes to enhance the teaching fraternity to make the teachers stick on to the institute. This study has enriched the literature on employee retention and the leadership arena. To the best of the authors' knowledge, there is no prior evidence concerning the study's integrated relationship of the continuous variables. The implications and limitations were finally expressed at the end of this manuscript.

Keywords: *Employee Retention, Self-Financing Colleges, Retention Strategies, Teamwork, Career Growth*

1. Introduction

In today's competitive business landscape, retaining top talent has become increasingly challenging for organizations across industries. Employee turnover not only incurs significant financial costs but also disrupts organizational productivity and morale. Employee retention is more than just a human resources concern; it impacts the overall health and sustainability of an organization. According to a study by the Society for Human Resource Management (SHRM), the average cost-per-hire is estimated to be approximately $4,129, while the time to fill a position is around 42 days (SHRM, 2016). By implementing comprehensive retention strategies, companies can not only mitigate the costs associated with turnover but also enhance employee satisfaction, commitment, and productivity. This article delves into a range of strategies, from fostering a positive work environment and many other strategies. Through an examination of these strategies, supported by empirical evidence and real-world examples, we aim to provide a roadmap for organizations seeking to improve their retention rates and build a dedicated, high-performing workforce. The facilities, compensation, resources etc of arts and science colleges differ, this difference may be visible in their attitude also. Here a comparative study is done between the different factors which affect the employee retention in these two types of colleges. In this study the researcher selected 12 different job-related factors which affect the employees in self financing colleges. The different factors involved in the current study are work environment, team work, management effectiveness, competency, organizational commitment, appraisal system, management involvement, gender issues, financial compensation, career growth and advancement, leadership practices work stress and Work life balance. Mann-Whitney U-test is done to compare the data obtained from the samples. [1]

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2. Objectives

To analyse if there is significant difference between factors affecting employee retention in self-financing engineering colleges and arts and science colleges.

3. Methodology

Both Primary and secondary data are used for the study. Primary data was collected with the help of pretested structured questionnaire from a selected sample of faculty members of self-financing colleges. Secondary data was collected from published books, periodicals, articles, reports and official documents of the government authorities and the self-financing colleges in Kerala. A multi stage stratified random sampling was used for data collection of this study. In Kerala, Ernakulam district is having the greatest concentration of self-financing institutions belonging to all categories. Hence Ernakulam district was selected as the area of the study. Self-financing colleges are clustered into two categories, namely arts and science and Engineering colleges. Thus, arts and science colleges, training colleges, and law colleges are together considered as arts and science colleges and engineering colleges are taken separately. Thus, there are two groups, namely, arts & science and engineering, that is, 59 arts & science colleges MG university(2019) and 22 engineering colleges(DTE 2018). These 81 colleges are again subdivided into colleges having less than 20 teachers, greater than 20 but less than 50 teachers, greater than 50 but less than 100 teachers, greater than 100 teachers but less than 150 and greater than 150 teachers. Giving proportionate representation to each group 335 faculty members were selected as sample from the randomly selected colleges from these groups. Arts and science colleges with less than 20 teaching faculty members is 36, from which 12 colleges and 48 samples were selected at random. Similarly, there are 24 colleges with more than 20 and less than 50 teachers from which 8 colleges were selected with a sample of 64. There are 8 arts and science colleges with more than 50 teachers from which 3 colleges and 45 samples were selected. Among the engineering colleges, the colleges with less than 100 teachers is 10 from which 4 colleges and 72 samples were taken. From the 7 colleges with more than 100 teachers but less than 150 teachers 80 samples were collected from 3 colleges There are 4 colleges with more than 150 teachers from which 28 samples were collected from one such college. Thus, altogether 157 samples from arts and science colleges and 177 samples from engineering colleges were selected for the study.

