

**A study on the impact of Faculty Development Investment on enhancing
Job Motivation and Satisfaction among the management faculty members**

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Preface

SDM Research Center for Management Studies (RCMS), since inception, has endeavored to promote research in the field of management education, in various ways. In this direction, in order to promote applied research, the Research Center has taken a unique initiative to encourage the faculty members to carry out various projects in the areas of management.

After completion of the projects, based on the peer review, reports are published with an ISBN number, by the Institute. The projects help the faculty members, and the students, who assist the faculty members for these projects, in various aspects, to gain practical knowledge, in the field of management.

The institute takes into account the time and resources required by the faculty members to carry out such projects, and, fully sponsors them to cover the various costs of the project work (for data collection, travel, etc).

From the academic viewpoint, these projects provide a unique opportunity to the faculty members and the students to get a first-hand experience, in investigating issues and concerns of targeted organizations or sectors, on a face to face basis, thereby, helping in knowledge creation and its transfer.

Mousumi Sengupta
Chairperson – SDM RCMS

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"Through the eyes of gratitude, everything is a miracle." - Mary Davis

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Executive Summary

The major objective of the study was to find out the impact of Faculty Development Investment on enhancing Job Motivation and Satisfaction among the management faculty in this research, convenient sampling was adopted to determine the sample size and collected the relevant primary data. On the collected responses percentage analysis was applied to create a tabulated projection from the distribution and denoted the collected data for consideration.

This study report has been structured into five chapters; chapter one focuses on the introduction of the study, this was followed by chapter two Research methodology which includes objective of the study, sampling design, sampling technique, data collection instruments. Over 30 literature reviews were presented in chapter three to support the identified research gap. Relevant primary data were obtained by using questionnaire and secondary data were collected from books, journals, magazines and other published sources. Chapter four depicts the analysis and interpretations of the study; the researchers have analysed around 200 data points collected from management faculty in South India.

The collected data were analysed by using appropriate statistical tools including descriptive statistics, factor analysis, ANOVA and other statistical tests. The study discussions and conclusions are presented in chapter five. Major findings of the study are; the investments made by management on Faculty Development programmes plays a crucial role in Job motivation, and offers assistance in updating innovative and attractive teaching pedagogies in the organization, apart from updating skills and knowledge, it is significant to them to project their capabilities to perform interesting and diverse work beyond the scope of their role, provided there are good working conditions to bring out the best outcomes, there is also a stated requirement for an increase in the optimum investments made by the management for participation in FDIs. The analysis revealed that There is good scope in conducting further research on the topic by identifying different types of institutions like arts, science & engineering and various zones.

Chapter I: Introduction

1.1 Introduction

It has always been believed that most important resource that any institution of education has its faculty members with upright knowledge and skills which should be conveyed to the students at most quality. However, during the first half of that last century it was always assumed that a competent basic scientist and clinical professionals would naturally be an effective teacher, there were days when the faculty members were recruited for their content knowledge but not for the educational skills, then following this faculty members sometimes being criticized for shortcomings in their teaching performances. But the faculty members are currently facing a lot of increasing demand to be creative and effective teachers, successful investigators, and productive outcomes. These pressures have been derived from contemporary curriculum development, competition in between the institutions and from the limited resources for research. Most of the studies emphasizes that such changes entailed that faculty members who will attain new knowledge, diverse skills, and abilities in many aspects including

- Managing multiple roles and new responsibilities: like basic management related instructions, micro group teaching, problem-based tutorials, case-based discussions, become mentors, and develop and evaluate new curriculum.
- Integrating technology into teaching, learning, and research and master new computer-based educational programs.
- Leadership and management proficiency.

Faculty members need to be prepared enough by some sort of Faculty Development Program (FDP) in order to deal with extensive changes and shifting paradigms in the system at the large, with such training, teaching is often reduced to instructors presenting their understanding of the subject by one-way lecturing.

Over the past five decades, faculty development activities evolved in focusing progressively. There has always been tremendous effort in the first half

of the 20th century to provide training at all levels but the birth of FDP began in 1975 and scalability has been over the past 25 years.

Faculty members need to be prepared enough by some sort of Faculty Development Program (FDP) in order to deal with extensive changes and shifting paradigms in the system at the large, with such training, teaching is often reduced to instructors presenting their understanding of the subject by one-way lecturing.

- Professional development which emphasized the development of individual faculty members in their professional responsibilities.
- Instructional development where development of faculty skills involving instructional technology, small group teachings, media, courses and so on.
- Organizational development where the requirements are vast, and the important concerns of the institution.
- Career advancement is always an effective way of development.
- Personal development which is stressed on life planning, interpersonal and communication skills of the entire peer group.

At present, faculty development has become an increasingly important constituent of the frame of work offering a wide array of programs. This surge in growth had been brought about by recognizing the value of faculty support in the energetic academic life and growth in the working experience.

Why are faculty development programs important? In recent times, there has been accumulating evidence about the ineffectiveness of the traditional way of teaching. It is highlighted that importance of these development programs which responds to advances in the educational hierarchy, to continue to adapt to the growing responsibilities of the fellow members and carry out more rigorous program evaluations. It is also stressed that FDPs need to expand their focus, consider different training methods and formats, which in return encourages new partnership and collaborations. Few of the evolving factors that have important

implications on the faculty members that should be considered through faculty development:

- Fiscal constraints and call for accountability-this basically necessitates that faculty members should always demonstrate greater accountability in the face of the increasing expenses of public and private investments in the sector.
- Increasing diversity among the students-with varying age, aspirations, culture, and academic backgrounds. Effective faculty must support the learning of those students with diverse learning needs and create teaching strategies with wide range of learning environment.
- Opportunities and challenges of technologies-technology offers many opportunities to enhance the learning processes with information, simulations and engaging learning activities and accordingly the faculty members should be able to update themselves and take advantage of the resources which are obtained.
- Changes in faculty characteristics and shifts in patterns- this part of the side requires to be found ways which can integrated in the new faculty members into the institution's community and at the same time ensuring the quality of the skills and abilities.

Basically, the aim of training for the administrative staff is to increase their expertise and capabilities in performing different set of duties and the act of putting them at their best potential in the simple sense. To enhance the skills in the development of faculty few of the training methods which are predominantly used across are:

- Job training
- Master of education
- Learning in similar situation before the faculty members begin the work
- Training with the theoretical education
- Distance education
- Courses outside the institution
- Introduction to relevance in the organization

These are the basic ways by which training programs are planned initially to introduce the faculty members for the concept of improvement programs. With this the question also arises that, do faculty development program activities have a positive effect on student academic achievement in higher education?

Implementing FDP was expected to result in enhancing the outcomes of the faculty which directly reflected on the improvement of the students. Such improvements have included the development of new teaching skills or assessment techniques, newer ways of viewing the student-teacher relationship, and increased commitment to the educational perspectives. It usually indices of learner behavior and student evaluations of teaching competencies. In certain way these things have to be augmented by careful assessments at different levels. Few of the authors outcomes were on FDP programs were that as follows

- High satisfaction with FDPs
- Changes in attitude towards teaching and faculty development
- Gains in knowledge and skills
- Changes in teaching behavior
- Changes in organizational practice and student learning.

Through this study, three general areas which can be possibly assessed are

- 1 Satisfaction measured by participation data or surveys.
- 2 Impact where teaching is assessed through follow up's and focus groups.
- 3 Impact on learning such as grade point averages for better explanation.

So far, the value of faculty development programs has been remarked but also the different measures of performances should be used in evaluation of FDP such as questionnaires and faculty reports which is predominantly done so far, FDPs has always been beneficial whenever it is measured through surveys or evaluations. And also, there has always been a correlation through different means by which it has

been done where it also suggests likelihood in conducting valuable and reliable programs which can be yielded at the end of the outcomes. Faculty developers and researchers concerned in assessing change should consider using valid and reliable questionnaires or sufficient establishment should be concerned for these measures. And the faculty development programs are recommended by different authors that the impact of an FDP should be measured at all angles which should not be limited to certain extent. It is stressed that it should be multifaceted, and the elements needed are to be progressed at each upgradation.

Different approaches have emerged to improve which is generally associated with changing theories of learning, FDP has always started with modest resources which is combined with strong institutional eagerness for the best outcomes. FDP varies in structure and functions at all levels in fact there is no ideal model for the level of process but no doubt that it has its own advantages and disadvantages. And also, the preference will depend on the key situational factors such as financial support, human resources, campus resources and local expertise to be well arranged and assisted which will directly reflect on the progress and the outcomes.

Government of India has also taken special initiatives and established Ministry of Human Resource Development, the essence of HRD is education which plays a significant and remedial role in balancing the socio-economic fabric of the country and currently the MHRD works through two departments:

- Department of School Education and Literacy
- Department of higher education

And the main objectives of this ministry are, formulating the national policies on education and ensure that it is implemented. Planned developments so that there could be an easy access to education. Providing financial help in the form of scholarships, loan subsidy for better improvements in the sector. And the department of higher education is responsible for the overall development of the basic infrastructure of this sector both in terms of policy and planning, under

this planned process the departments qualitative improvement enhances through world class universities, colleges and institutions. The bureau of higher education helps in following ways

- University and higher education
- Technical education
- Technology enabled learning
- Distance learning
- Language education
- Book promotion
- International cooperation and coordinate

These are a few initiatives which had been taken for the quality and betterment of the programs. And another program which is initiated by Government of India is 'Prashikshak' the teacher education portal for District Institutions of Education and Training where the objective was to be informed about the decisions about the institutions and compare the performance of their institutions and help the aspiring teachers for better collaborative programs which is much more advanced in today's world.

High quality professional training programs for faculty members have become essential for all the institutions in order to be able to compete in this ever-changing world. It is very evident that faculty development has become an established format and has grown into a recognized activity all the world. Professional training programs has always produced promising outcomes in the learning and teaching practices and FDPs has always proven effective in developing and nurturing the overall efficiencies which also enhances skills and educational leadership. Indeed, faculty development constitutes a strategic lever for institutional excellence and self-excellency and most essentially important means for advancing forward institutional readiness to bring in the desired changes in ever growing demands and facing it at its best.

Chapter II: Research Methodology

Statement of the problem

Faculty members employ a variety of teaching strategies in management institutes. New approaches to uplift teaching effectiveness include placing an emphasis on effective pedagogy and paying increased attention to the learning needs of students. In fact, the management faculty members need to constantly evolve in their approach to teach the students as there has been varied expectations from the present generation of students. Faculty Development Initiatives play a vital role in enhancing teaching capabilities and the management institutes' preparedness and interest in investing on faculty development may have a direct impact on teaching efficiency and satisfaction. Hence, this study was designed to understand the impact of Faculty Development Investment on enhancing Job Motivation and Satisfaction among the faculty of Management Institutes.

Objectives of the study

The major objectives of the study are,
To study the impact of Faculty Development Investments on enhancing Job Motivation among the Management faculty members
To explore the impact of Faculty Development Investment on Job Satisfaction among the Management faculty members
To know the factors contributing to Management Faculty Members' Job Motivation and Satisfaction

Methodology of the study

A descriptive research design was used in this study. Relevant primary data were obtained by using questionnaire and secondary data were collected from books, journals, magazines and other published sources. The study questionnaire was prepared based on faculty development related parameters

Sample & Locations for the study

The faculty members who are associated with management institutes located in South India were the population for this study. The researchers have collected data from 200 respondents for this present study.

Data Analysis

The collected data were analysed by using appropriate statistical tools including descriptive statistics, factor analysis, ANOVA and other statistical tests.

Duration of the study

The duration of the study was from April 2018 to January 2019

Chapter III: Literature Review

Literature Review

Joseph Steger (2000) in his work titled “Faculty Development Program” states that FDP is conducted in most of the institutes and it is need of the hour. The Developmental program is for individual faculty, groups of faculty, and departments. There are 4 types of Faculty Development activities like professional, instructional, curricular, organizational development. Professional faculty development helps faculty to become an expert in their stream, Instructional faculty development helps to be more creative and efficient ways of teaching, Curricular faculty development helps to update and revamp the curriculum with respect to needs of industry and Organizational development is related to overall institutional improvement and helps in decision making. More than 800 faculty members (42% of the total faculty) applied for the FDP over a three-year period. Nearly 400 faculty were funded. To better ascertain the extent of the program’s influence on the institution, a survey was distributed to all 1,925 faculty at the university. The results of the survey, regarding the Faculty Development Program’s impact, clearly show that it has changed the way interdisciplinary faculty collaborate and it has significantly facilitated the ability of faculty to address specific developmental needs. Also Faculty Development program improves skills and knowledge of the faculty so that there will be high quality in teaching and with continuous learning it will helps them being updated with latest trends and technology, so that they can adopt to the changes which in turn helps students learn more. In this process faculty/professor also gains knowledge and he will be motivated to learn more and can deliver more. He/she will also expect more rewards so that can be satisfied with the work they are doing or else they will be demotivated. Some institutions give rewards which also increases their motivation to do more and also he/ she will be more satisfied with their work with which name and fame of the person increases which also leads to increase the name and fame of the institution.

(Spector, 1997). Spector in his study gave three reasons for studying job satisfaction due to faculty development programs. They are: 1) humanitarian

perspective – individuals should deserve fair treatment and respect in their job; 2) utilitarian perspective – how an individual is treated often leads to the employee’s behaviours that can affect organization functioning, both positively and negatively; and 3) organizational functioning- understanding employees’ job satisfaction through development programs, which leads to overall development of the faculty. In his study he has also mentioned that with the proper faculty development activities there will be mutual development both for the faculty and also for students which in turn improves the quality of the institute.

Besong (2015) in his study found the relationship between investment for faculty development and job satisfaction among faculty in many institutions. Three hypotheses were formulated to guide the study. The sample population consisted of 252 faculties randomly selected from a population of 580 faculties. Data was analysed using Pearson Product Moment Correlation and Population t-test statistics and the hypotheses were tested at .05 level of significance. The result of the study revealed that economic and non-economic involvement significantly correlated with job satisfaction and also job involvement of faculty in many institutions. From the findings, it was recommended that adequate economic and non-economic investments for faculty development improves job satisfaction and also improves their personal skills.

Philips (2009) in his study “return on investment of Faculty Development Programs” stated that, 79% of the participants (students and others) reported their faculty teaching performance had improved as a result of their Faculty Development Program. The result was a positive ROI of 517% for the Faculty Development Program. Additionally, there were notable intangible benefits of the program, including job satisfaction, faculty career development, and student satisfaction.

Doepker (2010) in his report suggested that support for staff ought to incorporate creating personnel networks that cultivate constructive associations with other employees. Improvement/development programs assume a noteworthy part in helping faculty develop their roles. Faculty who took an

interest in advancement program revealed that there is improved student success and as well as had a positive impact on student learning, satisfaction, and motivation of both student and faculty. Faculties who took instructive training credits announced higher self-adequacy than the individuals who did not.

Trower (2010) in his study stated that satisfaction with the job and experiencing personal growth shows the greatest variance in the overall job satisfaction score. His research recommended various department chairs and administrators, focus faculty development on factors related to their individual personal growth and satisfaction and also there is improvement in student performance and their satisfaction. The support for faculty development is often overlooked by administration but research which he has conducted demonstrated that Faculty Development is more important to faculty as well as student.

Meyer (2014) in his article concluded that faculty development for online teaching should follow the following measures to be successful they are: positive opinions about effectiveness of the training, adoption of case studies in instruction, improved teaching skills, professional growth of faculty, usefulness to individual, satisfaction or relevance to participant, more cooperation across disciplines and confidence with and attitudes about assessment. If the faculties follow these measures and excel in these measures, then they can have better satisfaction and they will get more motivated to do their work.

