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**Research Paper**

# Factors Driving Effective Management of Higher Education Academic Administration, Problems Faced by Higher Education Institutions and Performance of Academic Administrators Before and After Training.

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***Abstract***
***Purpose:*** *The intention of present research work in black and white is to trace whether the socio-economic characteristics impact the study. Further, the study also intended to probe the factors driving management effectiveness of higher education academic administration and to study the problems faced by HEIs at Bengaluru. Furthermore the study also conducted to know managerial skills of academic administrators of HEIs and performance of administrative before and after training. Successful organisations not just happen but they are planned and products delivered serve as lessons and benchmark. Education is a power strategy, reliable and plays a catalyst role in bringing social justice (Gupta, 2020).*
***Approach:*** *A well drafted questionnaire was administered for the purpose of data collection. To fix the size of the sample Yamane T. (1967) formula was used and arrived at 360. Respondents were approached during working hours in their respective colleges. $x^2$, weighted arithmetic mean, Kendall's co-efficient of concordance and ANOVA statistical tools were performed to present and analyse the data.*
***Findings:*** *The study found significant variation in the socio-economic characteristics and high degree of relationship existed except participation in conferences / webinars where low degree of relationship is found but there is significant result. The factors driving management effectiveness of higher education academic administrators include professional leadership, honesty and integrity and leadership quantities. The problems faced includes inadequate infrastructural facilities, poor faculty and overcrowd and small classrooms. The managerial skills required found and which are ranked, and the first rank awarded to the able to interact with students, the second rank communicate the employees and third rank skill of using tools and techniques. Further the study also found that managerial personnel befitted after training.*
***Keywords:*** *Training, effects, skills, quality, infrastructures, overcrowd, challenges, goals, education.*

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## I. Introduction:

Quality and sustainability are the two ensuring factors of global higher education are like Siamese twins that cannot live one without the other. Quality and sustainable education at the higher education centres is the need of the hour as they are capable of winning any crisis and challenges through crisis and challenges management, conflict resolution, understand the crisis properly, resource management and offering proper solutions to resolve the crisis. India is the third highest education system in the world in terms of size and its diversity and the largest in terms of number of educational institutions (Sahil Sharma et al., 2015). The educational institution managers need to be capable and at the same time effective in performing their job (Porferio J. Barlas et al., 2016). They are critical in academic bodies in order to realise institutional goals. A

successful higher education institution is skilful in attaining its goal since it owns effective management. Effectiveness can be nurtured and it can be learned and mastered through practice (Drucker, 2004). The plenty available endomorphic literature describes how leaders of higher education should develop their capabilities to understand and manage change (Lieberman, 2005). The emerging educational leadership theories in recent years to inform leaders who are grappling with innumerable change process (Leithwood, 2007).

Managing and administration of HEIs requires assistance from multiple stake holders (Anna Visvizi et al., 2019). Educational institution managers should possess ability to manage time and stress which helps to cope with uncertainties and ambiguities associated with learning and business knowledge. The competencies awareness depended on one's own strength, and weakness, openness to feedback (Leslie, Dalton, Ernst & Deal, 2002). Daft (2005) states that conceptual skills like ability to see the organisation as a whole, human skill which reflects one's own ability to relate, coordinate, motivation and resolve conflicts and technical skills that describes one's mastery of the methods, techniques and equipment involvement in the job. HEIs have to face the meeting of needs of new generation of students and faculty expectations, modes of communication, ways of learning teaching and acquiring skills (Brennan, 2008).

Education makes tremendous impact on the society. The quality of the society depends upon the quality of educational system (Rao, M.S. 2010). Education provides information, imagination, knowledge, ideas, values and brings refinement, add to intelligence and makes the person confident. It is education that has brought out many changes in this world and transformed the entire civilisation.