4. Data Analysis

The Mann-Whitney U-test, is a statistical comparison of the mean. A dependence tests that compares the mean scores of an independent and a dependent variable assumes that differences in the mean score of the dependent variable are caused by the independent variable. In most analyses the independent variable is also called factor, because the factor splits the sample in two or more groups, also called factor steps. For the test of significance of the Mann-Whitney U-test it is assumed that with $n > 80$ or each of the two samples at least > 30 the distribution of the U-value from the sample approximates normal distribution. The U-value calculated with the sample can be compared against the normal distribution to calculate the confidence level. [2,3]

4.1. Work Environment

A positive work environment makes employees feel good about coming to work, and this provides the motivation to sustain them in the organization. The work environment in different colleges differ some organizations provide individual cubicles, personal desk tops etc. Thus the working conditions in self financing arts and science and engineering colleges differ. The factor work environment include five sub variables that are seating arrangement, enough resources to perform the job, clean and organized working environment, stressful work environment and organizational resources. The difference between faculty members of Engineering colleges and arts and science colleges in the matter of work environment and the factor affecting work environment were examined with the following hypothesis. H0: There is no significant difference with work environment of self financing engineering colleges and arts and science colleges. H1 : There is significant difference with work environment of self financing engineering colleges and arts and science colleges. This was tested using Mann-Whitney U-test and the results are shown in the table 1. [4,5]

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Table 1 Test Statistics for Mann Whitney U Test on Work Environment

	Work Environment
Mann-Whitney U	12734.000
Wilcoxon W	24980.000
Z	-1.203
Asymp. Sig. (2-tailed)	.229

Grouping Variable: College Type, Source: Primary data

Among the five sub variables of working environment the seating arrangement and enough resources shows a significant result. An examination of the findings in table shows that the results of the Mann Whitney U test applied to the working environment of teachers in self financing colleges in Ernakulam district posttest revealed a statistically significant difference at 5% level. This implies that work environment of self financing engineering colleges and arts and science colleges are the same in Kerala.

4.2. Team Work

Teamwork is often a crucial part of an organization, as it is often necessary for colleagues to work well together, to get the best output and also it will create a very good rapport between the staff members this will tend them to continue in the organization. There are so many sub variables under this factor they are mutual respect, colleague support, work appreciation and recognition, team work, innovation, efficiency of HOD and interdepartmental relationship. To compare the data between the arts and science college and engineering college the following hypotheses were framed and tested with Mann Whitney U test. H0: There is no significant difference in team work between the faculty members of self financing engineering colleges and arts and science colleges. H1: : There is significant difference in team work between the faculty members of self-financing engineering colleges and arts and science colleges The results are as follows in Table 2. An examination of the findings in Table shows that the results of the Mann Whitney U test applied to the engineering and arts and science self financing colleges in Ernakulum district revealed a statistically insignificant difference as p>.05 in all the sub variables of team work except in mutual respect(p=315>.05). The null hypothesis is accepted. This result indicates that in team work there exist no difference between the two groups.

Table 2 Test Statistics for Mann Whitney U Test on Team Work

	Team Work
Mann-Whitney U	12900.000
Wilcoxon W	25146.000
Z	-1.005
Asymp. Sig. (2-tailed)	.315

Grouping Variable: College Type, Source: Primary data

4.3. Management Effectiveness

An efficient management is necessary for the employees to say their problems. If the management is not effective it will cause disinterest in the employees so it is very much important to have en efficient management. There are six sub variables under management effectiveness they are effective communication by the management with the staff, respect from management, grievance handling, skill utilization, goal acknowledgement and knowledge regarding information in the college. This was analysed using the following hypotheses, H0: There is no significant difference in management effectiveness between the self financing engineering colleges and arts and science colleges. H1: There is significant difference in management effectiveness between the self financing engineering colleges and arts and science colleges. Mann Whitney U test is conducted to compare the arts and science college and engineering colleges the result are as follows in Table 3. The results of Mann Whitney U test give the significant value for grievance handling, goal acknowledgement, and departmental knowledge which are significant at 5% level. So we can say that the employees in engineering colleges can easily communicate regarding their grievance to their management than in arts and science colleges. The null hypothesis is rejected since the p value is less than .05. so we conclude that there exist significant difference between the two group.

