

## **COMPARISON OF FACULTY ENGAGEMENT IN DIFFERENT TYPES OF INSTITUTIONS**

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### **6.1 Introduction**

The faculty member of an Arts and Science college is expected to perform duties in the areas of teaching, research, and service. The performance of a faculty member will be assessed by the authorities in these three aspects for promotion and entitlements. UGC has issued guidelines for the faculty members, keeping in mind these three aspects, and it takes effort to make them excel in these areas. When a faculty member is involved in teaching, research, or service, he or she is considered to be engaged. Earlier, teaching was the only activity that was demanded of from the faculty members of arts and science colleges. Later on, the scope was broadened by the inclusion of research and service-oriented activities. Effective classroom interaction, the development of techniques for delivering concepts, the development of pedagogy, and creating interest in subjects among students are the core activities to be performed in teaching by the faculty members. When it comes to research, research presentations, research publications with a high impact factor, attainment of a good score in the h-index, and research work that contributes to society, it must be prioritised. National Service Scheme (NSS), National Cadet Corps (NCC), Extension programs, and other services to be performed by a faculty member in the service-related activities. The state's arts and science colleges are broadly classified as Government, Aided, and Autonomous. The engagement in teaching, research, and service of the faculty members belonging to these types of institutions may vary, as the institutions differ in their

functioning. Even, the regulatory bodies differentiate these institutions while making assessments and issuing guidelines. Hence, it is imperative to make a comparison of the engagement level of faculty members belonging to different institutions on the aspects of teaching, research, and service. The research hypotheses set up by the researcher are:

**H7: There exists a significant difference among the types of institutions and the dimensions of faculty engagement.**

The researcher has made use of mean and standard deviation to assess the level of engagement in these activities and a one-way ANOVA to check whether there exists a significant difference among faculty members of Government, Aided and Autonomous institutions with respect to teaching, research, and service engagement.

## **6.2 Descriptives on Teaching, Research, and Service Engagement**

In order to measure the level of engagement in teaching, research, and service, a five-point Likert scale has been developed by the researcher, and the respondents are asked to rate these statements on a scale that ranges from strongly agree (5) to strongly disagree (1). Statements TE1 to TE9 are used to examine the teaching engagement among faculty members, statements RE1 to RE8 are used to analyse the research engagement, and statements SE1 to SE7 are used to measure the service engagement of the faculty members belonging to Arts and Science colleges in Kerala. Table 6.1 gives the results of the mean and standard deviation.

**Table 6.1**  
**Mean and Standard Deviation on Teaching, Research and Service Engagement**

<b>Indicator Code</b>	<b>Statements</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>TE1</b>	Successful teaching and learning strategies should be used to support everyone.	3.7744	1.19354
<b>TE2</b>	Able to develop and use e-contents and MOOC's.	3.8077	1.17008
<b>TE3</b>	A supportive environment is necessary in order to provide additional services to institutions and universities.	3.7436	1.20662
<b>TE4</b>	A faculty member have to be curious to find out students	3.9154	1.26064

