Vol. XV, No. 2; September 2022 - February, 2023

Print ISSN: 0975-024X; Online ISSN: 2456-1371

Analysis of Accredited Higher Education Institutions in Karnataka with Respect to Location and Source of Finance

Mahantesh M. Kuri¹, Vishal Chenraj Jain²

¹Assistant Professor, Ranichennamma University, Belagavi, Karnataka, India ²Research Scholar, Ranichennamma University, Belagavi, Karnataka, India

Abstract

India is a developing country and in ordered to achieve our goals we have to strengthen our higher education system. The continuing growth of the middle class in India (approximately 200 million people) has led to increased demand for higher education and we know that this demand cannot be met very easily by the Indian Higher Education system. Although the Indian government is planning to establish new universities and colleges in the near future, these will not be enough to provide places for all students who seek higher education. If we think that what India will be like 25 years from now, we can estimate quantitatively with a fair degree of confidence in some areas.

Ever since the establishment of National Assessment and Accreditation Council (NAAC) it has been involved in evaluating the performance of the Universities and Colleges in the Country. The main philosophy of NAAC is based on objective and continuous improvement rather than being punitive or judgmental, so that all institutions of higher learning are empowered to maximize their resources, opportunities and capabilities. Across India there are few states who have taken up initiatives to go for Accreditation with the support of the government and higher education Council. Among these states Karnataka is one such state where more number of higher education Institutions have been accredited across different cycles. There are many factors which contributes for the institutions to have high cumulative grade point average and also grades. In this paper an attempt is being made to find out how location and source of funding influences on the accreditation status of higher education Institutions in Karnataka.

Keywords: Accreditation, Cumulative grade point average, Grade, Location, Source of funding

Introduction

The accreditation process of NAAC promotes internalization of quality sustenance and quality assurance processes within the institutions and encourages participatory management practices including student participation. The A&A process of NAAC is being revised over the years keeping the feedback from higher education Institutions, other stakeholders and the developments in the national scene .The Revised Assessment and Accreditation Framework launched in July 2017 and also slight revisions made in 2020 represents an explicit paradigm shift making in ICT enabled, objective, transparent, scalable and robust process with decrease in the total number of metrics..

Karnataka state is one of the leading and innovating states in the country and it is one among the top few states to Implement National Educational [policy (NEP 2020) mad has been known for bringing lot of **Corresponding Author:** Mahantesh M. Kuri, Assistant Professor, Ranichennamma University, Belagavi, Karnataka, India Email: catchmahantesh@yahoo.co.in **How to cite this article:** Kuri, M.M.; Jain, V.C. (2023). Predictive role of Emotion-Regulation in Acculturative Stress and Spiritual Well-Being of

International Students. Purushartha, 15(2),139-146. Source of support: Nil Conflict of interest: None

reformations in education system like the preparation of the vision document 'Higher Education in Karnataka'. Universities and colleges are primarily responsible for knowledge creation which in turn responsible for national development. There are nearly 33 universities and 984 colleges that have gone for accreditation under different Cycles. The state-wise analysis of accreditation reports of Karnataka (2021) reveals that more number of accreditation Institutions are under the grant-in-aid category compared to the self financing .Similarly, more number of accredited institutions are from urban locality when compared to semi

© The Author(s). 2022 Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons. org/licenses/by/4.0/), which permits unrestricted use, distribution, and non-commercial reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated. urban and rural.

Objectives

- To find the accreditation status of higher education institutions in Karnataka.
- To find the accreditation status of higher education institutions with respect to location in Karnataka.
- To find the accreditation status of higher education institutions with respect to source of funding in Karnataka.
- To find out the interaction effect of both

Location and source of funding

Hypotheses

- There is no significant difference in the accreditation scores(CGPA) of higher education Institutions with respect to Location
- There is no significant difference in the accreditation scores(CGPA) of higher education Institutions with respect to source of funding
- There is no significant interaction between location and Source of funding with respect to accreditation scores (CGPA)of higher education Institutions.