**Statement of the problem**

Education is a prerequisite for development. Education and trained manpower is a major input for economic and social development. People expect the universities to prepare them to face the unpredictable and uncertain challenges of the new millennium (Kurhade, M.S. 2012). Managerial capability has clear relationship with performance of an individual which affects organisational performance. An important shift has been noted in Higher Education at present that is from national education to global education and from teacher centric to learner centric education. HEIs plays an instrumental role in providing employment to all and capable of bringing peace and prosperity to any nation. Higher education creates valuable connection, facilitates upward mobility and enhances standard of living Higher Education in any nation brings prospects and prepare the students for the world. In present circumstances the development of higher education institutions and system is a necessity for better future of society. Universities in developing nations like India have firstly ensure that they reflect and respond to the life of the people living around them. It is mainly through the intellectual and moral leadership of the university that a tradition bound society will transferred into modern society.

**Objectives:**

1. To study socio economic characteristics of respondents.
2. To analyse the factors driving effective management of higher education academic administrators.
3. To study the problems faced by HEIs at Bengaluru.
4. To analyse the managerial skills of higher education academic administrators.

**Hypotheses:**

1. There exist no significant variation in socio economic data and do not impact on the study.
2. There are no factors effective management of higher education academic administrators.
3. Bengaluru HEIs are not facing any problems.
4. Managerial skills are not possessed by administrators.

**Research questions:**

1. What are the reasons behind socio economic characteristics not impacting on the study?
2. What are the factors driving effective management of higher education academic administrators?
3. What are the problems faced by HEIs at Bengaluru.
4. What are the skills of Higher education administrators.

**Research methodology:**

It is significant as it is going to give a clear cut idea of what the researcher is carrying out research. It is an appropriate strategy to map out the research work in relevance to make social plans (Harun Ar Rashid, 2022). Cavana et al. (2001) stated that research could be within national context i.e., in a non contrived setting. The present study considers to gather the required data by interviewing the academic administrators of higher education. This type of research is called as cross sectional i.e., consulting a typical or representative sample.

**Research questionnaire:** The present research considers both primary and secondary data. Primary data is gathered by framing and performing a well structured, close ended questionnaire which was distributed to the

academic administrators. The participants in the study were convinced and hence honest opinion is collected for the materialisation of purpose. The respondents were approached with a request to provide valuable response to the questions stated in the questionnaire. It is an appropriate for the present study since it is more cost effective which enhances response rates (Uma Sekaran, 2006). Using 5 point and 3 point Likert scale the bipolar opinions were presented. The questionnaire contains two parts.

**Pre-testing:** Cavana et al. (2001) states that a prudent researcher would perform pre-test once the questionnaire is designed and circulated prior to collection of data. To bring academic significance to the questionnaire and to test whether the included questions are correct, valid and timely pilot study is conducted. Hence the pre-testing was performed on selected number of administrators by meeting them and conduct interview and then the data required was gathered.

**Universe of the study:** The present study is confined to Urban Bengaluru. Higher education institutions like private and state universities, government colleges, medical and engineering colleges, deemed to be universities and permanent unaided private colleges represented. All office superintendents, libraries, deans, professors, registrars, principals, senior most professors were met and data was gathered.

**Sample and sampling technique :** Convenient sampling technique was followed while collecting data. The sample is determined on the strength HEIs by performing Yamanne T. (1967) formula $n = N / 1 + N(e)^2$ and used 95% confidence level. There 16 universities in Bengaluru of different nature and the number of librarians, superintendents, professors, registrars, HODs and deans assistant professor forms around 3500 on a simple calculation. 'm" is the sample size, "N" is the population (3500 for his study) and "e" is the level of precision (0.05 in this case since confidence level taken is 95%) $n = 3500 / 1 + 3500 (0.05)^2 = 3500 / 1 + 8.75 = 358.97$ ranked to the next number 360.