Watts (2002) in his article stated that Professional development activities are important to the growth and development of individual faculty at the college. "Faculty and staff development exist to improve performance. To improve a faculty performance, there is a need to focus on the individual, not just that part that relates to the job". Professional development activities are important and need to be supported by the institute. The literature and data suggest that faculty are a permanent and growing segment of the faculty composition in colleges. Their development and retention are important factors to institutional stability and student learning. Development

programs allow the college faculty to establish links with professional colleagues, to modify and improve instructional material and delivery, and to keep the spark of enthusiasm alive for themselves and their students.

Gaff and Morstain (2011) in their report suggested that over 80 percent of the participants in a sixteen institution faculty development study indicated many benefits of attending FDP (faculty development programs) which is invested by institution for development of faculty, some of them include increase contacts with creative people from other parts of the campus, increased motivation for teaching improvement, support of innovative ideas, greater awareness of their own teaching, and personal renewal. The study concluded that faculty development activities promoted organizational development by helping faculty to become "less insulated

Kozma (2010) in his article described that for the small colleges, faculty development activities provide leaders with the opportunity to act as institutional change agents. Since most small colleges have very limited funds with which to support faculty development activities, it is becoming increasingly necessary to give first priority to those faculty development efforts that address stated institutional needs and concerns. The benefits of FDP's is it indirectly helps to achieve institutional success and faculty's individual development and increase their motivation to learn more and improve the teaching skills so that students can absorb the concepts easily.

David (2000) In his article he has done a study on benefits of investing on faculty development program, from the sample of 36 faculties, he has found that 62% of the faculties have met their personal goals and objectives and also these faculties were also given opportunity to express themselves and they were very benefited with the faculty development program and it increased their job satisfaction. And their quality instructional programs and excellence in teaching depends on constant development of teaching skills and the opportunity for faculty renewal that provides motivation.

Armstrong (2001) in his article stated that Faculty training and development is very important in today's scenario because the business world is becoming more competitive and posing new challenges in front of the other institutions. To achieve the competitive advantage and get the best results, institutions have to provide the means to upgrade their faculties which they can best do by participating in training and development programs, which not only improve the employees' skills but also enhance their performance, motivation and give a sense of job satisfaction to them. The higher education system in India has witnessed remarkable growth in the past few years. India is definitely ahead of other developed countries in the field of education and training. The number of institutes offering higher education is much more in India when compared to China and the US.

Abdul (2014) in his article stated that most of the faculties were demotivated and dissatisfied because there is no faculty development programs and there is no change in curriculum. There is no improvement either from faculty side or from student side. Also management is not allowing faculty in decision making and there is lack of recognition and moral support from the management. This had led to increase in faculty attrition rate.

Bolliger, Hiltz (2010) in their study stated that some of the factors that increases the faculty job satisfaction are: personal demographic factor, flexibility, stress, positive attitude, going through faculty development programs, learning new technology, work preference, recognition and status. Also they commented that regular change in curriculum will be beneficent to the students which suits the industry so that students will be updated with the latest trends.

Ellen Stevens (2008) from his final research which has focused on obstacles to attend faculty development. Faculty were asked why they would not attend faculty development and the reason from the faculty are: because the time and day of the event, competing priorities, lack of financial support, inconvenient location, or uninterested in the topic. From the data which he has collected and using ANOVA it indicated that financial support from

one's institution significantly contributed to the main difference.

The impending shortage of prospective college faculty, the topics of faculty job satisfaction, recruitment and retention is a must priority. Besides the faculty of the future reflects the diversity of the people to be served; consequently, actions should be taken to make sure that the faculty positions are made attractive and alike. Internal stressors affecting women and minorities must be recognized and dealt to enhance the job satisfaction and make a better fit for the faculty role and get the person involved in his/her job. It has been shown that women faculty members are less satisfied than the male counterparts because they are more often asked to sacrifice much more when it comes to personal lives in order to meet their demand at the job as well as the families. Leaders and faculty in higher education must implement variety of recruiting and retention strategies. Few actions include, (1) recruiting women and minorities into undergraduate and graduate programs in sufficient numbers to fill the pool for faculty positions; (2) attracting women into disciplines where they are currently underrepresented; and (3) using incentives for departments to diversify. Contains an index and over 200 references. (GLR)

As the online education market continues to mature, institutions of higher education will respond to improve the employee faculty quality for better results to the students. Faculty members need unique training to successfully teach online which is convenient and easy for the students to access. While the effect of training is job satisfaction has been investigated in the realm of business, it has not been tested in the realm of online higher education. A quantitative study utilizing regression analysis investigated the relationship between the training methodology of online courses module completion and job satisfaction and the amount of training received that is how much time is being required and the resources used for the program. Overall job satisfaction was operationalized to access current overall faculty job satisfaction through the index of job satisfaction.

The purpose of the study was to examine the job satisfaction factors for physician assistant faculty.

Job satisfaction factors were divided into two categories that is intrinsic factors about the respondents and extrinsic factors about the institutional faculty support. The theatrical approach used to study the job satisfaction among the PA faculty was Herzberg's two-factor theory of motivation. A web-based survey instrument was distributed by email communication to other PA faculty this study evaluated the attitude and perceptions regarding the job satisfaction among them and further the expert panel review helped in completion of the survey. Frequencies, percentages and appropriate summary statistics were computed for the personal and professional characteristics. Overall the PA faculty was more satisfied than dissatisfied with their jobs. Finally, this study did support Herzberg's theoretical framework.

Faculty development programs are often time and resource intensive. To accommodate time constraints a limited time commitment faculty development programs were developed and was shown to be effective in improving participants scholarly initiatives. The objective of the study was to assess participants perception of why the faculty development program was effective in promoting scholarship in education. In depth semi structured interviews of participants was conducted a year after completing the faculty program, the interview were auto tape and transcribed. The transcriptions were coded independently by the investigators for dominant themes. The participants' satisfaction with the course as described in the interviews correlated with the early satisfaction surveys. Reasons offered for this impact fell into four broad categories: course content, course format, social networking during the course, and the course facilitation coaching strategies to achieve goals. Course focusing on the process, experiential learning, and situating the course facilitator in the role of a functional mentor or coach to complete projects can be effective in facilitating behaviour change after faculty development programs.

Directing a study of teaching skills of medical residents. The research includes the study of

teaching skills of medical residents, it includes the study of cultural variables in teacher education and counselling. Stimulating faculty to take an active interest in participating and improve knowledge about higher education. This survey assessed the attitude towards teaching and the gap between the teaching methods in which they were lacking behind. But at that time the university budgets were severely constrained the intrinsic motivation played a critical role in determining the participation in teaching improvement methods. Hence there was no further measures, or any kind of action taken regarding this which frozen the process and the medical residents were not trained because of the constraints which demotivated them and it clearly impacted in the work proceedings.

There are number of factors while planning, implementing and assessing teachers professional-development models and systems. A culture of support, the role of school and education leaders which involves developing norms of collegiality, openness and trust; creating opportunity and time for disciplined inquiry, providing opportunities to teachers' learning content in context, rethinking the functions of leadership and redefining leadership in schools and creating support networks and coalitions. This planning helped in few recommendations, external agencies can be of much support for professional-development programmes both financially and by offering particular activities and programmes that address the needs, the variety of model and techniques of professional development which improvises the support on regular basis in the workplace. The participants' satisfaction with the course as described in the interviews correlated with the early satisfaction surveys. Reasons offered for this impact fell into four broad categories: course content, course format, social networking during the course, and the course facilitation coaching strategies to achieve goals. Conclusions. Course focusing on the process, experiential learning, and situating the course facilitator in the role of a functional mentor or coach to complete projects can be effective in facilitating behaviour change after faculty development programs.

Within health science programs there has been call for more faculty developing for teaching and learning. The primary review was to understand the current landscape for the programs which helps through the search. faculty development for teaching and learning comes in a variety of forms, from individuals charged to initiate activities to committees and centers. Faculty development has been effective in improving faculty perceptions on the value of teaching, increasing motivation and enthusiasm for teaching, increasing knowledge and behaviours, and disseminating skills. Several models exist that can be implemented to support faculty teaching development. Institutions need to make informed decisions about which plan could be most successfully implemented in their college or school.

The aim of this study was to identify training needs of university faculty members, in order to achieve the desired quality in the light of technological innovations. A list of training needs of faculty members was developed in terms of technological innovations in general, developing skills of faculty members in the use of technological innovations and promoting university faculty members in quality assurance skills. The study followed the descriptive-analytic design in presenting the literature. The data collection was based on a questionnaire developed to assess university faculty members' needs in four areas, these are: teaching, scientific research, community service and promoting quality assurance procedures. The participants were 135 university faculty members chosen from different Saudi universities. Results were statistically analysed using SPSS. The results revealed the need for university faculty to be trained in the light of technological innovations. The study recommends a program for training faculty members, to use technological innovations, meet their scientific research needs, university teaching, and community service and meet course requirements in terms of quality standards and performance indicators.

The aim of the present study is to show how quality higher education can be achieved using innovative

technology through the study of the following: 1. The strong impact of technological advancement on the field of education, its systems and methods. 2. The shift in the teacher's roles from the traditional to the role of facilitator and guide. 3. Lack of skills and experiences required for effective university teaching. 4. The advancement in developing training programs in various areas of teaching and learning. 5. The need for faculty members to be updated on scientific developments to help improve teaching quality. 6. The increasing number of students, which require increased use of technological innovations. Thus, professional development of faculty as a basic requirement of improving quality of university education can be achieved through: Self-development: This is based on a faculty member's effort to improve themselves by attending seminars, lectures, conferences, workshops, conducting researches and translation, etc. Institutional-development: This is achieved through training workshops, seminars, researches and exchange visits with other universities organized by the institution. Achievement of quality in university education comes with many challenges including the need for more reliance on technological innovations, increasing social demand on education, and the need to invest resources to cope with sustained development. Technological innovations are not objective; their efficacy lies in the way they are used by qualified and skilled faculty members in the teaching and learning process. Results of a number of studies revealed some challenges and obstacles that are faced in the training of faculty members, particularly, those which are related to the use of innovative technology in higher education, are assumed to provide on one hand, a match between outcomes of education and the demands of the labour market, and employing it in conducting research and quality assurance procedures on the other.

Higher education has recently witnessed a great development as a result of technology use on both the levels of concepts and application. The traditional role of the teacher has changed into both facilitator and organizer in the learning environment in order to achieve quality. The teacher performs

these roles relying mainly on innovative technology (electronic library, multi-media, computer-assisted learning, individualization of learning, learning resources center, open university, distant learning, video-conferencing and web-conferencing). confirms that faculty member's acquaintance with concepts related to modern technology helps him develop the ability and skills to use it in teaching. Innovative technology is a comprehensive system involving all items of modern technology: equipment, programs, learning environments and methods in order to improve quality of the learning process. Thus, the innovative item of technology has two aspects: the material one involving equipment and programs and the second involving the strategies and methods used. The present study identifies innovative technology as a comprehensive system of effective use of modern technology including equipment, materials, programs and teaching strategies used to match the nature of course content in order to develop the educational system through interaction between learners, teachers and content.

This workshop focused on the procedure to do quality research. As a researcher, it is mandatory for one to know the basics and have a core idea in order to satisfy the purpose of research and establish an acceptable conclusion. JIMS has given this opportunity to the academicians to enhance their researching skills and understand the methodologies. The FDP summarised the aspects relating to the literature review, framing objectives, collection of data, analysing it and finally framing it into a research paper or proposal. This FDP intended to orient participants towards developing their own research plans with due attention at every stage of research. ensure that he/ she summarize prior studies about the topic in a manner that lays a foundation for understanding the research problem; 2) explain how your study specifically addresses gaps in the literature, insufficient consideration of the topic, or other deficiency in the literature; and, 3) note the broader theoretical, empirical, and/or policy contributions and implications of your research.

Nowadays, the success of any organization depends on the shaping of policies tailored to the needs of human resources; otherwise, it will lose the ability to adapt to today's complex environment and the ability to use the effectiveness of human resources. For this reason, Talent Management can help to attract, nurture and develop the next generation of public leaders. This study was conducted with the aim of finding the relationship between each of the main dimensions of talent management and improves the performance of faculty members at the university. This study is an applied research. The total population included all regular universities in Iran. Data were collected by the study of literature, interviews with experts and questionnaires so that data were analysed using correlation analysis and Analytical Network Process (ANP) by SPSS and Super Decisions software. The results show that the "talents development" dimension is in first place and the dimensions of "attracting the talent" and "talents maintenance", they are respectively ranked second and third the most relevant dimensions of talent management in improving the performance of faculty members in educational services. Thus, before considering the work processes and relying on modern technology, the role of "in-service training courses", "continuous learning" and "technical skills training" are crucial in improving the performance of faculty members.

The Programme aims at enhancing the academic and intellectual environment in the Institutions by providing faculty members with enough opportunities to pursue research and also to participate in seminars / conferences / workshops. Participation in such programmes would enable faculty members to update their research and pedagogical skills. The Institution should formulate a Selection Committee as per the constitution given below. While preparing the panel, care must be taken to select teachers from various disciplines. The Selection Committee will scrutinize the applications and certificates submitted in prescribed pro forma by the applicants and ensure that the applicants satisfy all the conditions laid down by the Commission for the award of Teacher Fellowship. A certificate to this effect will have to

be furnished along with the proceedings of the Selection Committee, which will be signed by all the members. Application for the award of Teacher Fellowship under “Faculty Development Programme” in respect of a teacher will not be considered.

The aim of this research is many folds like 1) To measure the effect of training & development on faculty’s work and performance, 2) To get the information about the strategies, which are helpful to improve the performance and 3) To compare the performance of two group, 1) Group-1 getting training & development opportunities, 2) Group-II not getting training & development opportunities. The nature of the study is quantitative and survey research. The sample size of 205 respondents was taken and the data was collected through a questionnaire based on Likert scale, using convenient sampling method. For the purpose of data analysis statistical tools like Correlation and Multiple Regression analysis have been used. It was concluded that training and development does have a significant impact on the performance of an individual faculty member. It is further concluded that the faculty members’ performance was greatly affected by other factors such as good pay, compensation package and extra-curricular leisure factors. These factors tend to increase their motivation and willingness to work which in turn had considerable impact on their performance. On the basis of results and conclusion following recommendations have been made, 1) Since training & development is a significant impact for employees’ performance, therefore, HR departments of Business Schools should give more attention and make their strategies for regular training programs, 2) Management should adopt the monetary benefits strategies apart from training & development for the faculty members in order to enhance the performance.

Higher education plays an essential role in society by creating new knowledge, transmitting it to students and fostering innovation. Research-based education has lately received increasing interest both among researchers in higher education and in

public discussion. The aim of this paper is to develop a thorough understanding of teacher education reform in Japan and its relation to the research development process. To identify whether Japanese teachers are equipped with the conceptual understanding and methodological skills to conduct research, field visits are carried out to some schools and higher education institutions; some content analysis of materials related to their Teacher Education Programs are conducted; twenty-five people (ten professionals, professors, and policy makers, five teachers, and ten students) are interviewed. Quantitative survey data as well as in-depth qualitative data are collected from survey questionnaires and semi-structured interviews over a period of two months. This research attempts to discuss the research policies, strategies and practices in graduate schools of teacher education and the contributions of research in developing high quality teaching. Findings of this research is expected to make research-informed contributions to contemporary issues, initiatives and reforms in Japanese higher education, and will at least serve to initiate a debate about research-based teacher education and contribute to the decisions that need to be made regarding the future of higher education in Japan.