<b>Indicator Code</b>	<b>Statements</b>	<b>Mean</b>	<b>Standard Deviation</b>
	preferences, interest, feelings and ideas.		
<b>TE5</b>	Active participation in orientation or refresher or methodology courses enhances the quality of research.	3.4026	1.10129
<b>TE6</b>	Being part of examination and evaluation activities seems to be worth.	3.5564	1.07347
<b>TE7</b>	Feedback from students arouses my confidence level to teach.	3.2872	1.10600
<b>TE8</b>	Faculty members need to be conscious to strengthen and update knowledge on a daily basis for effective mentoring.	2.9967	1.04963
<b>TE9</b>	A faculty member is responsible for using multiple diagnostic tools to determine student needs and identifies their areas of confusion.	3.5128	1.04578
<b>RE1</b>	Doing research presentations helps faculty members to get feedback on their work.	3.5385	1.1505
<b>RE2</b>	Publishing research work helps faculty members to communicate the research to a wide and interested audience.	3.5513	1.2088
<b>RE3</b>	Attainment of good scores in h-index can be used as a parameter to know the interest of a faculty member in research.	3.6385	1.2357
<b>RE4</b>	Research conducted must contribute something towards society.	3.6590	1.3218
<b>RE5</b>	Participation in research conferences helps to broaden the professional network.	3.5436	1.2260
<b>RE6</b>	Writing research papers engrosses me for hours on end.	3.4923	1.1644
<b>RE7</b>	Spending time for research enhances the overall quality as a faculty member.	2.4949	0.9903
<b>RE8</b>	Providing assistance to research scholars helps in building confidence in my skills as a researcher.	2.8436	0.9980
<b>SE1</b>	A faculty member must also provide administrative support to the college and University concerned.	3.4436	0.97825
<b>SE2</b>	A faculty member should be willing to be part of committees and perform the duties allotted.	3.6564	1.18902
<b>SE3</b>	Extension programmes and community engagement should be included in the curriculum.	3.0641	1.02588
<b>SE4</b>	I am energised by providing services.	3.5077	1.27208
<b>SE5</b>	My work as a service provider has an influence on society.	3.3462	0.94075
<b>SE6</b>	Faculty members should take initiative to identify the best practices and to implement it.	2.9590	1.02582
<b>SE7</b>	I feel immersed while providing services.	3.5821	0.91668

*Source: Primary Data*

Table 6.1 implies that ‘A faculty member have to be curious to find out students preferences, interest, feelings and ideas.’ has the highest mean score of 3.9154 (SD 1.26064) which indicates that faculty members are very much involved in teaching. Among the research engagement, it can be observed that, ‘Research conducted must contribute something towards society.’ obtains the highest mean score of 3.6590 (SD 1.3218), indicating the interest of faculty members to be part of research work which contributes to society. ‘A faculty member should be willing to be part of committees and perform the duties allotted.’ scores highest mean value of 3.6564 (SD 1.18902), which tells that faculty members are ready to perform their role in service-oriented activities.

From the mean values it can be inferred, faculty members must take more effort to upgrade themselves as a teacher, research, and service-provider.

**Table 6.2**  
**Descriptive Statistics of Dimensions of Faculty Engagement**

<b>Dimensions of Faculty Engagement</b>	<b>Mean</b>	<b>Standard Deviation</b>
Teaching Engagement	31.9667	8.9633
Research Engagement	26.7615	6.9940
Service Engagement	23.5590	6.4982

*Source: Primary Data*

Table 6.2 depicts the mean score of dimensions of faculty engagement which assures that all the dimensions of faculty engagement is having an above average representation in engaging faculty members of arts and science colleges of Kerala. Teaching Engagement is the dimension which has the highest mean score of 31.9667 (SD 8.9633) against the maximum score of forty-five which indicates a 71.037% of influence in engaging faculty members of Arts and Science colleges of Kerala. Teaching Engagement is followed by Service Engagement with a mean score of 23.5590 (SD 6.4982) against the maximum score of thirty-five, indicating 67.311% in engaging faculty members. The lowest mean score is attained by Research Engagement with a mean score of 26.7615 (SD 6.9940) which is also having an average influence in inculcating engaging among faculty members.

### 6.3 Comparison of Teaching Engagement in Different Types of Institutions

Teaching engagement is a multi-dimensional construct that reflects the faculty member's decision to dedicate their energy, time, and resources into their work. Engagement in teaching covers the teaching and learning-related tasks of teachers and many aspects of a faculty member. To know the mean score of the teaching engagement of faculty members among different types of institutions, descriptive analysis has been performed. The researcher has employed Levene's statistic and one-way ANOVA to measure whether any significant difference exists among faculty members of different types of institutions with respect to teaching engagement.

Table 6.3 presents the institution-wise test of homogeneity of variances in teaching engagement among faculty members.