**Sources of data:** The present research considers both primary and secondary data. A well drafted questionnaire in English was distributed to the respondents and possible care was taken to the receipt of questionnaire and request and reminders were sent to fill and collected data. The secondary sources include journals and internet.

**Statistical tools used:** The collected data from the different sources were computed, classified, tabulated analysed and interpreted. The statistical tools like chi-square, ANOVA, Kendall's coefficient of concordance and weighted average techniques were performed in addition to diagrams and graphs. 5 point and 3 point scale of Likert was used to place the bipolar opinions given by respondents.

**Limitations:**

1. The study confined only to Bengaluru.
2. Managerial capabilities of other education streams of technical, vocational are not attempted in this study.
3. Principals professors, office superintendent and registrars of HEIs were covered.

**Data Presentation and Analysis: A**

In this section all socio economic factors like age, income, gender, occupation, etc., are dealt as per the hypotheses.

Table-1 highlights data about socio economic characteristics of respondents. These socio-economic characteristics vary from gender to attending refresher courses. There are 295 males (81.94%) and the rest 65 (18.06%) females. Out of 360 respondents 319 (88.61%) are married and the rest 41 (11.39%) remained single. The age data reveals that 130 (36.11%) belongs to the age group of 35-45 years followed by 96 (26.67%) belongs to 25-35 years, 38 belongs to < 25 years (10.56%) and 20 (5.56%) belongs to the age group of > 55 years. Further, the table also reveals data about education. 230 respondents (63.89%) out 360 are PG in different streams followed by 65 (18.05%) degree holders, 45 (12.5%) are professional degree holders, and 20 (5.56%) are research scholars in different state universities, private universities, affiliated and autonomous institutions. Occupation details show that 230 (63.88%) are professors and assistant professors, 20 (5.56%) are research scholars, 40 (11.11%) deans, 25 (6.94%) libraries 30 (8.33%) superintendents and 15 (4.17%) registrars. The monthly income data reveals that 148 (41.11) are getting monthly income in the range 40K – 60K, 79 (21.94) in between 60K – 80K, 65 (18.05%) in the range of 20K – 40K, 45 (12.5%) < 20K and 23 (6.39%) > 80K. 322 respondents (89.44%) stated that they have participated in differences / webinars and 299 (83.05) out of 360 published research papers. 132 respondents (36.67%) were involved in syllabus framing and 312 (86.67%) participated in disciplinary enforcement meeting. Further, 293 (81.39%) attended refresher courses held in different universities.

**Data Presentation and Analysis : B**

Table – 2 connotes administrative managers of higher education of factors driving managerial effectiveness on higher education in Bengaluru. To measure these factors impacting weighted arithmetic mean was performed. The opinions are defined here as "f" and weights as "w". Likert scale of 5 point was utilized to

place the opinions given by the respondents. The first highest was awarded as the first rank and accordingly professional leadership the second rank was given to honesty and integrity and the third rank was awarded to leadership qualities. The remaining factors were ranked as per the strength of total. A professional leader with honesty and integrity and possessing leadership qualities can be useful to the higher educational institution.

Table – 3 reveals data about problems of Higher Education in Bengaluru. To measure the problems faced weighted average technique was performed. Likert 5 point of scale varying from strongly agree to strongly disagree was utilized in along with the corresponding weights 5, 4, 3, 2, 1. The bipolar opinions expressed by respondents is defined as 'f' and 'fw' was obtained. The sum of fw is divided by the sum of weights. Ranking was awarded based on the strength of WA. Accordingly the first ranked problem of higher education taking at Bengaluru is inadequate infrastructure and the second pertinent rank was given to the problem of poor faculty and the third rank was given to overcrowded and small class rooms. The remaining problems are ranked on the basis of strength of "WA".