| | Total Universities | Number of | Number of Not |
|---------------------------|--------------------|-------------------------|-------------------------|
| | /Institutions | Accredited Institutions | Accredited Institutions |
| Universities/Institutions | 69 | 33 | 36 |
| Colleges | 3594 | 928 | 2666 |

| Status of Accreditation | Institutions in | Karnataka (| (as on 12 th | August 2022) |
|-------------------------|-----------------|-------------|-------------------------|--------------|
| | | , | (| |

In this paper under stage –I analysis, following data has been considered for the purpose of analysis

| | Total Universities | Number of | Number of Not |
|---------------------------|--------------------|-------------------------|-------------------------|
| | /Institutions | Accredited Institutions | Accredited Institutions |
| Universities/Institutions | 69 | 28 | 41 |
| Colleges | 3594 | 837 | 2757 |

Status of Accreditation Institutions in Karnataka (as on 04/05/2020)

As per the Department of Collegiate Education (DCE), Karnataka website, there are 751First Grade Colleges, which consists of 430 Government First Grade Colleges (GFGC) and 321Government Aided First Grade Colleges,

including the University constituent colleges.

The number of colleges accredited by NAAC is given below in Table – 1 $\,$

| Private Aided Colleges | 200 |
|---------------------------|-----|
| Constituent Colleges | 09 |
| State Government Colleges | 205 |
| Total Number of Colleges | 414 |

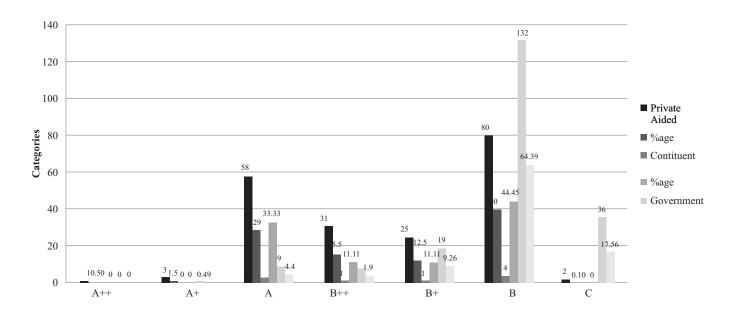
| | 0.1 | | 0. | |
|-------|---------------|-----------------|------------|-------|
| SN | Categories | No. of Colleges | Accredited | %age |
| 1. | Private Aided | 321 | 200 | 62.31 |
| 2. | Constituent | 13 | 9 | 69.23 |
| 3. | Government | 430 | 205 | 47.67 |
| Total | 764 | | 414 | |
| | | | (54.19%) | |

 Table 2. Category-wise Number of Accredited Colleges(N=764)

The total number of Government and Private Aided Colleges as per the Department of Collegiate Education are 751 (430+321) and there are 13 Constituent Colleges directly under the Six of the fifteen state (affiliating) Universities. For the above table-2, colleges which offer Arts, Science and Commerce courses are only considered.

Table 3. Accreditation of Colleges with their Grades under different categories

| Category | | | | Grades | | | | Total Accredited |
|---------------|-----|------|-------|--------|-------|-------|-------|------------------|
| | A++ | A+ | А | B++ | B+ | В | С | |
| Private Aided | 1 | 3 | 58 | 31 | 25 | 80 | 2 | 200 |
| %age | 0.5 | 1.5 | 29.00 | 15.5 | 12.5 | 40.00 | 0.010 | |
| Constituent | | | 3 | 1 | 1 | 4 | | 9 |
| %age | | | 33.33 | 11.11 | 11.11 | 44.45 | - | |
| Government | | 1 | 9 | 8 | 19 | 132 | 36 | 205 |
| %age | | 0.49 | 4.4 | 3.9 | 9.26 | 64.39 | 17.56 | |
| Total | 1 | 4 | 70 | 40 | 45 | 216 | 38 | 414 |



Analysis

One-way ANOVA of CGPA across Source of Financing

| | | | | | 95% Confidence Interval for Mean | | | |
|----------------|-----|--------|-----------|------------|----------------------------------|-------------|------|------|
| | Ν | Mean | Std. Dev. | Std. Error | Lower Bound | Upper Bound | Min. | Max. |
| Government | 262 | 2.3298 | .38992 | .02409 | 2.2824 | 2.3772 | 1.52 | 3.54 |
| Grant-in-aid | 299 | 2.6303 | .41981 | .02428 | 2.5825 | 2.6780 | 1.55 | 3.62 |
| Self-financing | 315 | 2.6681 | .47877 | .02698 | 2.6150 | 2.7211 | 1.52 | 3.83 |
| Total | 876 | 2.5540 | .45755 | .01546 | 2.5237 | 2.5843 | 1.52 | 3.83 |