4.Data Analysis and Interpretations

Analysis and Interpretation

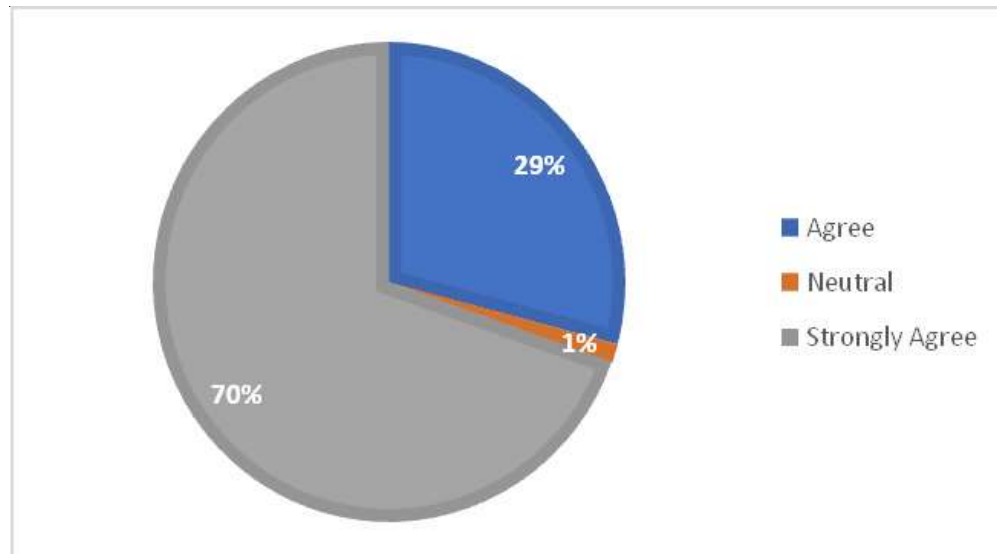
Data Processing

After the data was available for analysis it was coded and tabulated. The software used was MS-Excel, for

the purpose of analysis. The results have been represented through graphs for precise analysis.

Data analysis

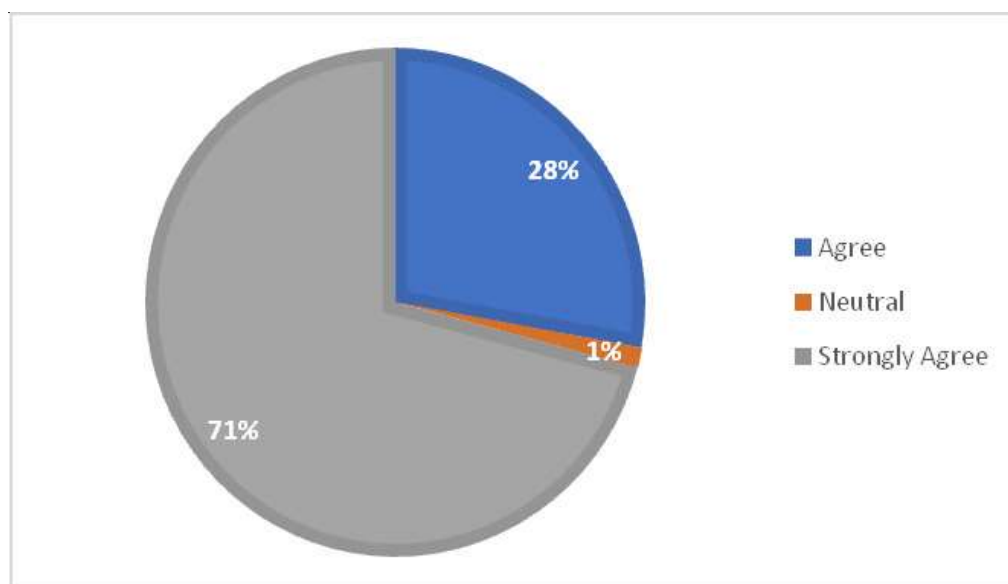
Chart.1. Performing interesting and diverse work



When the respondents were questioned regarding how exactly they project the performance capacity in an interesting way and is its diverse work in their respective roles, 70% of the respondents have strongly agreed and 29% agreed with how significant

this is with their respective jobs and how involved the respondents get into their work.

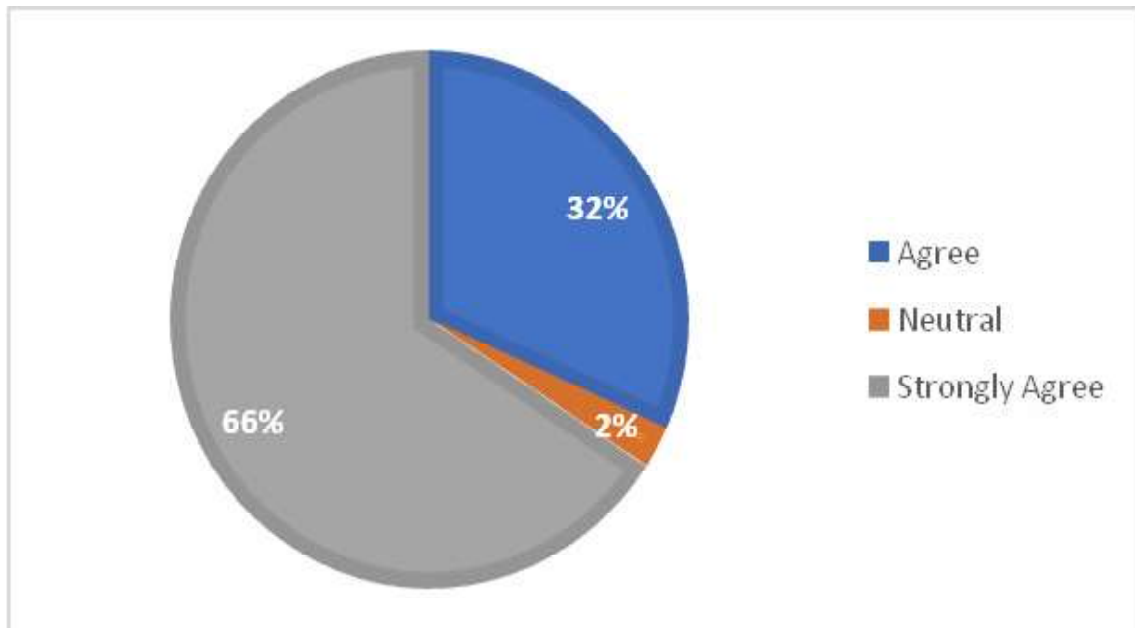
Chart.2. Updating innovation and attractive teaching pedagogies



In this rapidly changing world, it was realized that innovation and attractive teaching brings different dimensions and upgradation, 71% of the

respondents have strongly agreed in this regard and 28% of them agreed that updating is vital.

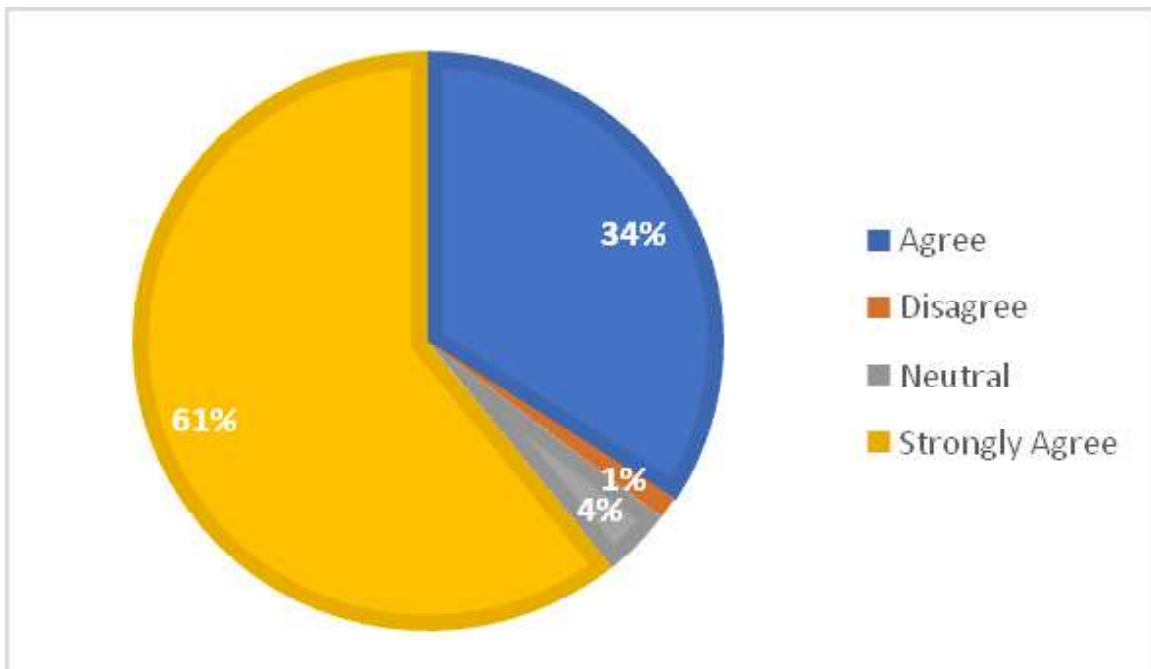
Chart. 3. Seeking opportunities to acquire updated teaching skills



When there is responsibility of overall development acquiring different skills and knowledge becomes a basic necessity in the progress, 66% of the

respondents strongly agreed that they seek opportunities to acquire updated teaching skills

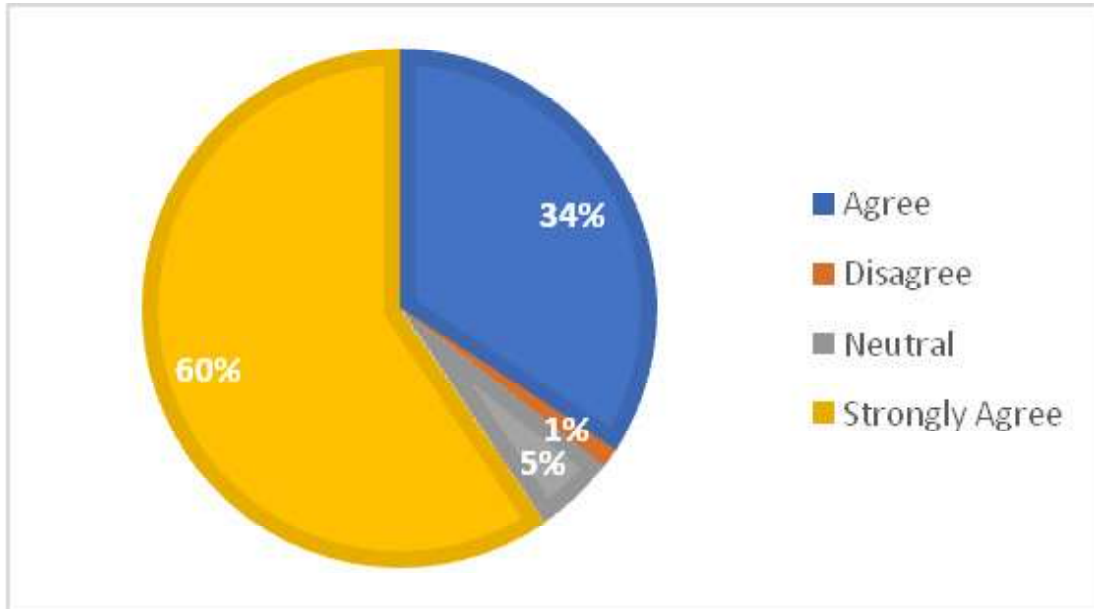
Chart. 4. Flexible leadership performance excellence



It is revealed from the above chart that 61% of the respondents strongly agreed that flexible leadership is the key for performance excellence and 34% of the respondents have agreed with the

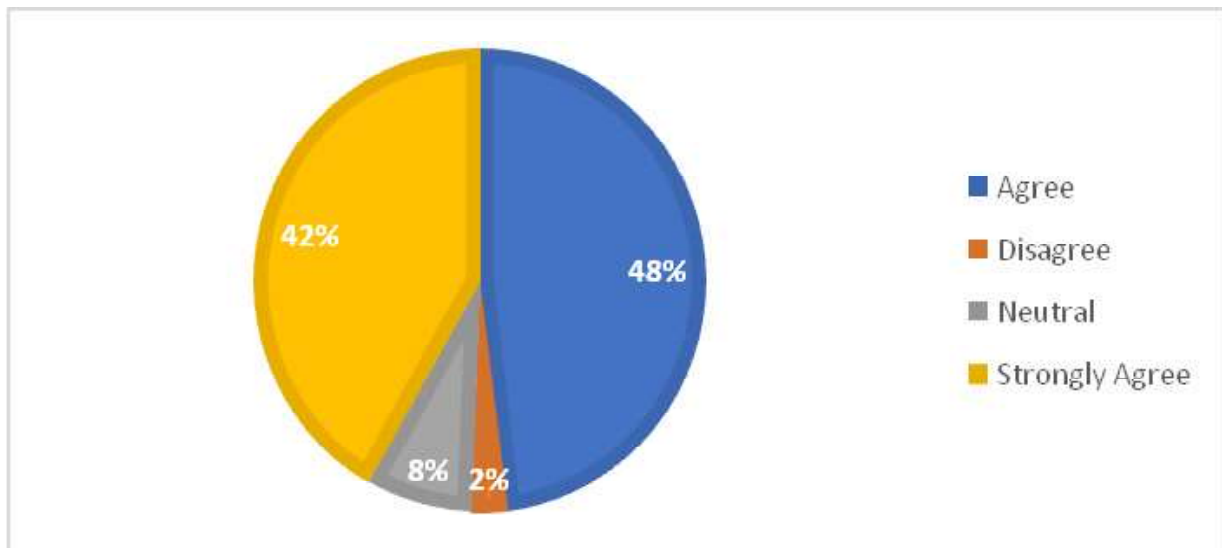
fact that guiding them in the right way and having a good working condition would bring out the best outcomes

Chart.5. Autonomy and discretion for high performance



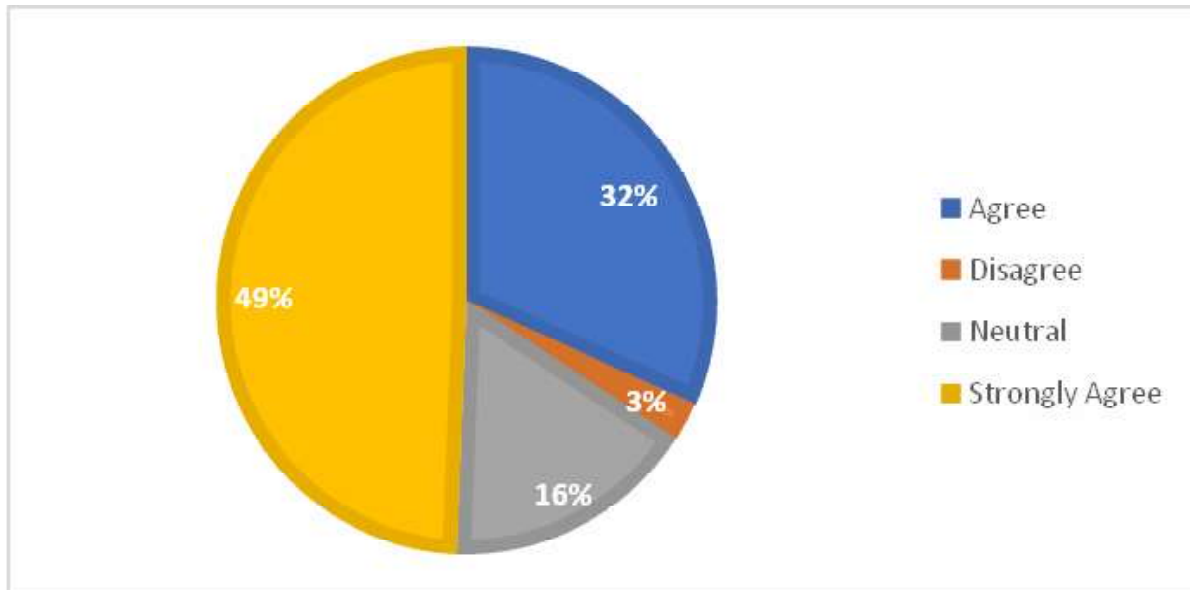
From the above chart, it was revealed that 60% of them strongly agreed that autonomy and discretion played a key role in their performance and 34% of them agreed in this regard.