Table 4 & 5 reveals data about performance of academic administrators of higher education before and after training. To compare and to measure the impact of training Kendall's co-efficient of concordance statistical tool was used and the data analyzed. Before training 192 respondents strongly agree over the impact Ness without training followed by 112 agree and 56 somewhat agree. Out of 192 who said strongly agree 25 expressed about preparing plans based on the needs of institution, 24 stated about drafting correspondence, 21 pointed at preparing plans relating to employee development,20 noticed about recruitment and selection of managing staff, 15 opined about managing profits and keeping track of progress. Out of 112 who expressed agree 15 drafting correspondence 14 spoke about negotiating with external organization, 13 noticed about preparing plans based on the needs of institution, and 8 each stated about recruitment and selection of managing staff and responding to queries and correspondence. Further, 8 more spoke about formation of forum to publish research papers lecturers. Out of 56 who said somewhat agree, 8 spoke about drafting correspondence, 6 responding to queries and correspondence and research and writing reports. After undergoing training the administrators of HEIs showed some progress and the style of administration also very much impacted. 216 respondents 360 expressed strongly agree followed by 102 agree and 42 somewhat agree. Out of 216 respondents who said strongly agree, 41 spoke about preparing the plans based on the needs of institution, 35 expressed about recruitment and selection of staff, 28 noticed about drafting correspondence, 22 opined about preparing plans relating to employee development. Out of 102 who said agree 22 expressed about preparing plans relating to employee development, 20 stated about drafting correspondence 8 opined about recruitment and selection of managing staff, 7 noticed about formation of forum to publish research papers of faculty, 6 each said about negotiating with external organization and designing better information system. Out of 42 who said somewhat agree 10 stated about preparing plans based on the needs of institution, 8 stated about drafting correspondence. The value of 'w' before training was 0.65 and after training it was 2.29. The difference being 1.64 was used in the formula $x2 = k(N-1)w$ to derive the value. Accordingly the decided answer was 63.96 which is greater than the critical table value 22.362 and hence 'w' fails to accept H0 and accepts H1 and it is concluded that there exist significant relationship between after training and performance of academic administrators.

**Conclusion:** Higher education effectively transform the society for a bright future. Education develops knowledge and provides to many. Effective administration of HEIs, universities should address properly the needs of students. HEIs should be free from politics and its interferences. Effective administration of HEIs brings prospects. The study found significant variation in the socio-economic characteristics and high degree of relationship existed except purification in conferences / webinars where low degree of relationship is found but prove is significant result. The factors driving management effectiveness of higher education academic administrators include professional leadership, honesty and integrity and leadership quantities. The problems faced includes inadequate infrastructural facilities, poor faculty and overcrowd and small classrooms. The managerial skills required found and which are ranked, and the first rank to the able to interact with students, the second rank communicate the employees and third rank skill of using tools and techniques. Further the study also found that managerial personnel befitted after training.

## References:


[1]. Anna Visvizi., Miltiadis D. Lythos., & Akila Serinete (2019). Management and administration of Higher Education Institutions in time of charge, 1-11. doi: 10.1108/978-1-78973-627-420191001.

[2]. Brennan, J. (2008). Higher Education and Social Change. **Higher Education.** 56(3), 381-393. Retrieved from http://www.jster.org.acg.idm.oclc.org/ stable/40269082.

[3]. Cavana., Roberty., Delayahe, Braina, L., & Sekkann, U. (2001). Applied business research: Quantitative and qualitative methods. John Wiley & Sons, Milton Queensland, ISSN – 10-471341266.

[4]. Daft, R.L. (2005). Management (7th ed). OH, USA: Thomson / South Western.

[5]. Drucker, P.F. (2004). What makes an effective executive. **Harvard Business Review,** 82(6), 58-63.

[6]. Harun Ar Rashid, (2022). Research Methodology, Limbol: Org https://libon.org.

[7]. Kurhade, M.S. (2012). Yearning for quality universities.