Descriptive Statistics of CGPA

Test of Homogeneity of Variances of CGPA

| | Levene Statistic | df1 | df2 | Sig. |
|--------------------------------------|------------------|-----|---------|------|
| Based on Mean | 6.011 | 2 | 873 | .003 |
| Based on Median | 6.539 | 2 | 873 | .002 |
| Based on Median and with adjusted df | 6.539 | 2 | 843.029 | .002 |
| Based on trimmed mean | 6.250 | 2 | 873 | .002 |

ANOVA of CGPA

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|--------|------|
| Between Groups | 19.006 | 2 | 9.503 | 50.531 | .000 |
| Within Groups | 164.177 | 873 | .188 | | |
| Total | 183.183 | 875 | | | |

Robust Tests of Equality of Means of CGPA

| | Statistica | df1 | df2 | Sig. |
|----------------|------------|-----|---------|------|
| Welch | 56.069 | 2 | 580.535 | .000 |
| Brown-Forsythe | 51.444 | 2 | 867.389 | .000 |
| | | | | |

a.Asymptotically F distributed.

| | | T USE HIDE TESES OF | interritie e compa | 10010 1000 10 | | | |
|------------|----------------|---------------------|--------------------|---------------|------|-------------|---------------|
| | (I) Source of | (J) Source of | Mean | Std. Error | Sig. | 95% Confid | ence Interval |
| | finance | finance | Difference (I-J) | | | Lower Bound | Upper Bound |
| Tamhane | Government | Grant-in-aid | 30046* | .03420 | .000 | 3824 | 2185 |
| | | Self-financing | 33825* | .03617 | .000 | 4249 | 2516 |
| | Grant-in-aid | Government | .30046* | .03420 | .000 | .2185 | .3824 |
| | | Self-financing | 03780 | .03629 | .654 | 1247 | .0491 |
| | Self-financing | Government | .33825* | .03617 | .000 | .2516 | .4249 |
| | | Grant-in-aid | .03780 | .03629 | .654 | 0491 | .1247 |
| Dunnett T3 | Government | Grant-in-aid | 30046* | .03420 | .000 | 3824 | 2186 |
| | | Self-financing | 33825* | .03617 | .000 | 4249 | 2517 |
| | Grant-in-aid | Government | .30046* | .03420 | .000 | .2186 | .3824 |
| | | Self-financing | 03780 | .03629 | .654 | 1247 | .0491 |
| | Self-financing | Government | .33825* | .03617 | .000 | .2517 | .4249 |
| | | Grant-in-aid | .03780 | .03629 | .654 | 0491 | .1247 |
| Games- | Government | Grant-in-aid | 30046* | .03420 | .000 | 3808 | 2201 |
| Howell | | Self-financing | 33825* | .03617 | .000 | 4232 | 2533 |
| | Grant-in-aid | Government | .30046* | .03420 | .000 | .2201 | .3808 |
| | | Self-financing | 03780 | .03629 | .551 | 1231 | .0475 |
| | Self-financing | Government | .33825* | .03617 | .000 | .2533 | .4232 |
| | | Grant-in-aid | .03780 | .03629 | .551 | 0475 | .1231 |

Post Hoc Tests of Multiple Comparisons Test for CGPA

Interpretation:

From the table 'Test of Homogeneity of Variances of CGPA' across source of financing, we observe that the significant p values are less the 0.05, there is a significant difference between the variances, and variances are in homogeny.

Furthermore, from the above table of 'ANOVA of CGPA' we observe that, the significant value is

.000, the exact significance level is not zero, but some number too small to show up in the number of decimals presented in the SPSS output. As the significant value is less than the set 0.05, we accept the null hypothesis, i.e. population means are equal and significant across source of financing variable data.