Chart.6. Accomplishment of personal goals



It is revealed from the above chart that 42% of the respondents have strongly agreed that accomplishment of personal goals is a key for the personal growth, 48% of the respondents have agreed with this phenomenon

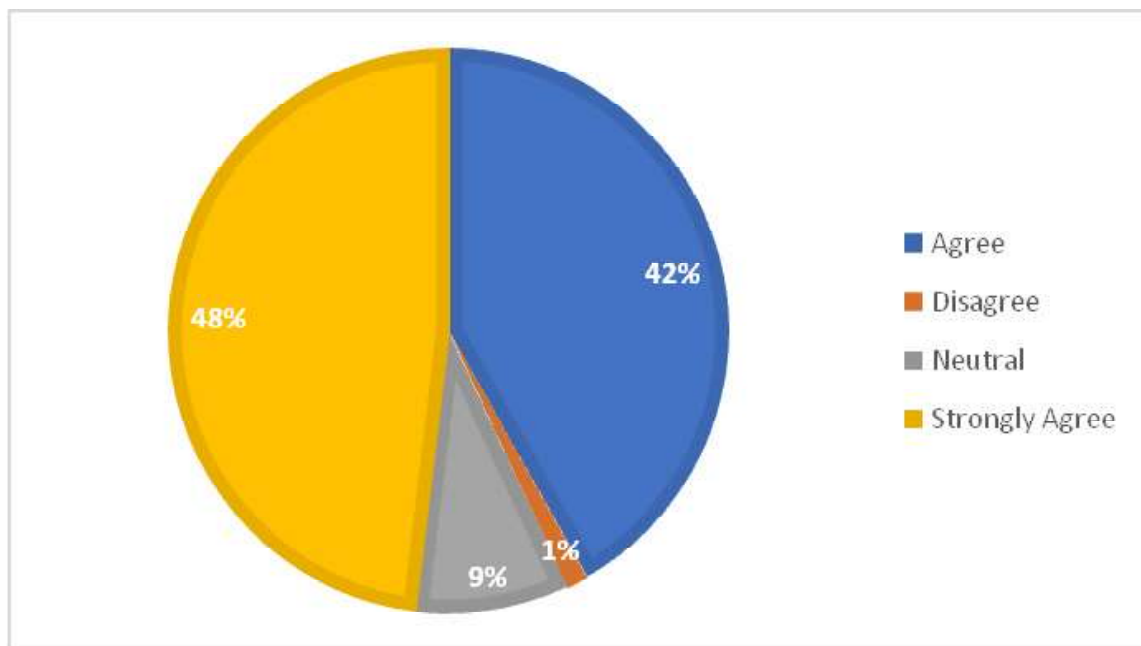
Chart. 7. Role of FDPs on updated skills and knowledge



It is understood from the above chart that 49% of the respondents strongly agreed that persistently

attending FDPs helped them updating skills and knowledge. 32% of the respondents agreed with this phenomenon

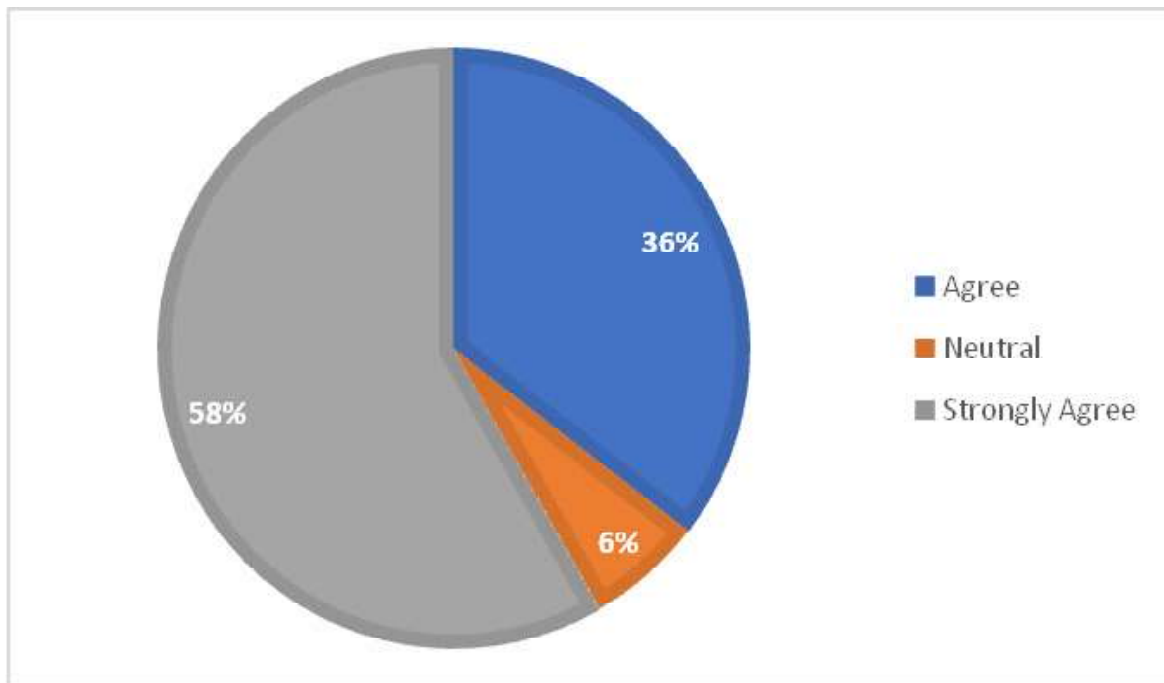
Chart.8. Job motivation



Majority of the respondents i.e. 48% and 42% of them have strongly agreed and agreed respectively,

that the investment made by the management played a crucial role in enhancing the job motivation

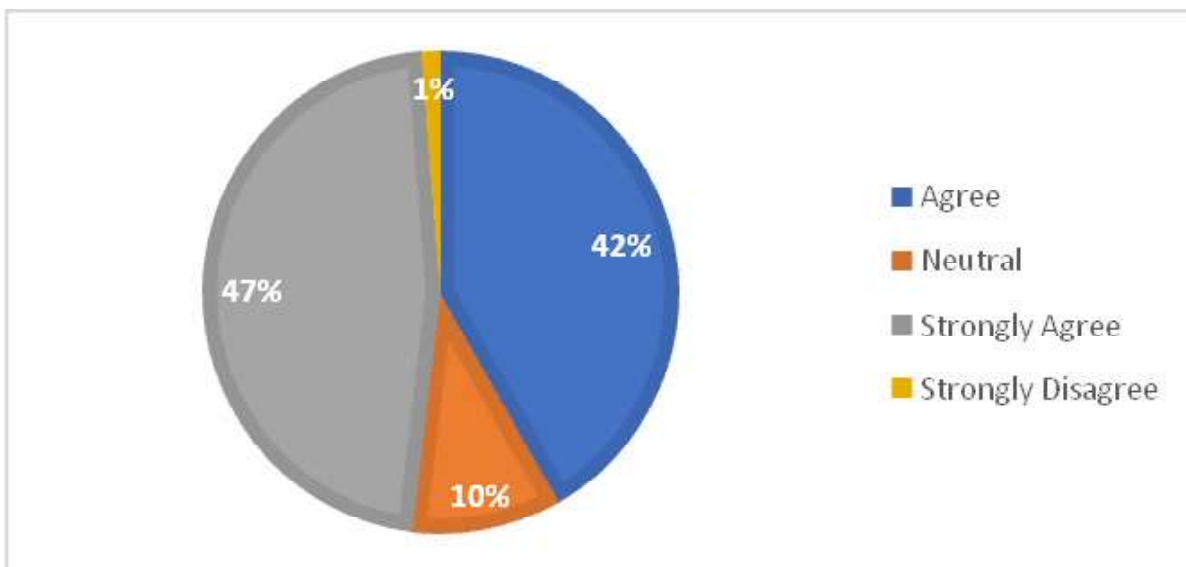
Chart.9. Effect of updated teaching methodology



It is understood clearly from the above chart that 58% of the respondents strongly agreed that the

updated teaching methodology is vital in delivering the courses effectively in the classroom. 36% of the respondents have agreed in this regard

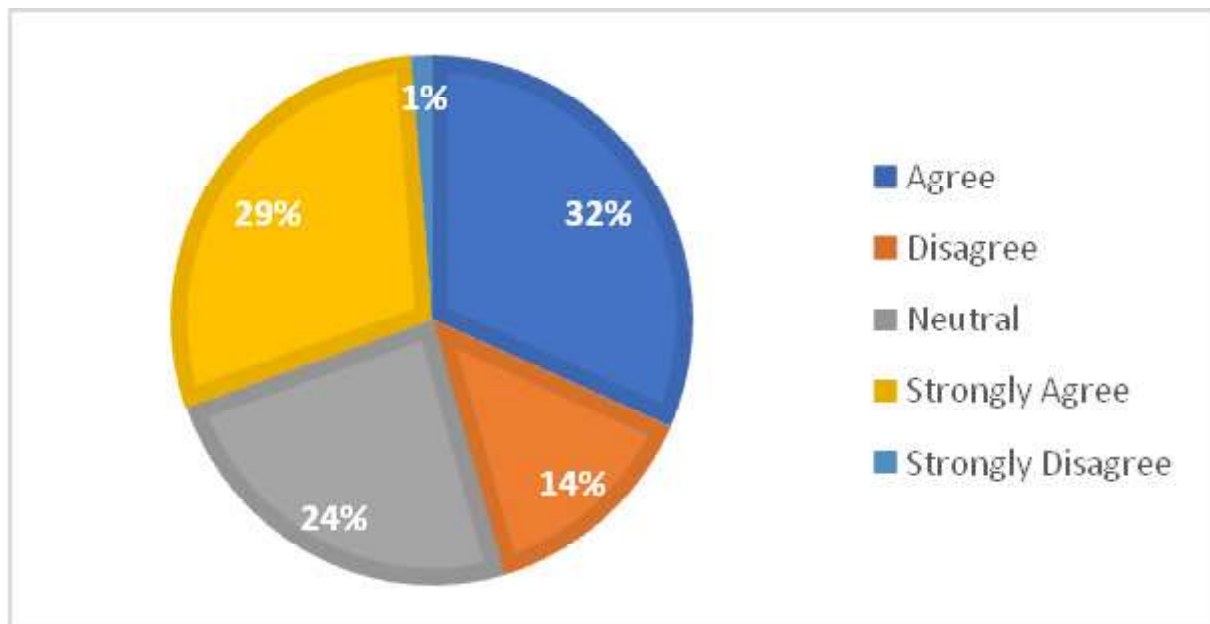
Chart.10. Role of management in boosting employer loyalty through participation in faculty development events



It is evident from the chart above, that a majority of the respondents, i.e., 47% have strongly agreed that the encouragement given from the management has always boosted their morale and effective work

progress. 42% of the respondents expressed agreement, while around 10% expressed slight disagreement.

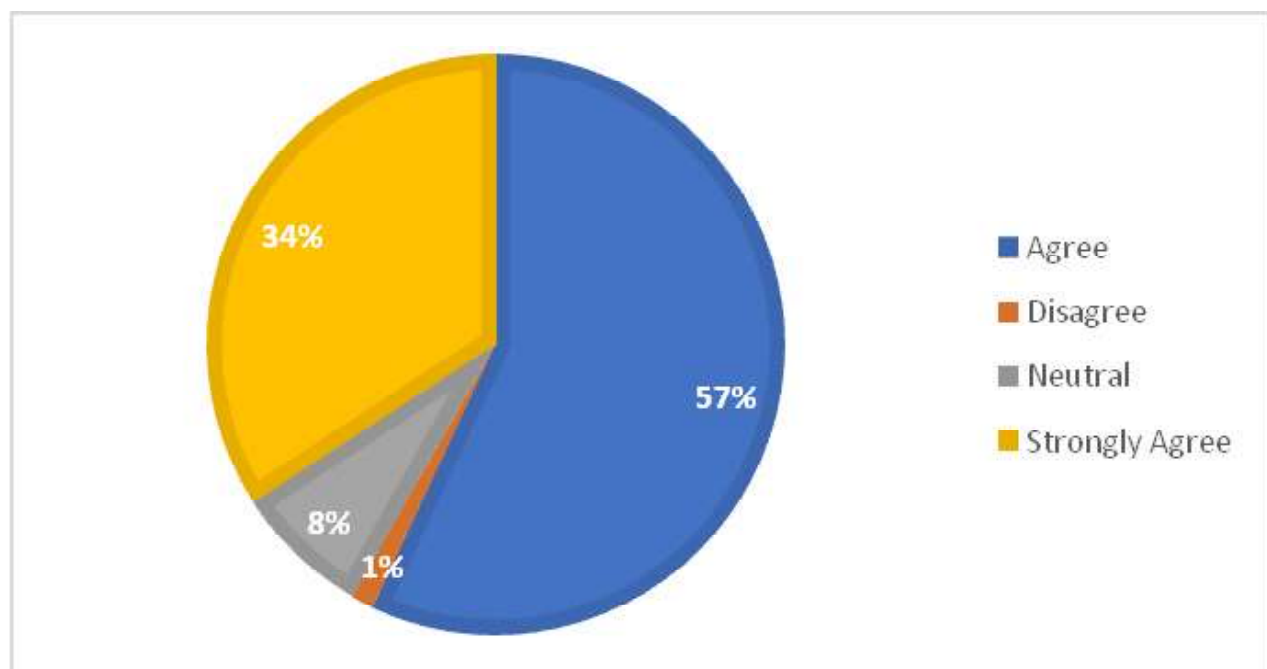
Chart.11. Optimum investments made by the management for participation in FDPs



In this context, the chart depicts that 32% of the respondents slightly agree that management support drives them towards the FDP initiative from

the investment made from their management. 29% respondents expressed strong agreement regarding the same.