#### 6.3.1 Institution-wise analysis of Teaching Engagement

**Table 6.3**

**Institution-wise Test of Homogeneity of Variance of Teaching Engagement**

Variable	Levene's Statistic	Sig. value
Teaching Engagement	2.008	0.136

*Source: Primary Data*

Since the p value of the test is greater than 0.05, the assumption of equal variance is accepted. Hence, the value of ANOVA is considered in the study. Table 6.4 presents the results of the ANOVA test.

**Table 6.4**

**Institution-wise analysis of Teaching Engagement**

Institution	N	Mean	SD	Max Score	F value/ Welch F	P Value	Remarks
Government	140	31.1714	9.409				
Aided	184	33.0109	8.414				
Autonomous	66	30.7424	9.287	45	2.433	0.089	ANOVA
<b>Total</b>	<b>390</b>	<b>31.9667</b>	<b>8.963</b>				

*Source: Primary Data*

From Table 6.4, it can be clearly observed that the p value is 0.089, which is greater than 0.05, which indicates that there is no significant difference among different types of educational institutions with respect to teaching engagement. While analysing the mean score, it is understood that faculty members belonging to aided institutions have the highest mean score of 33.0109 (SD 8.414), followed by the faculty members of Government colleges with a mean score of 31.1714 and SD of 9.409. Faculty members in Autonomous colleges have the lowest mean score of 30.7424 with a SD of 9.287. The mean value assures that there is no significant difference in teaching engagement among faculty members belonging to different types of institutions.

#### **6.4 Comparison of Research Engagement in Different Types of Institutions**

Research engagement can be defined as the positive feeling of faculty members towards research work achieved by investing resources, energy, and time in research-oriented activities. It is an emotional, psychological, and physical connectedness among the faculty members in the pursuit of research. Faculty members belonging to different types of institutions may possess different levels of research engagement. A descriptive analysis has been done to determine the mean score of different types of institutions with regard to research engagement. Further, one-way ANOVA is applied to test the significant difference among types of institutions. Levene's test has been used for testing the homogeneity of variances, which is illustrated in Table 6.5.

##### **6.4.1 Institution-wise analysis of Research Engagement**

**Table 6.5**

#### **Institution-wise Test of Homogeneity of Variances of Research Engagement**

<b>Variable</b>	<b>Levene's Statistic</b>	<b>Sig. value</b>
Research Engagement	1.667	0.188

*Source: Primary Data*

Table 6.5 reveals that the p-value of the test is greater than 0.05 for research engagement, and hence the assumption of equal variance is accepted. So, ANOVA's F value is considered in the study. The results are exhibited in Table 6.6.

**Table 6.6**  
**Institution-wise Analysis of Research Engagement**

<b>Institution</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Max Score</b>	<b>F value/ Welch F</b>	<b>P Value</b>	<b>Remarks</b>
Government	140	25.5500	7.41506				
Aided	184	27.1515	7.07377	40	3.394	0.035*	ANOVA
Autonomous	66	27.5435	6.53099				
<b>Total</b>	<b>390</b>	<b>26.7615</b>	<b>6.99409</b>				

*Source: Primary Data, \* statistically significance at 5% level.*

From table 6.6, it is clear that there exists a significant difference among faculty members regarding research engagement, belonging to different types of institutions, as the p value of the test is less than 0.05. The mean score is the maximum for faculty members belonging to Autonomous institutions, with a value of 27.5435 (6.53099), followed by Aided institutions with a mean score of 27.1515 (7.07377). Faculty members of Government institutions possess the lowest mean score of 25.5500 (SD 7.41506). This indicates that faculty members belonging to Autonomous institutions are more engaged in research. Multiple comparisons through post hoc analysis were performed to measure the significant difference among faculty members' attitudes towards research engagement. Since equal variances are assumed, the Tukey HSD test is used to examine the pairwise differences among faculty members belonging to different institutions with regard to research engagement. The results of Post Hoc are presented in Table 6.7.