One-way ANOVA of CGPA across Location

| | N | Mean | Std. Dev. | Std. Error | 95% Confidence Interval for Mean | | Min. | Max. |
|------------|-----|--------|-----------|------------|----------------------------------|-------------|------|------|
| | | | | | Lower Bound | Upper Bound | | |
| Rural | 288 | 2.4195 | .41914 | .02470 | 2.3709 | 2.4681 | 1.67 | 3.61 |
| Urban | 461 | 2.6777 | .45930 | .02139 | 2.6356 | 2.7197 | 1.52 | 3.83 |
| Semi-urban | 127 | 2.4101 | .40664 | .03608 | 2.3387 | 2.4815 | 1.52 | 3.34 |
| Total | 876 | 2.5540 | .45755 | .01546 | 2.5237 | 2.5843 | 1.52 | 3.83 |

Descriptive Statistics of CGPA

| | Levene Statistic | df1 | df2 | Sig. |
|--------------------------------------|------------------|-----|---------|------|
| Based on Mean | 2.494 | 2 | 873 | .083 |
| Based on Median | 2.536 | 2 | 873 | .080 |
| Based on Median and with adjusted df | 2.536 | 2 | 867.114 | .080 |
| Based on trimmed mean | 2.532 | 2 | 873 | .080 |

Test of Homogeneity of Variances of CGPA

ANOVA of CGPA

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|--------|------|
| Between Groups | 14.887 | 2 | 7.444 | 38.612 | .000 |
| Within Groups | 168.296 | 873 | .193 | | |
| Total | 183.183 | 875 | | | |

Robust Tests of Equality of Means

| | Statistica | df1 | df2 | Sig. |
|----------------|------------|-----|---------|------|
| Welch | 39.007 | 2 | 353.570 | .000 |
| Brown-Forsythe | 41.440 | 2 | 564.037 | .000 |

a. Asymptotically F distributed.

Post Hoc Tests of Multiple Comparisons of GFPA

| | (I) Location | (J) Location | Mean | Std. Error | Sig. | 95% Confid | ence Interval |
|-----------|--------------|--------------|------------------|------------|------|-------------|---------------|
| | | | Difference (I-J) | | | Lower Bound | Upper Bound |
| Tukey HSD | Rural | Urban | 25814* | .03298 | .000 | 3356 | 1807 |
| | | Semi-urban | .00941 | .04677 | .978 | 1004 | .1192 |
| | Urban | Rural | .25814* | .03298 | .000 | .1807 | .3356 |
| | | Semi-urban | .26755* | .04400 | .000 | .1642 | .3709 |
| | Semi-urban | Rural | 00941 | .04677 | .978 | 1192 | .1004 |
| | | Urban | 26755* | .04400 | .000 | 3709 | 1642 |
| LSD | Rural | Urban | 25814* | .03298 | .000 | 3229 | 1934 |
| | | Semi-urban | .00941 | .04677 | .841 | 0824 | .1012 |
| | Urban | Rural | .25814* | .03298 | .000 | .1934 | .3229 |
| | | Semi-urban | .26755* | .04400 | .000 | .1812 | .3539 |
| | Semi-urban | Rural | 00941 | .04677 | .841 | 1012 | .0824 |
| | | Urban | 26755* | .04400 | .000 | 3539 | 1812 |

*. The mean difference is significant at the 0.05 level.

Interpretation:

From the table 'Test of Homogeneity of Variances of CGPA' across location, we observe that the significant p values are greater the 0.05then the variances are not significantly different from each other (i.e., the homogeneity assumption of the variance is met).