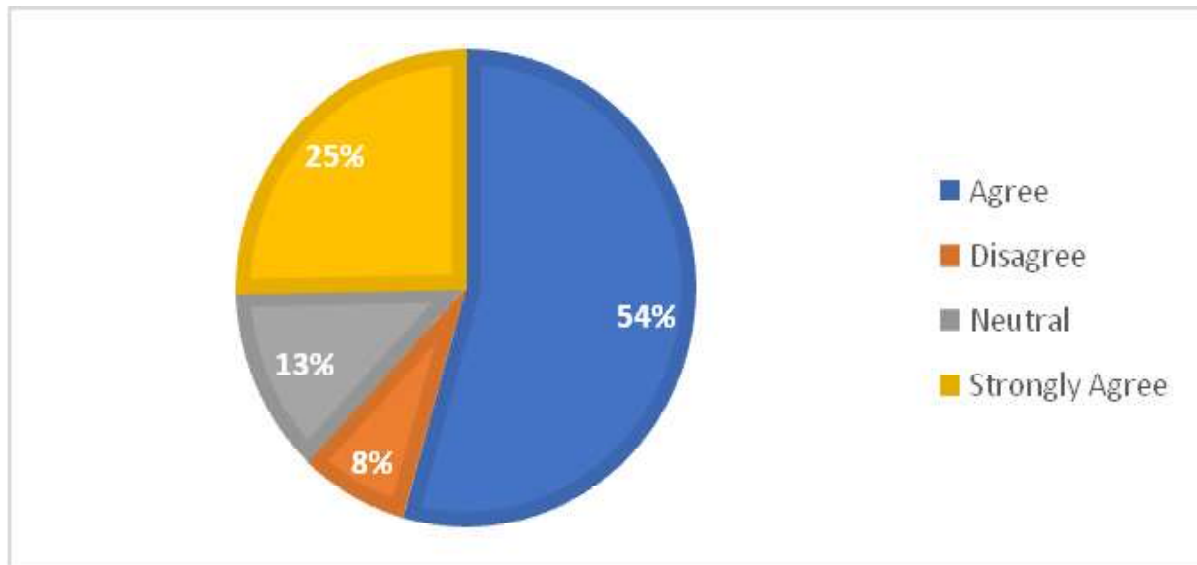
Chart.12 Aid in focusing on the teaching assignment



From the responses, we decipher that 57% of them agree to the statement while 34% of them strongly agree that faculty development programs keep them

focused on their assignments for better teaching at all levels.

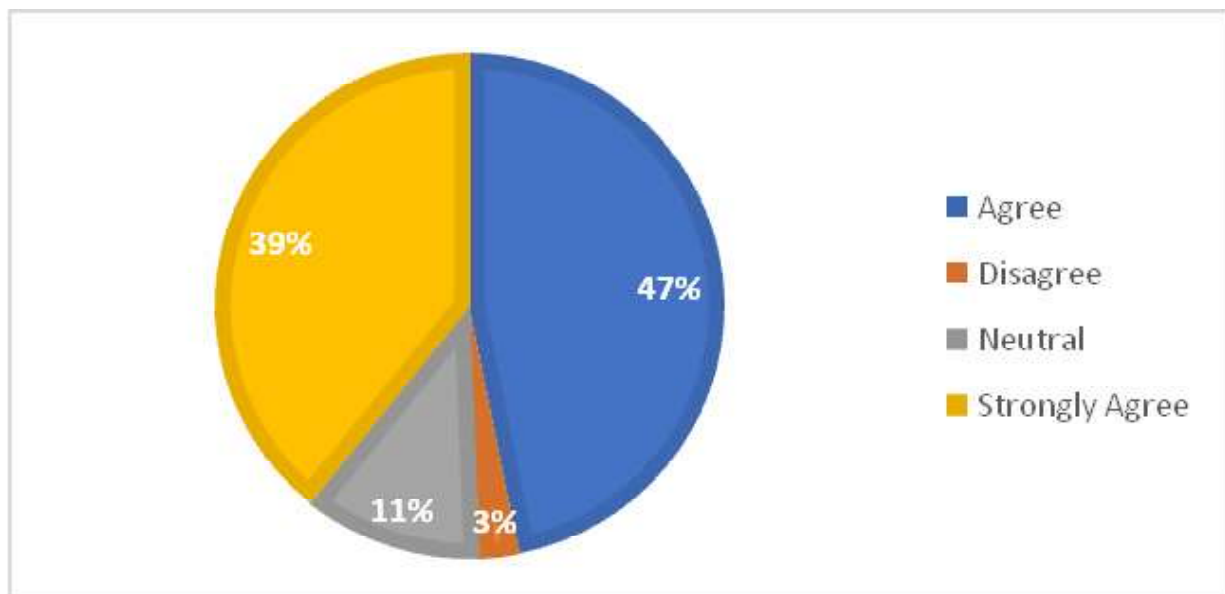
Chart.13. The emphasis on the faculty development involves more responsibility, and causes more stress.



It is evident that 54% of them agree and 8% of the respondents strongly agree that the FDP stresses

them to be more responsible in their work, since it urges them to work at their best potential, based on the programs they undergo.

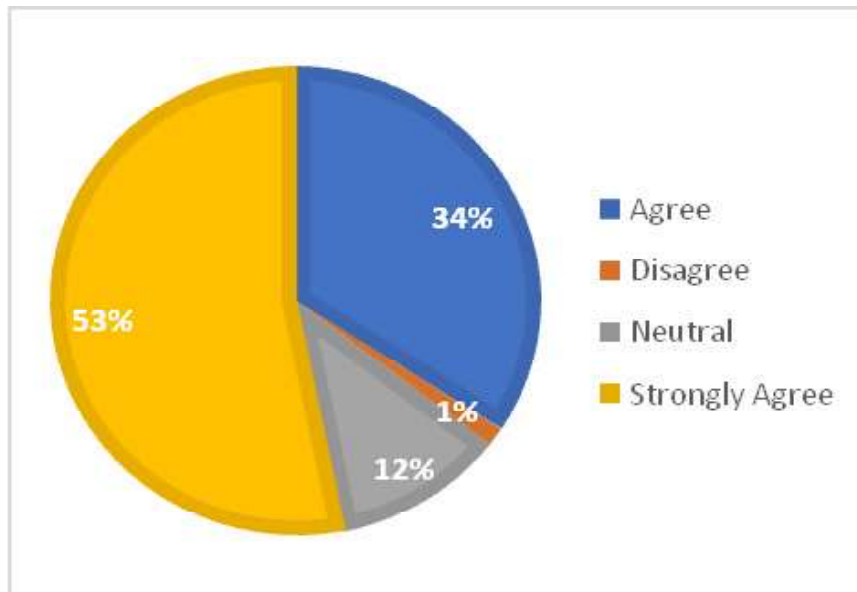
Chart.14. Motivation to deliver the best in the classrooms



From the responses, it is clear that 47% respondents agree and 39% of them strongly agree that motivation is an important factor, which helps them

in teaching better. The knowledge transfer is at the best in terms of value addition.

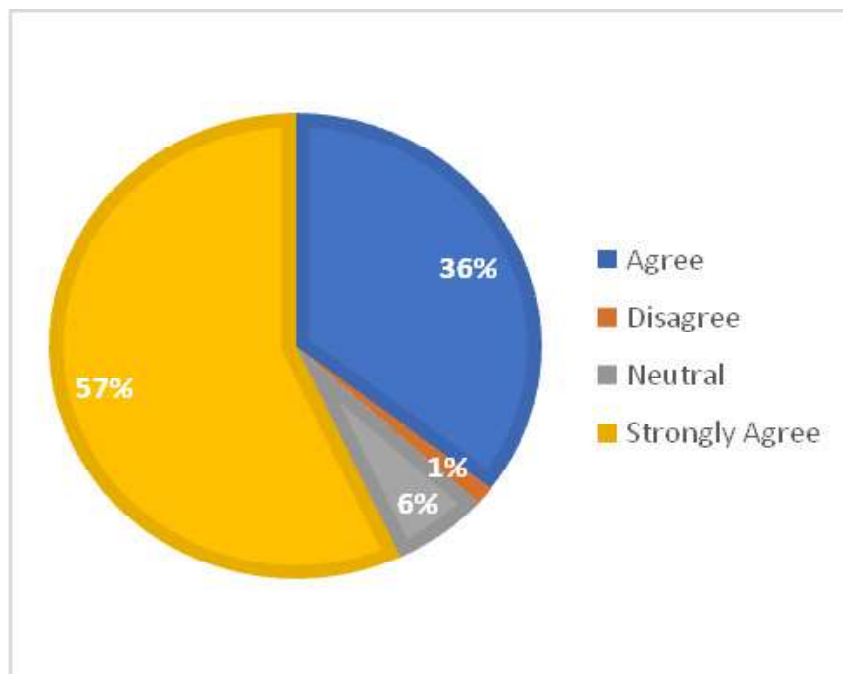
Chart.15. Improving Self Confidence



More than half of the respondents agree that faculty development programs helps them to build their self-confidence. 53% of the respondents have been

able to see the positive effect of FDPs in their career, while 34% have expressed agreement.

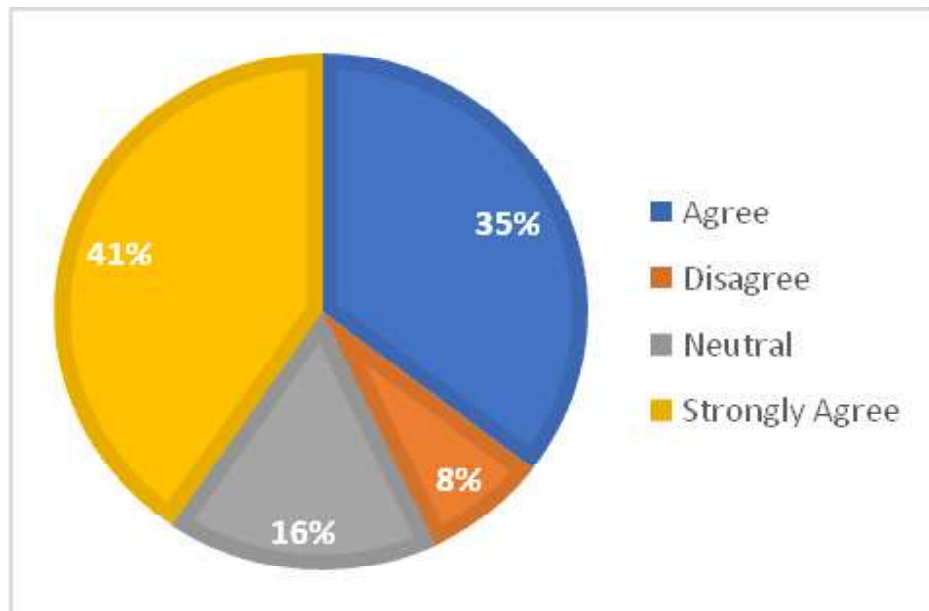
Chart. 16. Aid in learning from colleagues from other institutes



This is in-line with the previous question. Apart from having positive effect from the FDPs, 36% of the respondents feel that they get to learn more from

the colleagues the attend the programs with, more than 80% respondents agreeing to this.

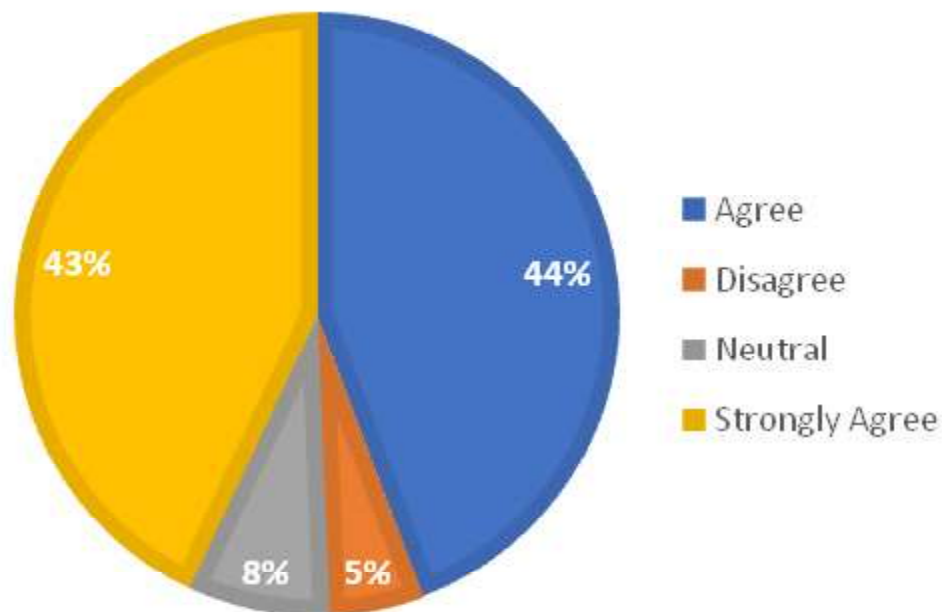
Chart.17. Motivation for a longer stint with the institute



It is evident that 41% of the respondents agree strongly that that FDPs give them rationale to stay in the organization for a longer duration, with other

factors kept constant. 35% of the respondents have agreed to this. Hence, from a management perspective, we can state that there are good benefits arising from the investment on FDPs.

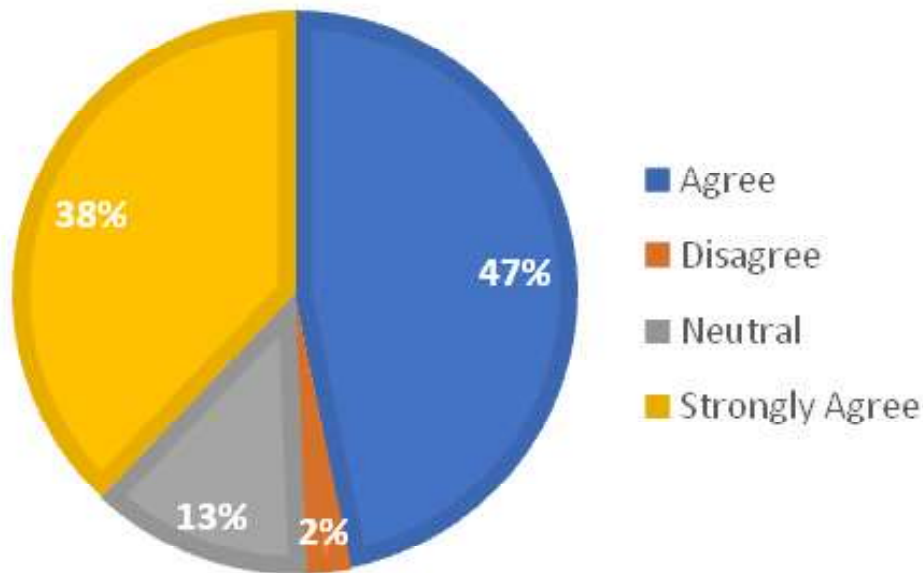
Chart.18. Enhancing your job satisfaction



The chart highlights that 43% of the respondents strongly agree that faculty investment is a major deterministic factor in enhancing job satisfaction, while 44% express agreement on the same. FDPs

given the employees a possibility of increasing their knowledge base and in seeking better growth in their career. Hence, the job satisfaction tends to increase.

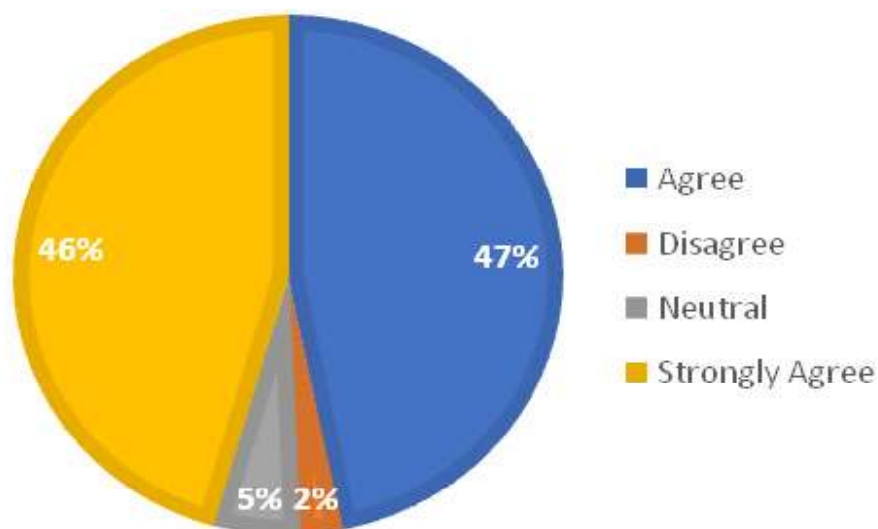
Chart.19. Importance of position, standing and grade



It is interesting to note from the chart that 47% of the respondents agree and 38% express strong agreement that position, standing and grade are important for the faculty. Due to the traditional

organization structure that educational institutions follow, the FDPs and other training programs helps the faculty to scale up in the organization due the gain in learning and knowledge.