**Table 6.7**  
**Post Hoc Test for significant difference among the type of institution with respect to Research Engagement**

<b>Institution (I)</b>	<b>Institution (J)</b>	<b>Mean Difference (I-J)</b>	<b>Standard Error</b>	<b>p value</b>
Government	Aided	-1.60152	1.03794	0.272
	Autonomous	-1.99348*	0.77960	0.029
Aided	Government	1.60152	1.03794	0.272
	Autonomous	-0.39196	0.99739	0.918
Autonomous	Government	1.99348*	0.77960	0.029
	Aided	0.39196	0.99739	0.918

*Source: Primary Data, \* statistically significant at 5% level.*

The results of a post-hoc analysis using Tukey HSD are shown in Table 6.7, and the p values are less than 0.05, indicating that there is a significant difference between the faculty members of Government colleges and Autonomous colleges. As a result, it can be deduced that research engagement differs between faculty members of Autonomous and Government institutions. The faculty members belonging to Autonomous institutions have the highest mean score, followed by Aided institutions. Hence, it can be concluded that faculty members belonging to Autonomous institutions are more engaged in research compared to faculty members belonging to other types of institutions.

### **6.5 Comparison of Service Engagement in Different Types of Institutions**

Service engagement is considered to be a part of extension and outreach programmes conducted by the institution. It is critical that faculty members develop the necessary skills to serve society as their roles change. The level of service engagement among faculty members at different types of institutions may vary. In order to know the mean value of faculty members with respect to service engagement, a descriptive analysis was done. A one-way ANOVA is employed to test the significant difference among faculty members with respect to service engagement.

#### **6.5.1 Institution-wise analysis of Service Engagement**

**Table 6.8**  
**Institution-wise Test of Homogeneity of Variances of Service Engagement**

<b>Variable</b>	<b>Levene's Statistic</b>	<b>Sig. value</b>
Service Engagement	1.979	0.140

*Source: Primary Data*

Table 6.8 reveals that the p value of the test is greater than 0.05 for service engagement, and hence, the assumption of equal variance is accepted. The value of ANOVA is considered in the study, and the results are exhibited in Table 6.9.



**Table 6.9**

**Institution-wise analysis of Service Engagement**

<b>Institution</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Max Score</b>	<b>F value/ Welch F</b>	<b>P Value</b>	<b>Remarks</b>
Government	140	22.9214	6.78240				
Aided	184	24.1739	6.07712				
Autonomous	66	23.1970	6.94865	35	1.605	0.202	ANOVA
Total	390	23.5590	6.49820				

*Source: Primary Data*

The results indicate that there is no significant difference among faculty members belonging to different types of institutions with regard to service engagement, as the p value is greater than 0.05. The faculty members of Aided colleges have the highest mean score of 24.1739 (SD 6.07712), and the faculty members of Government colleges have the lowest mean score of 22.9214 (SD 6.78240). It implies that Aided college faculty members are more engaged in service compared to faculty members at other types of institutions.

While testing seventh hypothesis, (Tables 6.3 to 6.9) with the help of One-way ANOVA to test the difference among type of institution and the dimensions of faculty engagement, ***the null hypothesis is accepted except for research engagement.***

The significant difference among faculty members belonging to different type of institution with respect to research engagement. While, in case of teaching and service engagement no significant difference among faculty members belonging to different types of institutions.

**6.6 Conclusion**

From the foregoing analysis performed with the help of a one-way ANOVA, it can be seen that there is no significant difference among faculty members of different types of institutions with respect to teaching and service engagement, as the p value is greater than 0.05. While, in the case of research engagement, the p value shows a value, less than 0.05, which indicates that there exists a significant

difference among types of institutions with regard to research engagement. The Tukey HSD post hoc analysis confirms the existence of a significant difference between faculty members of Aided and Autonomous institutions. The faculty members must keep in mind that their role as researchers will have an impact on society and that they should take part in research that is beneficial for society.