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Table 3 Test Statistics of Mann Whitney U Test on Management Effectiveness

	Management Effectiveness
Mann-Whitney U	10854.000
Wilcoxon W	23100.000
Z	-3.521
Asymp. Sig. (2-tailed)	.000

Grouping Variable: College Type, Source: Primary data

4.4. Competency

Competencies are the measurable or observable knowledge, skills, abilities, and behaviors (KSABs) critical to successful job performance. A teacher must be competent enough to perform his/her job effectively here the researcher is trying to find if there is any difference in the competency of the teachers in self financing arts and science and engineering colleges. The sub variables under competency are job challenge, staff development programme, freedom, innovative teaching method, consultancy assignment, working hour utilization, and work skills. H0: There is no significant difference in the competency level of the self financing engineering colleges and arts and science colleges. H1: There is significant difference in the competency level of the self financing engineering colleges and arts and science colleges. Mann Whitney U test is done to compare the results of engineering and arts and science colleges. The results are as follows in Table 4.

Table 4 Mann Whitney U Test on Competency

	Competency Level
Mann-Whitney U	11683.500
Wilcoxon W	27259.500
Z	-2.436
Asymp. Sig. (2-tailed)	.015

Source: Primary data, Grouping Variable: College Type

On an examination of the findings in Table it is found that there is a significant difference between engineering colleges and arts and science colleges in the case of competency. On the basis of the results obtained, it could be argued the job challenge, work skills, staff development programme, innovative teaching methods, consultancy assignment and work skills have a shown a difference between the arts and science colleges and engineering colleges. The null hypothesis is rejected as p value is less than .05.

4.5. Organization Commitment

Highly committed employee will identify with the goals and values of the organization, has a stronger desire to belong to the organization. Highly committed employees are treated as an asset to the organization. Here organization commitment is been tested using the sub variables extra effort taken by the employees, feeling of organizational belongingness, obligation towards the people associated with it, commitment towards the values and normative commitment that is a sense of obligation to stay. This was examined using the following hypotheses. H0: There is no significant difference between the faculty members of the self financing engineering colleges and arts and science colleges in the matter of organizational commitment H1: There is significant difference between the faculty members of the self financing engineering college, arts, science colleges in the matter of organizational commitment The result of Mann Whitney U test is shown in Table 5.

Table 5 Mann Whitney U Test on Organization Commitment

	Organization Commitment
Mann-Whitney U	11838.500
Wilcoxon W	24084.500
Z	-2.390
Asymp. Sig. (2-tailed)	.017

Grouping Variable: College Type, Source: Primary data

As will be revealed by an examination of the findings in table, there is a significant difference between the arts and science colleges and engineering colleges in the organizational commitment with p value .017 which is less than .05. Hence H0 is rejected that

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means there exist significant difference between the faculty members of the self-financing engineering colleges and arts and science colleges in the matter of organizational commitment.

4.6. Performance Appraisal

If a good performance appraisal system is there to assess the teachers it would have been retain good qualified employees in the organization. The teachers skills in paper publication etc are taken as the sub variable for performance appraisal. The appraisal system in of the self financing engineering colleges and arts and science colleges is compared using the hypotheses H0: There is no significant difference between the appraisal system of self financing engineering colleges and arts and science colleges. H1: There is significant difference between the appraisal system of self financing engineering colleges and arts and science colleges. The result of Mann Whitney U test is shown below in Table 6.