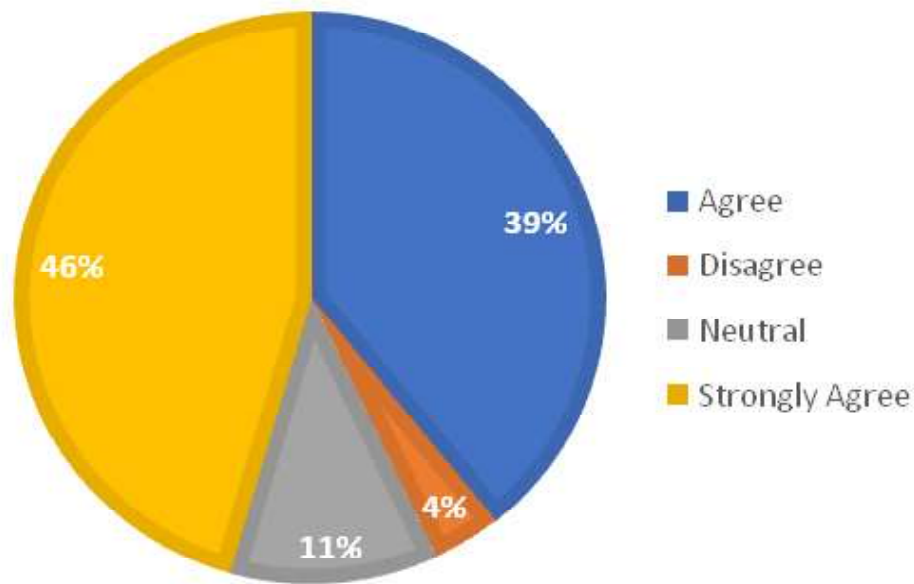
Chart.20. Opportunities for promotion and advancement affects motivation



It is evident from the graph that, for employees to be motivated, there should be options for them to grow in their career. With 46% of the respondents portraying strong agreement, and 47% agreeing on

the statement, we can delineate that promotion opportunities and advancement options are important for the faculty to stay motivated.

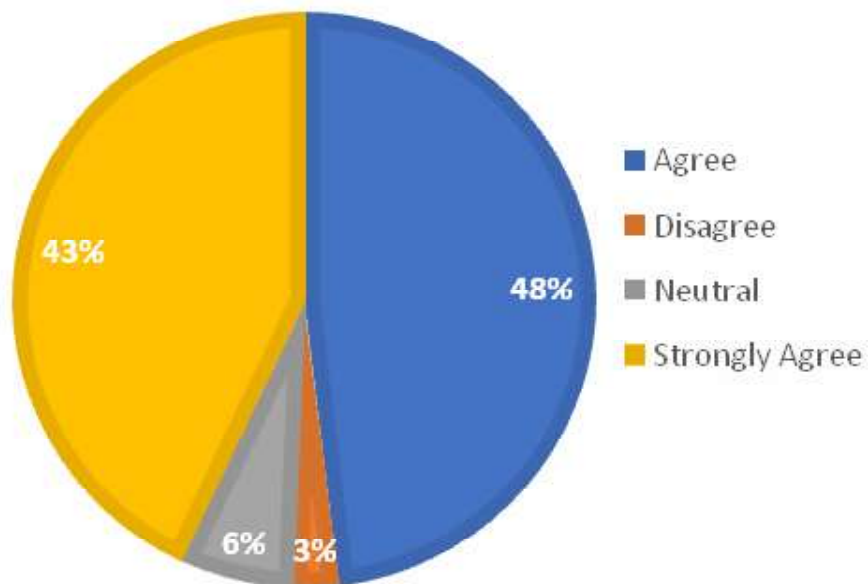
Chart. 21. Performance recognition affects motivation



It is clear that 46% of the respondents feel that recognition of their performance affects the motivation levels in the organization, while 39%

express agreement on the same. A small percentage of the respondents, about 4% express disagreement on the same.

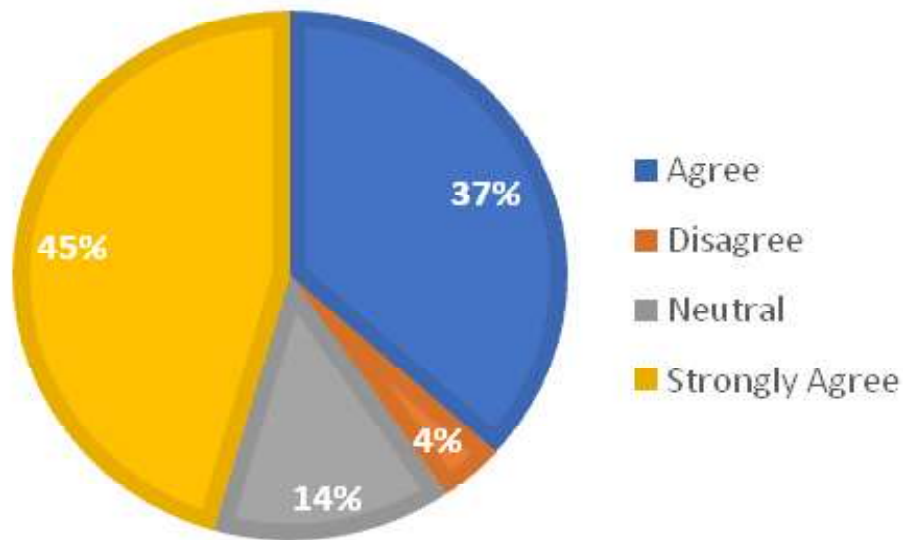
Chart.22. Encourage new and better ways of doing things



It is deciphered from the responses that 43% of the respondents strongly agree and 48% agree to the statement, respectively. This is primarily due to the

environment created by the management of the respondents, by offering various channels to implement their learnings from the FDPs.

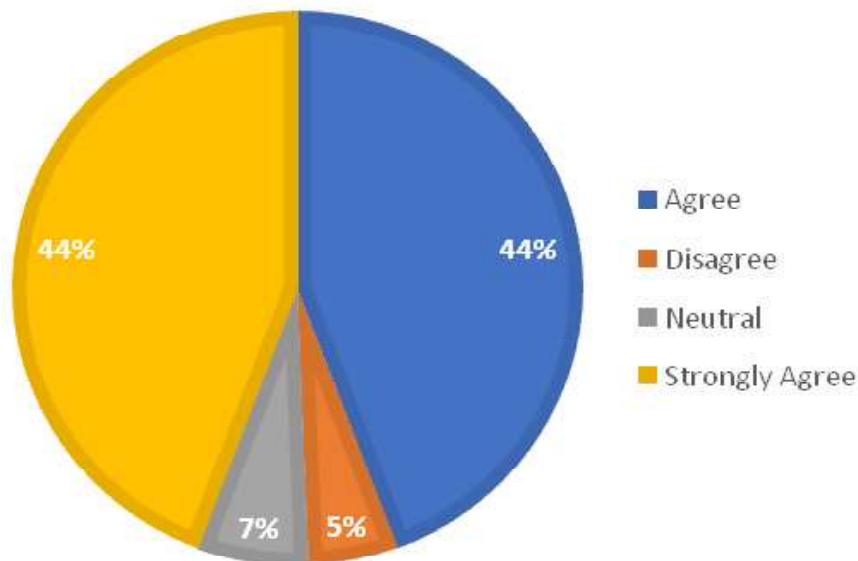
Chart.23. The monetary and other fringe benefits are the culmination of development



It is evident that 45% of the respondents strongly agree to the fact that monetary and other fringe benefits are the culmination of development, while 37% express agreement on the same. As there is

still importance given to position and grade, the respondents opine that the opportunities of growth in the organization increases the fringe and monetary benefits.

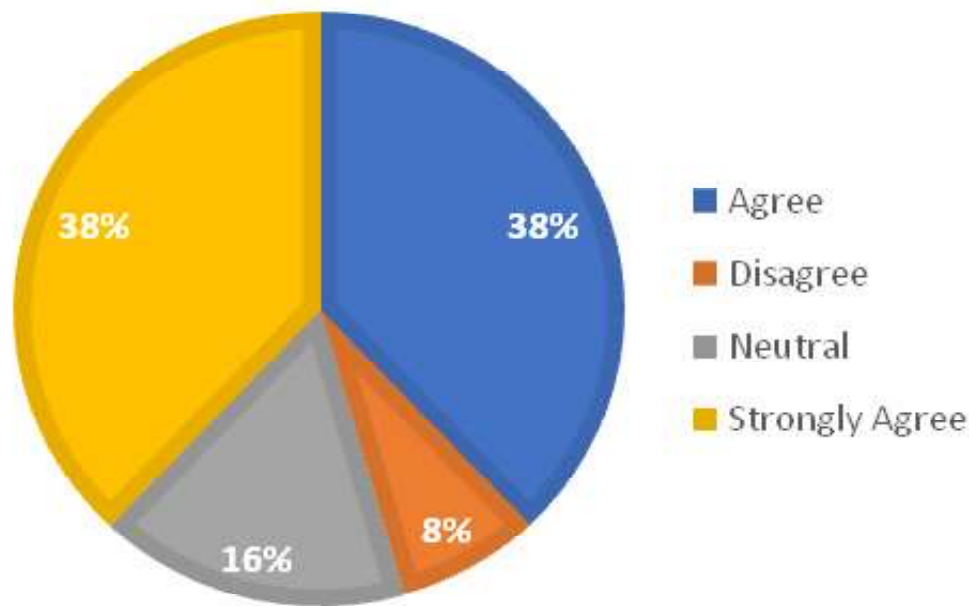
Chart.24. Helps enhance performance



From the graph, we can conclude that about 44% of the respondents express strong agreement that FDI enhances performance, while another 44% agree

on the same. This is in concurrence with the increase in motivation and performance.

Chart.25. Knowledge availed helps in job securement



From the responses, we can perceive that almost 76% of the respondents express agreement since the respondents were able to move to a better

designation within or outside the organizations they were working in. However, about 16% feel that the FDPs do not affect securing better jobs.

Data set features separation, Questionnaire is a mix of variables related to motivation and satisfaction and was done deliberately to reduce bias while responding to the questionnaire. To perform analysis the data variables related to the motivation and satisfaction are separated as follows.

Motivation related variables are

1. It is essential to update about innovative and attractive teaching pedagogies & methods.
2. I seek the opportunities to acquire updated information on teaching skills and knowledge.
3. Autonomy and discretion in performing their role motivates them.
4. The investment made by management on Faculty Development programmes plays a crucial role in Job motivation.

5. It is significant to them to project their capability to perform interesting and diverse work in their role.
6. The presence or absence of opportunities for promotion and advancement affects their motivation.
7. The encouragement given by the management to participate in the faculty development events boosts to their employer loyalty.
8. The investment on faculty development keeps them focused on the teaching assignment at its best.
9. The importance given by the management for the faculty development stresses them to be more responsible in their role.
10. The intention of faculty development motivates them to deliver the best in the classrooms.

11. Attending faculty development programs helps them to build their self-confidence.
12. Attending faculty development programs helps them to learn from colleagues from other institutes.
13. The presence or absence of their performance recognition affects the motivation.
14. Feel encouraged to come up with new and better ways of doing things as a result of faculty development initiatives and investments.
15. Constant Faculty development investment helps them enhance their performance constantly.

Satisfaction related variables are

1. Flexible leaders and working conditions are important to them for their best performance.
2. The prospect to accomplish personal goals and achieving the same is crucial for them.
3. The range of investment made by the management for the faculty members to participate in FDPs is optimum.
4. Faculty development investment motivates them to have a longer stint/duration with the institute.
5. Faculty investment is one of the deterministic factors in enhancing their job satisfaction.
6. The position, standing and grade are important to them.
7. The monetary and other fringe benefits are the culmination of their development.

8. Knowledge availed through Faculty development programmes helps to have a secured job.
9. Persistently attending faculty development programmes provides them with updated skill-set and knowledge.
10. The constant update on the teaching methodology helps them to be effective handling of the classes.

Anova and Kruskal–Wallis test

Anova test on Motivation variables

Here, variables of motivation are compared to each other as a group. So, there are fifteen groups of features related to motivation. Hypothesis for Anova and Kruskal–Wallis test are given below,

Null Hypothesis: $\mu_1 = \mu_2 = \mu_3 \dots \mu_{14} = \mu_{15}$ that is all fifteen-population mean are same or there is no difference between the populations.

Alternate Hypothesis: $\mu_1 \neq \mu_2 \dots \mu_{14} \neq \mu_{15}$ that is all fifteen-population mean are not same or there exists a difference between the populations.

Level of significance or α is chosen 5%.

Checking assumptions for Anova and Kruskal–Wallis Shapiro-Wilk test

Normality test, Shapiro-Wilk test is performed here.

The hypotheses used are:

Ho: The sample data are not significantly different than a normal population.

H1: The sample data are significantly different than a normal population.

Shapiro-Wilk Test														
W-stat	0.644004	0.697173	0.764341	0.607404	0.745371	0.751566	0.767364	0.812848	0.797954	0.752709	0.717101	0.784804	0.760165	0.759142
p-value	1.53E-12	1.78E-11	6.32E-10	3.25E-13	2.17E-10	3.05E-10	7.53E-10	1.29E-08	4.87E-09	3.26E-10	4.83E-11	2.14E-09	4.97E-10	4.68E-10
alpha	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
normal	no	no	no	no	no	no	no	no	no	no	no	no	no	no

Figure 28: Shapiro-Wilk test (Motivation variable)

P value of all the fifteen variables are less than 0.05 or <5%, hence we can neglect null hypothesis, the

data sample is not normal thus non-parametric test should be used.

Levene's test

Equality of variances test, Levene's test is performed.

The hypotheses used are:

Ho: Population variances across the sub-samples are the same.

H1: Population variances across the sub-samples are different.

Levene's Tests	
type	p-value
means	0.000327
medians	0.000421
trimmed	4.62E-05

Figure 29: Levene's test (Motivation variable)

P value is less than alpha or <5%, so reject the null hypothesis, which implies that the variances are heterogeneous.

Thus the assumptions for Anova are not satisfied because Shapiro-Wilk test shows data is not normal. So we use Kruskal–Wallis test for analysis.

Anova model

ANOVA								
Sources	SS	df	MS	F	P value	F crit	RMSSE	Omega Sq
Between Groups	41.33333	14	2.952381	6.114191	7.72E-12	1.700228	0.278199	0.056978
Within Groups	564.962	1170	0.482874					
Total	606.2954	1184	0.512074					

Figure 30: Anova (Motivation)

P value is less than alpha or <5%, so reject the null hypothesis, Hence we can say the population means are significantly different.