[8]. Leiberman, A. (2005). The growth of educational change as a field of study: Understanding its roots and branches. In A. Libermann (ed.) **The roots of education change** (PP. 1-8). Dordrent, The Netherlands: Springer.
[9]. Leithwood, K. (2007). What we know about educational leadership. In Burger, J., Webber, C.F., & Klinck, P. (Eds), Intelligent leadership: Constructs for thinking education leaders (PP. 41-66). Dordrecht, The Netherlands: Springer.
[10]. Leslie. J.B. Dalton, M., Errst, C. & Deal, J. (2002). **Managerial effectiveness in a global context.** Greenboro, North Carolina: Centre for creative leadership.
[11]. Porferio J. Barlas Jr., & Luis A. Abioda. (2016). Administrators managerial capability and effectivenss in state universities and college in Western Visays. **WVSU Research Journal,** 5(1), 21-32.
[12]. Rao, M.S. (2012). Challenges in Indian education system. **Indira Management Review,** P. 38, 2010 July.
[13]. Sahil Sharma., & Purnendu Sharma. (2015). Indian Higher Education System: Challenges and suggestions. Electronic **Journal for inclusive education,** 3(4) Summer /Feb/2015.
[14]. Umasekaran. (2006). Research methods for business A skill building approach, John Wiley & Sons Inc. P. 236, http://www.wiley.com/college.
University Nws, 50(11), March 12-18, PP7-11.

**Table – 1 :**

| Socio-economic characteristics | $x^2$ | TV@0.05 | df | result of $x^2$ | "c" | Result of 'C' |
|---|---|---|---|---|---|---|
| Gender | 146.94 | 3.841 | 1 | Significant | 0.53 | High Degree |
| Marital status | 214.66 | 3.841 | 1 | Significant | 0.61 | High Degree |
| Age (in years) | 108.56 | 9.488 | 4 | Significant | 0.48 | High Degree |
| Education | 30167 | 7.815 | 3 | Significant | 0.67 | High Degree |
| Occupation | 583.67 | 11.070 | 5 | Significant | 0.78 | High Degree |
| Monthly income (INR) | 125.05 | 9.488 | 4 | Significant | 0.50 | High Degree |
| Participation in conference / webinars | 224.04 | 3.841 | 1 | Significant | 0.61 | Low Degree |
| Writing research papers | 157.34 | 3.841 | 1 | Significant | 0.55 | High Degree |
| Involvement in syllabus framing | 25.60 | 3.841 | 1 | Significant | 0.25 | Low Degree |
| Participation in disciplinary enforcement meeting | 193.60 | 3.841 | 1 | Significant | 0.59 | High Degree |
| Attended refresher courses | 141.80 | 3.841 | 1 | Significant | 0.53 | High Degree |

Source : Field Survey

Note : $x^2$ = chi-square

'c' = $\sqrt{(x^2 / x^2 + N)}$

Where 'c' = contingency coefficient

N = Number of observations

When the value 'c' is equal or near 1, it means there is high degree of association between attributes. Contingency co-efficient will always to be less than 1. High degree is considered here if 'c' is 0.50 and above.