Table 6 Mann Whitney U Test on Appraisal System

	Appraisal System
Mann-Whitney U	11051.000
Wilcoxon W	23297.000
Z	-3.143
Asymp. Sig. (2-tailed)	.002

Source: Primary data, Grouping Variable: College Type

As shown by the results in Table, there is a significant difference between Arts and science colleges and engineering colleges in case of appraisal system except in article publication. The result give a value0.002 which is less than .05. Hence the null hypothesis is rejected. That implies that there is significant difference between the appraisal system of self financing engineering colleges and arts and science colleges.

4.7. Management Involvement

Management involvement is obvious to retain the employees in the organization The people from the top level management need to concentrate on the individual needs of the employees. A proper induction training and the information sharing is very much important. Thus four sub variables under management involvement is organizational information, individual needs, interdepartmental information and induction training provided to the employees at the time of their joining. The difference in the two groups are tested using the hypotheses H0: There is no significant difference in the involvement of top level management of the self financing engineering colleges and arts and science colleges H1: There is significant difference in the involvement of top level management of the self financing engineering colleges and arts and science colleges

Table 7 Mann Whitney U test on Management Involvement

	Management Involvement
Mann-Whitney U	12113.000
Wilcoxon W	24359.000
Z	-1.915
Asymp. Sig. (2-tailed)	.046

Source: Primary data, Grouping Variable: College Type

As shown in Table 7, In the case of involvement also there shows a significant difference in management involvement other than the sub variable organizational information. The p value .045 is less than .05 so we can say that the null hypothesis is rejected and hence there is significant difference in the involvement of top level management of the self-financing engineering colleges and arts and science colleges.

4.8. Gender bias

Table 8 Test Statistics[a]

	Gender Bias
Mann-Whitney U	13245.000
Wilcoxon W	28821.000
Z	-.575
Asymp. Sig. (2-tailed)	.565

Grouping Variable: College Type, Source: Primary data

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As shown in Table 8, An examination of the findings in Table reveals the results of Mann Whitney U test for the gender issues of arts and science colleges and engineering colleges did not show any statistical difference (Z=-0.575; p=.565>.05). The null hypothesis is accepted. Hence we can conclude that the gender issues in the both groups are the same

4.9. Financial Compensation

Financial compensation show a very high impact on retaining the employees in self financing colleges. Here Mann Whitney U test and Wilcoxon W test is been done to compare the financial compensation between arts and science colleges and engineering colleges . The sub variables used to explain financial compensation are competitive benefits, Incentives given, miscellaneous compensation like sponsoring for FDP, performance rewards etc are involved. The difference is tested using the hypotheses. H0: There is no significant difference in the financial compensation of the self financing engineering colleges and arts and science colleges. H1: There is significant difference in the financial compensation of the self financing engineering colleges and arts and science colleges.

Table 9 Mann Whitney U Test on Financial Compensation

	Financial compensation
Mann-Whitney U	10935.000
Wilcoxon W	23181.000
Z	-3.308
Asymp. Sig. (2-tailed)	.001

Source: Primary Data, Grouping Variable: College Type

As shown in Table 9, In case of financial compensation the p value is .001 which is less than .05 so we reject the null hypothesis and conclude that the compensation given to Arts and science colleges is different from that in the engineering colleges.

4.10. Career Growth and Advancement

When chi square test is done it shows that there is a relationship between career advancement and employee retention. Here Mann Whitney U test and Wilcoxon W test is done to test if there is any difference between the career growth opportunities given to the arts and science colleges and self financing engineering colleges. There are five sub variables which comes under career growth and advancement. The hypotheses for testing are H0: There is no significant difference in the career growth and advancement of faculty members of the self financing engineering colleges and arts and science colleges. H1: There is significant difference in the career growth and advancement of faculty members of the self financing engineering colleges and arts and science colleges.

Table 10 Mann Whitney U Test on Career Growth and Advancement

	Career Growth and Advancement
Mann-Whitney U	10958.000
Wilcoxon W	23204.000
Z	-3.313
Asymp. Sig. (2-tailed)	.001

Source: Primary data, Grouping Variable: College Type

As shown in Table 10, The results from the table show that Career growth and advancement have a very significant difference between the two groups. All the three are having a p value less than .01 ie they have a significance of 99%.