Two-Way ANOVA of CGPA across Source of Financing and Location Furthermore, from the above table of 'ANOVA of CGPA' we observe that, the significant value is .000, the exact significance level is not zero, but some number too small to show up in the number of decimals presented in the SPSS output. As the significant value is less than the set 0.05, we accept the null hypothesis, i.e. population means are equal and significant across source of location.

| Between-Subjects Factors | | | | | | | |
|--------------------------|---------------|----------------|-----|--|--|--|--|
| | Value Label N | | | | | | |
| Location | 1 | Rural | 288 | | | | |
| | 2 | Urban | 461 | | | | |
| | 3 | Semi-urban | 127 | | | | |
| Source of finance | 1 | Government | 262 | | | | |
| | 2 | Grant-in-aid | 299 | | | | |
| | 3 | Self-financing | 315 | | | | |

Descriptive Statistics of CGPA

| Location | Source of finance | Mean | Std. Dev. | Ν |
|------------|-------------------|--------|-----------|-----|
| Rural | Government | 2.2457 | .30855 | 129 |
| | Grant-in-aid | 2.5480 | .43940 | 86 |
| | Self-financing | 2.5752 | .45243 | 73 |
| | Total | 2.4195 | .41914 | 288 |
| Urban | Government | 2.5271 | .45350 | 73 |
| | Grant-in-aid | 2.6977 | .41135 | 164 |
| | Self-financing | 2.7120 | .48598 | 224 |
| | Total | 2.6777 | .45930 | 461 |
| Semi-urban | Government | 2.2705 | .38452 | 60 |
| | Grant-in-aid | 2.5488 | .37846 | 49 |
| | Self-financing | 2.4978 | .41908 | 18 |
| | Total | 2.4101 | .40664 | 127 |
| Total | Government | 2.3298 | .38992 | 262 |
| | Grant-in-aid | 2.6303 | .41981 | 299 |
| | Self-financing | 2.6681 | .47877 | 315 |
| | Total | 2.5540 | .45755 | 876 |



| | Levene Statistic | df1 | df2 | Sig. |
|--------------------------------------|------------------|-----|---------|------|
| Based on Mean | 4.143 | 8 | 867 | .000 |
| Based on Median | 4.207 | 8 | 867 | .000 |
| Based on Median and with adjusted df | 4.207 | 8 | 796.555 | .000 |
| Based on trimmed mean | 4.192 | 8 | 867 | .000 |

Levene's Test of Equality of Error Variances^{a,b}

From the above table "Levene's Test of Equality of Error Variances", the significant p values are less the

0.05, stating that there is a significant difference between variances of variables.

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|----------------------------|-------------------------|-----|-------------|-----------|------|
| Corrected Model | 26.208a | 8 | 3.276 | 18.094 | .000 |
| Intercept | 3412.680 | 1 | 3412.680 | 18848.749 | .000 |
| Location | 6.975 | 2 | 3.487 | 19.262 | .000 |
| Source of finance | 8.846 | 2 | 4.423 | 24.428 | .000 |
| Location * Sourceoffinance | .688 | 4 | .172 | .949 | .435 |
| Error | 156.976 | 867 | .181 | | |
| Total | 5897.237 | 876 | | | |
| Corrected Total | 183.183 | 875 | | | |

Tests of Between-Subjects Effects for CGPA

R Squared = .143 (Adjusted R Squared = .135)

Econometric equation:

Dependent variable = Intercept + Location + Source of finance + Location * Source of finance CGPA = 3412.6 + 6.97 + 8.84 + 0.68

Findings

- There is a significant difference in the accreditation scores (CGPA) of higher education Institutions with respect to Location. This means that location has direct influence on the CGPA of higher educational Institutions of Karnataka.
- There is a significant difference in the accreditation scores (CGPA) of higher education Institutions with respect to source of finance. This means that source of finance has an influence on the CGPA of higher educational institutions of Karnataka.
- There is no significant interaction between location and Source of funding with respect to accreditation scores (CGPA) of higher education Institutions. This means there is no combined effect of location and source of funding on the CGPA of higher

educational institutions of Karnataka.

Conclusion

Among various factors contributing to the cumulative Grade point average and also the Assessment grade, location and source of funding are also significant factors. Institutions which are located in urban side have better facilities and access to various resources which in turn adds to the quality of education provided. Similarly, source of finance in terms of self financing, Grant—in-aid and Government has its influence on the cumulative grade point average of the higher education Institutions of Karnataka.

References

Association of Indian Universities (2021). *University News*. Vol.59 (46)

NAAC (2021). State-wise Analysis of Accreditation Reports, Karnataka.

Sharma.S.C., & Srikanta Swamy.S. (2020). *Pursuit of Quality in Higher education : An Indian Perspective*. NAAC.