Kruskal–Wallis model

Kruskal-Wallis Test																
	[It is esse	[I seek the	[Autonom	[The inve	[It is signi	[The pres	[The enco	[The inve	[The impo	[The inter	[Attendin	[Attendin	[The pres	[You feel	[Constant	Faculty de
median	5	5	5	4	5	4	4	4	4	4	5	5	4	4	4	
rank sum	57663	55228.5	51633	45942	57125.5	45381.5	45107.5	40314	33718.5	41271.5	47523	50273.5	43620	44022	43881.5	
count	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	1185
r^2/n	42088881	38609965	33746414	26717308	41307883	26069374	25755526	20572387	14391611	21561224	28587792	31992719	24084866	24530842	24374507	4.24E+08
H-stat																65.63692
H-ties																81.29081
df																14
p-value																1.63E-11
alpha																0.05
sig																yes

Figure 31: Kruskal–Wallis (Motivation variable)

In Kruskal–Wallis test, P value is less than alpha or <5%, so reject the null hypothesis, hence we can

say the population means are statically significantly different using Kruskal–Wallis model.

Interpretation from Kruskal–Wallis

The variables related to motivation differ significantly in their mean.

Anova test on Satisfaction variables

Here, variables of satisfaction are compared to each other as a group. So, there are ten groups of features related to satisfaction. Hypothesis for Anova and Kruskal–Wallis test are given below,

Null Hypothesis: $\mu_1 = \mu_2 = \mu_3 \dots \mu_9 = \mu_{10}$ that is all population mean are same or there is no difference between the populations.

Alternate Hypothesis: $\mu_1 \neq \mu_2 \neq \dots \mu_9 \neq \mu_{10}$ that is all ten-population mean are not same or there exists a difference between the populations.

Level of significance or α is chosen 5%.

Checking assumptions for Anova

Shapiro-Wilk test

Normality test, Shapiro-Wilk test is performed here.

The hypotheses used are:

Ho: The sample data are not significantly different than a normal population.

H1: The sample data are significantly different than a normal population.

Shapiro-Wilk Test										
W-stat	0.682224	0.771608	0.876087901	0.818821	0.771068	0.805526	0.793472	0.825913	0.78119	0.7046
p-value	8.68E-12	9.66E-10	1.54641E-06	1.94E-08	9.36E-10	7.96E-09	3.67E-09	3.17E-08	1.71E-09	2.57E-11
alpha	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
normal	no	no	no	no	no	no	no	no	no	no

Figure 32: Shapiro-Wilk test (Satisfaction variable)

P value of all the fifteen variables are less than 0.05 or <5%, hence we can neglect null hypothesis, the data sample is not normal thus non-parametric test should be used.

Levene's test

Equality of variances test, Levene's test is performed.

Levene's Tests	
type	p-value
means	3.09E-05
medians	0.00049
trimmed	2.42E-05

Figure 33: Levene's test (Satisfaction)

The hypotheses used are:

Ho: Population variances across the sub-samples are the same.

H1: Population variances across the sub-samples are different.

P value is less than alpha or <5%, so reject the null hypothesis, which implies that the variances are heterogeneous.

Thus the assumptions for Anova are satisfied, now Anova is performed

Anova model

ANOVA								
Sources	SS	df	MS	F	P value	F crit	RMSSE	Omega Sq
Between	38.13291	9	4.23699	6.234379	1.57E-08	1.891867	0.28092	0.056276
Within Gr	530.1013	780	0.679617					
Total	568.2342	789	0.720195					

Figure 34: Anova (Satisfaction)

P value is less than alpha or $<5\%$, so reject the null hypothesis, hence we can say the population means are significantly different.

Kruskal–Wallis model

[illegible]

In KW test, P value is less than alpha or $<5\%$, so reject the null hypothesis, Hence we can say the population means are statically significantly different using Kruskal–Wallis model.

Interpretation from Anova

The variables related to satisfaction differ significantly in their mean.

Factor analysis

Motivation and satisfaction are having 15 and 10 variables respectively. The dimension is huge for analysis, to make it simple, it is better to reduce the dimensions in the data.

Factor analysis on Motivation variables

All the variables (15 variables) related to the motivation are taken for calculation. All the variables are interval scaled. For factor analysis the sample size should be less than 100, data set taken has sample size less than 100. Also, from Anova it is noticed that data set variables are differed mean. In order to reduce the dimension, the correlation among the variables have to be checked.

Figure 35: Kruskal–Wallis (Satisfaction)

[illegible]

Figure 36: Corelation matrix (Motivation)

From correlation matrix it is noticed that it is nearly similar to identity matrix.

KMO																	
	[It is esse	[I seek th	[Autonom	[The invest	[It is signi	[The pres	[The enco	[The inve	[The impc	[The inter	[Attendin	[Attendin	[The pres	[You feel	[Constant Faculty de		
	0.471071	0.569772	0.679499	0.9110522	0.748104	0.776413	0.756637	0.866667	0.752165	0.801589	0.811703	0.842759	0.756693	0.779113	0.839493	0.779246	

Figure 37: KMO (Motivation)

KMO test shows that value <0.7 is not significantly or inadequately contributed in the population.

So important variable contributed for motivation are

- The investment made by management on Faculty Development programmes plays a crucial role in Job motivation.
- It is significant to them to project their capability to perform interesting and diverse work in their role.
- The presence or absence of opportunities for promotion and advancement affects their motivation.
- The encouragement given by the management to participate in the faculty development events boosts to their employer loyalty.
- The investment on faculty development keeps them focused on the teaching assignment at its best.
- The importance given by the management for the faculty development stresses them to be more responsible in their role.
- The intention of faculty development motivates them to deliver the best in the classrooms.
- Attending faculty development programs helps them to build their self-confidence.
- Attending faculty development programs helps them to learn from colleagues from other institutes.
- The presence or absence of their performance recognition affects the motivation.

- Feel encouraged to come up with new and better ways of doing things as a result of faulty development initiatives and investments.
- Constant Faculty development investment helps them enhance their performance constantly.

Scree Plot			
	eValue	%	Cum %
	5.345542	35.64%	35.64%
	1.641401	10.94%	46.58%
	1.255319	8.37%	54.95%
	0.951608	6.34%	61.29%
	0.899146	5.99%	67.29%
	0.846617	5.64%	72.93%
	0.824907	5.50%	78.43%
	0.672186	4.48%	82.91%
	0.573131	3.82%	86.73%
	0.520663	3.47%	90.20%
	0.448587	2.99%	93.19%
	0.371388	2.48%	95.67%
	0.277196	1.85%	97.52%
	0.21924	1.46%	98.98%
	0.153069	1.02%	100.00%

Figure 38: Screeplot(Motivation)

From scree plot it is noticed that three clusters can be formed, as three eigen values are greater than value one.



Figure 39: Screeplot graph(Motivation)

From graphical representation of the scree plot, contribute more than 5% as shown in y axis. So three elbow occurs after three scale in x axis which clusters can be formed.

Factor Matrix (rotated Varimax)			
	1	2	3
[It is essential to update about innovative and attractive teaching pedagogies methods]	-0.13009	-0.74106	0.274037
[I seek the opportunities to acquire updated information on teaching skills and knowledge]	0.114435	-0.8278	-0.01823
[Autonomy and discretion in performing your role motivates you]	0.228633	-0.16353	0.657655
[The investment made by management on Faculty Development programmes plays a crucial role in Job motivation]	0.429398	0.109445	0.575711
[It is significant to you to project your capability to perform interesting and diverse work in your role]	0.335852	-0.47595	0.144129
[The presence or absence of opportunities for promotion and advancement affects your motivation]	0.085934	-0.12485	0.792069
[The encouragement given by the management to participate in the faculty development events boosts to your employer loyalty.]	0.614763	0.041784	0.272827
[The investment on faculty development keeps you focused on the teaching assignment at its best]	0.607478	-0.15089	0.37549
[The importance given by the management for the faculty development stresses you to be more responsible in your role]	0.516688	-0.0402	0.075521
[The intention of faculty development motivates you to deliver the best in the classrooms]	0.789568	-0.21682	0.070318
[Attending faculty development programs helps you to build your self-confidence]	0.636201	-0.1294	0.217764
[Attending faculty development programs helps you to learn from colleagues from other institutes]	0.680507	-0.04278	-0.01871
[The presence or absence of your performance recognition affects the motivation]	0.122648	-0.20969	0.742991
[You feel encouraged to come up with new and better ways of doing things as a result of faulty development initiatives and investments]	0.649111	0.003522	0.555867
[Constant Faculty development investment helps you enhance your performance constantly]	0.709662	0.051467	0.366342
	3.832053	1.653604	2.756605

Figure 40: Factor matrix rotated varimax (Motivation)

The variables which is present in different clusters are mentioned in the factor matrix.

Cluster 1 name: Competence with personal encouragement

The variables are present in cluster 1

- The encouragement given by the management to participate in the faculty development events boosts to their employer loyalty.

The investment on faculty development keeps them focused on the teaching assignment at its best.

The importance given by the management for the faculty development stresses them to be more responsible in their role.

The intention of faculty development motivates them to deliver the best in the classrooms.

- Attending faculty development programs helps them to build their self-confidence.
- Attending faculty development programs helps them to learn from colleagues from other institutes.
- Feel encouraged to come up with new and better ways of doing things as a result of faulty development initiatives and investments.
- Constant Faculty development investment helps them enhance their performance constantly.

Cluster 2 name: Opportunities for skill improvement

The variables are present in cluster 2

- It is essential to update about innovative and attractive teaching pedagogies methods.
- I seek the opportunities to acquire updated information on teaching skills and knowledge.

Cluster 3 name: Faculty career growth with recognition

The variables are present in cluster 3

- Autonomy and discretion in performing their role motivates them.
- The investment made by management on Faculty Development programmes plays a crucial role in Job motivation.

· The presence or absence of opportunities for promotion and advancement affects their motivation.

· The presence or absence of their performance recognition affects the motivation.

· Feel encouraged to come up with new and better ways of doing things as a result of faulty development initiatives and investments.

Interpretation from Factor analysis and clustering

The correlation exists between the variables, by that three clusters can be formed. Thus, fifteen variables can be reduced to the three variables. Thus focusing on these three variables is enough to motivate respondents on FDP.

Factor analysis on satisfaction variables

All the variables (10 variables) related to the satisfaction are taken for calculation. All the variables are interval scaled. For factor analysis the sample size should be less than 100, data set taken has sample size less than 100. Also from Anova it is noticed that data set variables are differed mean. In order to reduce the dimension the correlation among the variables have to be checked.

Correlation Matrix										
	[Flexible I	[The pros	[The rang	[Faculty d	[Faculty ir	[The posit	[The mon	[Knowled	[Persister	[The constant updat
[Flexible I	1	0.153596	0.139795	0.1762	0.152404	0.167293	0.281127	0.049639	0.121806	0.087572
[The pros	0.153596	1	0.135159	0.399297	0.202545	0.172856	0.266205	0.184103	-0.00869	0.175186
[The rang	0.139795	0.135159	1	0.330724	0.40476	0.035615	0.244404	0.172616	0.156298	0.114423
[Faculty d	0.1762	0.399297	0.330724	1	0.783293	0.408189	0.496929	0.511755	0.182069	0.207781
[Faculty ir	0.152404	0.202545	0.40476	0.783293	1	0.396859	0.592349	0.544506	0.27547	0.170147
[The posit	0.167293	0.172856	0.035615	0.408189	0.396859	1	0.367755	0.420762	0.112906	0.238425
[The mon	0.281127	0.266205	0.244404	0.496929	0.592349	0.367755	1	0.527792	0.345493	0.177499
[Knowled	0.049639	0.184103	0.172616	0.511755	0.544506	0.420762	0.527792	1	0.260399	0.054023
[Persister	0.121806	-0.00869	0.156298	0.182069	0.27547	0.112906	0.345493	0.260399	1	0.214477
[The cons	0.087572	0.175186	0.114423	0.207781	0.170147	0.238425	0.177499	0.054023	0.214477	1
	0.229396	0.407727	0.439339	1.665184	1.751325	0.765129	1.372125	1.150866	0.394296	8.436232

Figure 41: Corelation matrix (Satisfaction)

From correlation matrix it is noticed that it is nearly similar to identity matrix.

KMO										
	[Flexible I	[The pros	[The rang	[Faculty d	[Faculty ir	[The posit	[The mon	[Knowled	[Persister	[The const
	0.676966	0.62821	0.807492	0.736692	0.72911	0.822882	0.827263	0.835806	0.757202	0.671606

Figure 42: KMO (Satisfaction)

KMO test shows that value <0.7 is not significantly or inadequately contributed in the population. So important variable contributed for satisfaction are,

- The range of investment made by the management for the faculty members to participate in FDPs is optimum.
- Faculty development investment motivates them to have a longer stint/duration with the institute.
- Faculty investment is one of the deterministic factors in enhancing their job satisfaction.
- The position, standing and grade are important to them.
- The monetary and other fringe benefits are the culmination of their development.
- Knowledge availed through Faculty development programmes helps to have a secured job.
- Persistently attending faculty development programmes provides them with updated skill-set and knowledge.

Scree Plot			
	eValue	%	Cum %
	3.606281	36.06%	36.06%
	1.075815	10.76%	46.82%
	1.070914	10.71%	57.53%
	1.020763	10.21%	67.74%
	0.92529	9.25%	76.99%
	0.740504	7.41%	84.40%
	0.514205	5.14%	89.54%
	0.474948	4.75%	94.29%
	0.401931	4.02%	98.31%
	0.169349	1.69%	100.00%
	10		

Figure 43: Screeplot(Satisfaction)

From scree plot it is noticed that four clusters can be formed, as four eigen values are greater than value one.



Figure 44: Scree plot (Satisfaction)

From graphical representation of the scree plot, elbow occurs after four scale in x axis which contribute more than 5% as shown in y axis. So four clusters can be formed.

Factor Matrix (rotated Varimax)				
	1	2	3	4
[Flexible leaders and working conditions are important to you for your best performance]	0.035377	-0.58216	-0.11504	-0.308
[The prospect to accomplish personal goals and achieving the same is crucial for you]	0.281366	-0.36286	-0.66396	-0.1284
[The range of investment made by the management for the faculty members to participate in FDPs is optimum]	0.215562	-0.07436	0.021284	-0.82999
[Faculty development investment motivates you to have a longer stint/duration with the institute]	0.783157	-0.14606	-0.22967	-0.2716
[Faculty investment is one of the deterministic factors in enhancing your job satisfaction]	0.817181	-0.06321	0.020936	-0.343
[The position, standing and grade are important to you]	0.653578	-0.2811	-0.09576	0.373878
[The monetary and other fringe benefits are the culmination of your development]	0.701567	-0.26731	0.107694	-0.19274
[Knowledge availed through Faculty development programmes helps to have a secured job]	0.830339	0.093801	0.097189	0.023371
[Persistently attending faculty development programmes provides you with updated skill-set and knowledge]	0.287161	-0.35405	0.722842	-0.16053
[The constant update on the teaching methodology helps you to be effective handling of the classes]	0.11598	-0.76973	0.097357	0.133023
	3.112742	1.378529	1.069906	1.212596

Figure 45: Factor matrix rotated varimax (Satisfaction)

The variables which is present in different clusters are mentioned in the factor matrix.

Cluster 1 name: Benefits which are derived from FDP's

The variables present in cluster 1 are

- Faculty development investment motivates them to have a longer stint/duration with the institute.
- Faculty investment is one of the deterministic factors in enhancing their job satisfaction.
- The position, standing and grade are important to them.
- The monetary and other fringe benefits are the culmination of their development.
- Knowledge availed through Faculty development programmes helps to have a secured job.

Cluster 2 name: Acquiring or polishing new skills

The variables present in cluster 2 are

- Flexible leaders and working conditions are important to them for their best performance.
- The constant update on the teaching methodology helps them to be effective handling of the classes.

Cluster 3 name: Positive contribution towards carrier

The variables present in cluster 3 are

- The prospect to accomplish personal goals and achieving the same is crucial for them.
- Persistently attending faculty development programmes provides them with updated skill-set and knowledge.