**Table – 2 : Factors driving effective management of higher education academic administrators**

| Factors driving managerial effectiveness | Weight | 5 | 4 | 3 | 2 | 1 | T | WA |
|---|---|---|---|---|---|---|---|---|
| | Likert scale | SA | A | N | DA | SDA | | |
| Positive reinforcement | f | 185 | 101 | 42 | 18 | 14 | 360 | XV |
| | fw | 925 | 404 | 126 | 36 | 14 | 1505 | 100.33 |
| Professional leadership | f | 232 | 90 | 20 | 10 | 8 | 360 | I |
| | fw | 1160 | 360 | 60 | 20 | 8 | 1608 | 107.20 |
| High expectations | f | 195 | 87 | 48 | 18 | 12 | 360 | XII |
| | fw | 975 | 348 | 144 | 36 | 12 | 1515 | 101.20 |
| Rights and responsibilities | f | 197 | 93 | 32 | 20 | 18 | 360 | XIII |
| | fw | 985 | 372 | 96 | 40 | 18 | 1511 | 100.73 |
| Learning environment | f | 210 | 95 | 28 | 18 | 9 | 360 | VI |
| | fw | 1050 | 380 | 84 | 36 | 9 | 1559 | 103.93 |
| Purposeful teaching | f | 210 | 85 | 36 | 11 | 18 | 360 | VIII |
| | fw | 1050 | 340 | 108 | 22 | 18 | 1538 | 102.53 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Learning organization | f | 212 | 83 | 30 | 20 | 15 | 360 | IX |
| | fw | 1060 | 332 | 90 | 40 | 15 | 1537 | 102.47 |
| Concentration in teaching | f | 185 | 88 | 45 | 20 | 22 | 360 | XVIII |
| | Fw | 925 | 352 | 135 | 40 | 22 | 1474 | 98.27 |
| Shared vision with and goals | f | 191 | 98 | 40 | 10 | 21 | 360 | XIV |
| | fw | 955 | 392 | 120 | 20 | 21 | 1508 | 100.53 |
| Home school community | f | 180 | 110 | 30 | 25 | 15 | 360 | XVII |
| | fw | 900 | 440 | 90 | 50 | 15 | 1495 | 99.67 |
| Bring order and consistency | f | 200 | 85 | 48 | 10 | 17 | 360 | XI |
| | fw | 1000 | 340 | 144 | 20 | 17 | 1521 | 101.40 |
| Personality threat, alertness, tolerance from stress, integrity, self confidence | f | 210 | 90 | 38 | 10 | 12 | 360 | VII |
| | fw | 1050 | 360 | 114 | 20 | 12 | 1556 | 103.73 |
| Motivation | f | 215 | 85 | 37 | 15 | 8 | 360 | V |
| | fw | 1075 | 340 | 111 | 30 | 8 | 1564 | 104.27 |
| Honesty & integrity | f | 228 | 90 | 25 | 14 | 3 | 360 | II |
| | fw | 1140 | 360 | 75 | 28 | 3 | 1606 | 107.07 |
| Leadership qualities | f | 220 | 102 | 20 | 10 | 8 | 360 | III |
| | fw | 1100 | 408 | 60 | 20 | 8 | 1596 | 106.40 |
| Collaborate decision making | f | 195 | 101 | 32 | 18 | 14 | 360 | X |
| | fw | 975 | 404 | 96 | 36 | 14 | 1525 | 101.67 |
| Nurturing creativity | f | 185 | 100 | 45 | 11 | 19 | 360 | XVI |
| | fw | 925 | 400 | 135 | 22 | 19 | 1501 | 100.06 |
| Innovation | f | 230 | 88 | 22 | 13 | 7 | 360 | IV |
| | fw | 1150 | 352 | 66 | 20 | 7 | 1595 | 106.33 |

Source : Field Survey
Likert scale : SA - Strongly Agree, A - Agree, N - Neutral, DA - Disagree, SDA - Strongly Disagree
Weights : 5 + 4 + 3 + 2 + 1 = 15 Weighted average = Total / sum of weights