4.11. Leadership Practices

A comparison between the leadership practices in the engineering colleges and arts and science colleges are done. Here the leadership practices followed by both the top level management and the head of the department are done. The test hypotheses for the analysis are H0: There is no significant difference in the leadership practices of the self financing engineering colleges and arts and science colleges. H1: There is significant difference in the leadership practices of the self financing engineering colleges and arts and science colleges. The results of the comparison is shown below in Table 11.

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Table 11 Mann Whitney U Test on Leadership Practices

	Leadership Practices
Mann-Whitney U	13405.000
Wilcoxon W	28981.000
Z	-.390
Asymp. Sig. (2-tailed)	.697

Source: Primary data, Grouping Variable: College Type

Since the p-value is greater than our significance level of 0.05, we fail to reject the null hypothesis and conclude that there is not enough evidence in the data to suggest that there is difference between arts and science colleges and engineering colleges.

4.12. Work Stress

There are seven variables which explain work stress in self financing colleges. A comparative analysis on these variables to arts and science colleges and engineering colleges are done. Hypotheses formulated for the analysis are H0: There is no significant difference between the faculty members of the self financing engineering colleges and arts and science colleges in the matter of work stress. H1: There is significant difference between the faculty members of the self financing engineering colleges and arts and science colleges in the matter of work stress. For this Mann whitney U test and Wilcoxon W test are used the results are shown below in Table 12.

Table 12 Mann Whitney U Test on Work Stress

	work stress
Mann-Whitney U	13467.500
Wilcoxon W	25713.500
Z	-.311
Asymp. Sig. (2-tailed)	.756

Source: Primary Data, Grouping Variable: College Type

When we compare the two group from the table it is clear that there is no significant difference between the work stress in self financing arts and science college and engineering colleges in ernakulam district. So we accept the null hypothesis.

4.13. Work Life Balance

The reason why most of the teachers took teaching as their profession is they have a good amount of work life balance shown. Here a test is been done to compare the work life balance of faculty members in engineering and arts and science colleges. For this hypothesis formulated for analysis they are H0: There is no significant difference between the faculty members of the self financing engineering colleges and arts and science colleges in the matter of work life balance. H1: There is significant difference between the faculty members of the self financing engineering colleges and arts and science colleges in the matter of work life balance. Mann Whitney U test and Wicoxon W test is been used by the researcher to test the difference. The results are shown in the table below. For this Mann whitney U test and Wilcoxon W test are used the results are shown below in Table 13.

Table 13 Mann Whitney U Test On Work Life Balance

	work life balance
Mann-Whitney U	13145.000
Wilcoxon W	25235.000
Z	-.508
Asymp. Sig. (2-tailed)	.612

Source: Primary data Grouping, Variable: College Type

Mann-Whitney U test gives the result that time spend with the family is having a significant difference between the two groups with a p value of .612>.05. we accept the null hypothesis. There are two variables which describe Work life balance they are the policy which that organization is following regarding the work life balance and the amount that an employee can spend with the family after the work in the college. We can conclude that the work life policies are not having much difference when the two groups are compared.

Conclusion

From the paper it is clear that the strategies selected are relevant. The employee retention strategies followed in self financing engineering colleges and

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self financing arts and science colleges shows a significant difference. This article identifies thirteen different strategies among them seven variables shows that there exist a significant difference among the two type of colleges. All the other six variables says that there is no difference exist between the retention strategies in the two categories of colleges. High employee turnover increases cost in resources, recruiting, and time when replacing open positions. Cloutier, O., Felusiak, L., Hill, C., & Pemberton-Jones, E. J. (2015). Implementing these strategies will improve the employee retention rate in self financing colleges.

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