Cluster 4 name: Return on investment

The variable present in cluster 4 is

- The range of investment made by the management for the faculty members to participate in FDPs is optimum.

Interpterion from Factor analysis and clustering

The correlation exists between the variables, by that four clusters can be formed. Thus, ten variables can be reduced to the four valuables. Thus, focusing on these four variables is enough to get satisfaction on FDP.

Mann-Whitney Test

This test is done to test the gender preference with respect to motivation and satisfaction towards FDP.

Mann-Whitney Test for motivation

The hypotheses used are:

Ho: The motivation is not related significantly with gender.

H1: The motivation is related significantly with gender.

Mann-Whitney Test for Two Independent Samples			
	Gender	Moivation	
count	79	79	
median	1	4.466667	
rank sum	3160	9401	
U	6241	0	
	one tail	two tail	
alpha	0.05		
U	0		
mean	3120.5		
std dev	284.5584	ties	
z-score	10.96611		
effect r	0.872417		
U-crit	2652.443	2562.776	
p-value	0	0	
sig (norm)	yes	yes	

Figure 46:Mann-Whitney Test (Motivation)

The p value is less than 5%, hence null hypothesis is rejected. Thus there is a significant relation with respect to gender and motivation to FDP program. That is motivation factors with respect to FDP for male and female are different.

Mann-Whitney Test for satisfaction

The hypotheses used are:

Ho: The satisfaction is not related significantly with gender.

H1: The satisfaction is related significantly with gender.

Mann-Whitney Test for Two Independent Samples			
	Gender	Satisfacation	
count	79	79	
median	1	4.3	
rank sum	3160	9401	
U	6241	0	
	one tail	two tail	
alpha	0.05		
U	0		
mean	3120.5		
std dev	284.4868	ties	
z-score	10.96887		
effect r	0.872637		
U-crit	2652.561	2562.916	
p-value	0	0	
sig (norm)	yes	yes	

Figure 47:Mann-Whitney Test (Satisfaction)

The p value is less than 5%, hence null hypothesis is rejected. Thus there is a significant relation with respect to gender and satisfaction to FDP program. That is satisfaction factors with respect to FDP for male and female are different.

Regression analysis

Considering the variables of motivation and satisfaction, taking one of the variables as dependent variable and other variable as independent variable, multiple linear regression is performed.

Multiple linear regression on motivation

Dependent variable: The intention of faculty development motivates them to deliver the best in the classrooms.

Independent variable: remaining 14 variables of motivation.

Sample size: 79

Dependent and independent variables do not show variation as standard deviation of all variables is greater than zero.

Descriptive Statistics	0.535346	0.657516	0.70123	0.494598	0.69868	0.763284	0.644805	0.83166	0.750223	0.741062	0.676733472	0.811912	0.70791	0.799627
Mean	4.632911	4.518987	4.367089	4.683544	4.35443	4.329114	4.240506	3.974684	4.227848	4.392405	4.481012658	4.265823	4.316456	4.278481
Standard Error	0.060231	0.073976	0.078895	0.055658	0.078608	0.085876	0.072546	0.093569	0.084404	0.083376	0.076138464	0.091347	0.079646	0.089965
Median	5	5	5	5	5	4	4	4	4	5	5	5	4	4
Mode	5	5	5	5	5	4	4	4	4	5	5	5	4	4
Standard Deviation	0.535346	0.657516	0.70123	0.494598	0.69868	0.763284	0.644805	0.83166	0.750223	0.741062	0.676733472	0.811912	0.70791	0.799627
Sample Variance	0.286595	0.432327	0.491723	0.244726	0.488153	0.582603	0.415774	0.691659	0.562804	0.549172	0.457968192	0.659202	0.501136	0.639403
Kurtosis	0.113423	1.772675	0.462423	0.026567	1.631373	3.231567	0.769012	0.422444	0.414956	0.23034	1.284833945	0.474951	1.31416	1.312818
Skewness	-1.06941	-1.32091	-0.88296	-1.12715	-1.07998	-1.35129	-0.56414	-0.77521	-0.777	-0.97608	-1.20277356	-0.97046	-0.98674	-1.16727
Range	2	3	3	2	3	4	3	3	3	3	3	3	3	3
Maximum	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Minimum	3	2	2	3	2	2	2	2	2	2	2	2	2	2
Sum	366	357	345	370	344	342	335	334	334	347	354	337	341	338
Count	79	79	79	79	79	79	79	79	79	79	79	79	79	79
Geometric Mean	4.599138	4.462506	4.303224	4.655298	4.288195	4.238139	4.186794	3.871828	4.151771	4.320537	4.421237818	4.174039	4.248539	4.186444
Harmonic Mean	4.562079	4.392956	4.228368	4.62439	4.205856	4.089733	4.125326	3.747036	4.061697	4.235925	4.348623853	4.061697	4.165202	4.08867
AAD	0.483156	0.572344	0.608877	0.440635	0.588367	0.628425	0.519148	0.546707	0.605993	0.64605	0.591251402	0.669124	0.588367	0.639321
MAD	0	0	1	0	1	1	0	0	1	0	0	1	1	1
IQR	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1

Figure 48: summary statistics (Motivation)

Assumptions:

1. The regression model can be expressed linearly
2. The regression model's expected mean error is zero,
3. The errors' variance is constant (homoscedasticity), and
4. The errors are independent (no autocorrelation).

Multicollinearity is not present as variance inflation factors for all variables are less than 10.

Regression Analysis									
OVERALL FIT									
Multiple R Square Adjusted R Square Standard Error Observations	0.761288	AIC	-84.8673						
	0.57956	AICc	-76.0931						
	0.487589	SBC	-49.3255						
	0.537017								
	79								
ANOVA									
						Alpha	0.05		
Regression	df	SS	MS	F	p-value	sig			
Residual	14	25.44195	1.817282	6.301534	1.09E-07	yes			
Total	64	18.45678	0.288387						
	78	43.89873							
Intercept									
	coeff	std err	t stat	p-value	lower	upper	vif		
	-0.77122	0.911619	-0.84599	0.40071	-2.59239	1.049947			
	-0.00123	0.156975	-0.00782	0.993783	-0.31482	0.312367			
	0.33927	0.130903	2.591761	0.011816	0.077761	0.600779			
	-0.16959	0.137432	-1.23399	0.221721	-0.44414	0.104963			
	0.09811	0.112085	0.875317	0.384675	-0.12581	0.322024			
	-0.04491	0.144429	-0.31093	0.756868	-0.33344	0.243624			
	-0.03525	0.122142	-0.28863	0.773797	-0.27926	0.208753			
	-0.18728	0.1131	-1.65589	0.102639	-0.41322	0.038662			
	0.212007	0.130337	1.626609	0.108734	-0.04837	0.472384			
	0.204526	0.08411	2.431652	0.01784	0.036497	0.372555			
	0.04936	0.116915	0.42219	0.674301	-0.1842	0.282925			
	0.210179	0.107806	1.949611	0.055607	-0.00519	0.425545			
	-0.07816	0.108194	-0.72244	0.472658	-0.29431	0.137979			
	0.219465	0.175078	1.253524	0.214575	-0.13029	0.569224			
	0.341498	0.117811	2.898702	0.005127	0.106144	0.576851			

Figure 49: Regression (Motivation)

When model is built, the factors responsible for faculty development motivation to deliver the best in the classrooms are variable with p value less than 5%. They are,

- I seek the opportunities to acquire updated information on teaching skills and knowledge
- The importance given by the management for the faculty development stresses them to be more responsible in their role
- Constant Faculty development investment helps them enhance their performance constantly

Model is given below

$$Y = \text{Intercept} + mx_1 + mx_2 + mx_3 + \text{constant}$$

Model equation is,

Faculty development motivation to deliver the best in the classrooms = $-0.77 + (0.33)$ seek the opportunities to acquire updated information on teaching skills + (0.20) importance given by the management for the faculty development stresses them to be more responsible in their role + (0.34) Faculty development investment helps them enhance their performance constantly + Constant

R squared is 0.579, that is 58% of the dependent variable is explained by independent variables. Thus 58% increase of the motivation can be increased by focusing on above three variables.

Multiple linear regression on satisfaction

Dependent variable: Faculty investment is one of the deterministic factors in enhancing their job satisfaction.

Independent variable: remaining 9 variables of satisfaction.

Sample size: 79

Dependent and independent variables do not show variation as standard deviation of all variables is greater than zero.

Descriptive Statistics																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</
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Figure 50: Summary statistics (Satisfaction)

3. The errors' variance is constant (homoscedasticity), and
4. The errors are independent (no autocorrelation).

1. The regression model can be expressed linearly
2. The regression model's expected mean error is zero,

Multicollinearity is not present as variance inflation factors for all variables are less than 10.

Regression Analysis									
OVERALL FIT									
Multiple R	0.846304								
R Square	0.716231	AIC	-114.178						
Adjusted R Square	0.679217	AICc	-110.238						
Standard Error	0.457692	SBC	-90.4837						
Observations	79								
ANOVA									
			Alpha	0.05					
	df	SS	MS	F	p-value	sig			
Regression	9	36.48244	4.053604	19.35059	1.12E-15	yes			
Residual	69	14.45427	0.209482						
Total	78	50.93671							
Intercept									
	coeff	std err	t stat	p-value	lower	upper	vif		
	0.998518	0.60325	1.655229	0.10242	-0.20493	2.201969			
	-0.04441	0.086806	-0.51159	0.61057	-0.21758	0.128764	1.136503		
	-0.15657	0.080373	-1.94809	0.055473	-0.31691	0.003766	1.242838		
	0.112451	0.052416	2.14536	0.035446	0.007884	0.217017	1.172734		
	0.533496	0.075658	7.051462	1.07E-09	0.382564	0.684429	1.868465		
	0.21454	0.083028	2.583936	0.011888	0.048903	0.380177	1.791213		
	0.070498	0.074175	0.950435	0.345209	-0.07748	0.218472	1.751388		
	0.040819	0.068955	0.591974	0.555803	-0.09674	0.17838	1.222797		
	-0.01703	0.090481	-0.18817	0.851296	-0.19753	0.163478	1.161544		
	0.055501	0.081329	0.682434	0.497249	-0.10674	0.217747	1.413267		

Figure 51:Regression (Satisfaction)

When model is built, the factors responsible for faculty development helping towards job satisfaction are variable with p value less than 5%. They are,

- The range of investment made by the management for the faculty members to participate in FDPs is optimum
- Faculty development investment motivates them to have a longer stint/duration with the institute
- The monetary and other fringe benefits are the culmination of their development

Model is given below

$$Y = \text{intercept} + mx_1 + mx_2 + mx_3 + \text{constant}$$

Model equation is faculty development is helping towards job satisfaction = $0.99 + (0.11)$ range of investment made by the management for the faculty members to participate in FDPs is optimum + (0.53) Faculty development investment motivates them to have a longer stint/duration with the institute + (0.21) The monetary and other fringe benefits are the culmination of their development + Constant

R squared is 0.7162, that is 71% of the dependent variable is explained by independent variables. Thus 71% increase of the satisfaction can be increased by focusing on above three variables.

Findings and suggestions

- The investments made by management on Faculty Development programmes plays a crucial role in Job motivation, and offers assistance in updating innovative and attractive teaching pedagogies in the organization, apart from updating skills and knowledge.
- It is significant to them to project their capabilities to perform interesting and diverse work beyond the scope of their role, provided there are good working conditions to bring out the best outcomes.
- There is also a stated requirement for an increase in the optimum investments made by the management for participation in FDIs.

The investments and programs help in seeking opportunities to acquire updated teaching skills, and help in deployment of flexible leadership performance excellence.

- The encouragement given by the management to participate in the faculty development events is a crucial factor, and boosts employer loyalty.
- The investment on faculty development keeps them focused on delivery of the teaching assignment, at its best.
- The importance given by the management for the faculty development stresses them to be more responsible in their roles.
- Faculty development motivates them to deliver the best in the classrooms.
- Attending faculty development programs helps them to build their self-confidence.
- Attending faculty development programs helps them to learn from colleagues from other institutes.
- The presence or absence of their performance recognition affects the motivation.
- Feel encouraged to come up with new and better ways of doing things as a result of faculty development initiatives and investments.
- Constant Faculty development investment helps them enhance their performance constantly and delineate that lateral and vertical growth and development opportunities are important for the faculty to stay motivated.
- The presence or absence of opportunities for promotion and advancement affects their motivation severely, while autonomy and discretion played a key role in their performance.
- Most of the faculty development initiatives have been evident in the growth trajectories of their careers, and in securement of jobs amongst the faculty, which in turn helps in scaling up the professional ladder within the organization.

Suggestions

- Managements of academic institutions especially the management institutes shall consider the cost on faculty development as investments rather than expenditure as it is going to yield the returns in the future.
- An increase in the optimum investments made by the management for participation in FDIs is feasible for the organization.
- Specific faculty development programmes on the core domain of the faculty members must be provided in regular intervals of time in order to keep the faculty members up-to-date.
- Impact analysis must be done periodically by providing suitable opportunities to the faculty members to encash their learning and experiences in the FDPs.
- Suitable technical upgradation in the FDPs should be adopted for smooth learning.

Scope for further research

There is always another step-in learning to upgrade and update the knowledge. In this research the study is on the impact of Faculty Development Investment on enhancing Job Motivation and Satisfaction among the management faculty members in South India. The study can be enhanced to the entire country level and specific academics i.e. engineering, medical, para medical, social sciences etc.

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A study on the impact of Faculty Development Investment on enhancing Job Motivation and Satisfaction among the management faculty members in South India

Name (Optional):

Designation:

Name of the institute:

Highest Educational Qualification:

Experience in years:

Experience with the present

Organization: Less than 1 year ☐ 1-3 years ☐ 3-5 years ☐ Above 5 years ☐

Annual FDP investment: Less than 10,000 ☐ 10,000-50,000 ☐ 50,000-1,00,000 ☐ Above 1,00,000 ☐

Given below are some statements to record your opinion on Faculty Development Investment impact on job motivation and satisfaction. Indicate your opinion on the statement in the rating scale as given below

a. Strongly agree(SA) b. Agree(A) c. Neutral(N) d. Disagree(D) e. Strongly disagree (SD)

S. No	Statement	SA	A	N	D	SD
1.	It is important to you to be able to do interesting and varied work and express your creativity					
2.	It is essential to update about new teaching pedagogies and methodologies					
3.	I value the opportunity to acquire new knowledge and skills					
4.	Flexible leaders and working conditions are important to you					

5.	Freedom and discretion in how you do your job motivate you					
6.	The opportunity to attain personal goals and achieve is important to you					
7.	The investment on Faculty Development plays a crucial role in Job motivation					
8.	The constant update on the teaching methodology helps you to be effective in handling the classes					
9.	The positive attitude of management on faculty development leads to your job satisfaction					
10.	The investment on faculty development keeps you focused on the teaching assignment					
11.	The intention of faculty development motivates you to deliver the best in the classrooms					
12.	Attending faculty development programs helps you to learn from colleagues from other institutes					
13.	Faculty development investment motivates you to have a longer stint/duration with the institute					
14.	Faculty investment is one of the deterministic factors in enhancing your job satisfaction					
15.	The position, standing and grade are important to you					
16.	The presence or absence of opportunities for promotion and advancement affects your motivation					
17.	The presence or absence of recognition for your personal contribution affects the motivation					
18.	You feel encouraged to come up with new and better ways of doing things as a result of faulty development initiatives and investments					
19.	The monetary and the benefits package are important to you					
20.	Faculty development investment helps you enhance your performance directly and subsequently helps to have a secured job					