**Table – 3 : Problems faced by HEIs at Bengaluru**

| Problems faced | Weight | 5 | 4 | 3 | 2 | 1 | T | WA |
|---|---|---|---|---|---|---|---|---|
| | Likert scale | SA | A | N | DA | SDA | | |
| Inadequate infrastructural facilities | f | 230 | 88 | 22 | 12 | 8 | 360 | I |
| | fw | 1150 | 352 | 66 | 24 | 8 | 1600 | 106.67 |
| Poor faculty | f | 220 | 98 | 20 | 14 | 8 | 360 | II |
| | fw | 1110 | 392 | 60 | 28 | 8 | 1588 | 105.87 |
| Low student enrolment | f | 180 | 142 | 15 | 12 | 11 | 360 | V |
| | fw | 900 | 568 | 45 | 24 | 11 | 1548 | 103.32 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Declining research standards | f | 160 | 131 | 38 | 15 | 16 | 360 | XII |
| | fw | 800 | 524 | 114 | 30 | 16 | 1484 | 98.93 |
| Unmotivated students | f | 90 | 110 | 58 | 57 | 45 | 360 | XVI |
| | fw | 450 | 440 | 174 | 114 | 45 | 1223 | 81.53 |
| Overcrowd & small classrooms | f | 231 | 85 | 15 | 18 | 11 | 360 | III |
| | fw | 1155 | 340 | 45 | 36 | 11 | 1587 | 105.80 |
| Widespread geographic income gender & ethnic imbalances | f | 185 | 75 | 36 | 39 | 25 | 360 | XIV |
| | fw | 925 | 300 | 108 | 78 | 25 | 1436 | 95.73 |
| Demand and supply gap | f | 205 | 72 | 52 | 15 | 16 | 360 | X |
| | Fw | 1025 | 288 | 156 | 30 | 16 | 1515 | 101.00 |
| Uneven growth and access to opportunity | f | 210 | 62 | 48 | 22 | 18 | 360 | XI |
| | fw | 1050 | 248 | 144 | 44 | 18 | 1504 | 100.27 |
| Research constraints | f | 220 | 80 | 32 | 12 | 16 | 360 | IV |
| | fw | 1100 | 320 | 96 | 24 | 16 | 1566 | 104.40 |
| More centered on theories and rather than practical knowledge | f | 180 | 112 | 48 | 8 | 12 | 360 | IX |
| | fw | 900 | 448 | 144 | 16 | 12 | 1520 | 101.33 |
| Settling abroad after getting degree from IITs & IIMs without serving India | f | 200 | 115 | 17 | 10 | 18 | 360 | VI |
| | fw | 1000 | 460 | 51 | 20 | 18 | 1549 | 103.27 |
| Quota system | f | 145 | 105 | 53 | 27 | 30 | 360 | XV |
| | fw | 725 | 420 | 159 | 54 | 30 | 1388 | 92.53 |
| Problem of equity | f | 180 | 110 | 15 | 35 | 20 | 360 | VIII |
| | fw | 900 | 440 | 45 | 70 | 20 | 1475 | 98.33 |
| Syllabus framing without considering its usefulness in the business | f | 205 | 72 | 34 | 29 | 20 | 360 | VIII |
| | fw | 1025 | 288 | 136 | 58 | 20 | 1527 | 101.80 |
| Poor quality | f | 210 | 82 | 44 | 13 | 11 | 360 | VII |
| | fw | 1050 | 328 | 132 | 26 | 11 | 1547 | 103.13 |

Source : Field Survey
Likert scale : SA - Strongly Agree, A - Agree, N - Neutral, DA - Disagree, SDA - Strongly Disagree
Weights : 5 + 4 + 3 + 2 + 1 = 15 Weighted average = Total / sum of weights

**Table – 4 : Performance of Academic administrative before training**

| Areas impacting training | SA | A | SWA | RT | $RT^2$ |
|---|---|---|---|---|---|
| Recruitment and selection of managing staff | 20 | 8 | 3 | 31 | 961 |
| Managing profits and keeping track of progress | 15 | 4 | 2 | 21 | 441 |
| Managing budgets | 8 | 4 | 2 | 14 | 196 |
| Responding to queiries and correspondence | 10 | 8 | 6 | 24 | 576 |
| Working with student groups | 9 | 4 | 2 | 15 | 225 |
| Gathering & analysing data | 11 | 7 | 3 | 21 | 441 |
| Research and writing reports | 12 | 9 | 6 | 27 | 729 |
| Negotiating with external organisation | 13 | 14 | 5 | 32 | 1024 |
| Drafting correspondence | 24 | 15 | 8 | 47 | 2209 |
| Preparing plans based on the needs of institutions | 25 | 13 | 5 | 43 | 1849 |
| Designing better information system | 9 | 7 | 2 | 18 | 324 |
| Preparing plans relating to employee development | 21 | 6 | 4 | 31 | 961 |

| | | | | | |
|---|---|---|---|---|---|
| Designing better information systems in faculties | 8 | 5 | 3 | 16 | 256 |
| Formation of forum to publish research papers of lecturers | 7 | 8 | 5 | 20 | 400 |
| Total | 192 | 112 | 56 | 360 | 10592 |

Source : Field Survey

Note : SA - Strongly Agree, A - Agree, SWA - Somewhat Agree, RT - Row Total

$SSR = \Sigma RT^2 - (\Sigma RT)^2 / N$

$= 10592 - (360)^2 / 14 = 10592 – 9257.14$

$= 1334.86$

Use the sum of squares (SSR) in the following formula to obtain Kendall's W.

$W = 12 \times SSR / K^2N (N^2 - 1)$

$= 12 \times 1334.86 / 9 \times 14 (196 - 1)$

$= 16018.28 / 24570 = 0.65$

**Table –5 : Performance of Academic administrative after training**

| Areas impacting training | SA | A | SWA | RT | $RT^2$ |
|---|---|---|---|---|---|
| Recruitment and selection of managing staff | 35 | 8 | 2 | 45 | 2025 |
| Managing profits and keeping track of progress | 11 | 3 | 1 | 15 | 225 |
| Managing budgets | 10 | 3 | 1 | 14 | 196 |
| Responding to queries and correspondence | 8 | 5 | 2 | 15 | 225 |
| Working with student groups | 7 | 4 | 3 | 14 | 196 |
| Gathering & analysing data | 10 | 5 | 2 | 17 | 289 |
| Research and writing reports | 13 | 4 | 2 | 19 | 361 |
| Negotiating with external organisation | 10 | 6 | 2 | 18 | 324 |
| Drafting correspondence | 28 | 20 | 8 | 56 | 3136 |
| Preparing plans based on the needs of institutions | 41 | 22 | 10 | 73 | 5329 |
| Designing better information system | 11 | 6 | 2 | 19 | 361 |
| Preparing plans relating to employee development | 22 | 5 | 5 | 32 | 1024 |
| Designing better information systems in faculties | 5 | 4 | 1 | 10 | 100 |
| Formation of forum to publish research papers of lecturers | 5 | 7 | 1 | 13 | 169 |
| Total | 216 | 102 | 42 | 360 | 13960 |

Source : Field Survey

Note : SA - Strongly Agree, A - Agree, SWA - Somewhat Agree, RT - Row Total

$SSR = \Sigma RT^2 - (\Sigma RT)^2 / N$

$= 13960 - (360)^2 / 14 = 13960 –9257.14$

$= 4702.86$

Use the sum of squares (SSR) in the following formula to obtain Kendall's W.

$W = 12 \times SSR / K^2N (N^2 - 1)$

$= 12 \times SSR / 9 \times 14 (196 - 1)$

$= 12 \times 4702.86 / 24570$

$= 56434.32 / 24570 = 2.29$

Finding the difference between 2.29 and 0.65

Now $w = 2.29 – 0.65 = 1.64$

Test the significance of "W" by using the chi-square statistic.

$x^2 = k (n-1) w$

$= 3 (14-1) 1.64$

$= 3 \times 13 \times 1.64 = 63.96$

**Decision :** At 8 d.f. with 0.05 level of significance the TV = 22.362. The calculated value being 63.96 higher than the critical table value and. Therefore 'w' fails to accept $H_0$ and accepts $H_1$. It is concluded here that after training the administrators concentrated on the relevant issues which are fund in the study existence of significant relationship between factors and academic administration of HEIs.