

**COST-BENEFIT ANALYSIS OF JESUIT HIGHER
EDUCATION IN INDIA: WITH SPECIAL
REFERENCE TO WEST BENGAL**



**Thesis submitted to the Degree of
Doctor of Philosophy (Commerce)**

**In
Commerce**

**by
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LIST OF ABBREVIATIONS

B.A.	-	Bachelor of Arts
B.Com.	-	Bachelors of Commerce
B.Sc.	-	Bachelors of Science
BGC	-	Bhairab Ganguly College
CGPA	-	Cumulative Grade Point Average
CMS	-	Church Missionary Society
CPE	-	Centre of Potential for Excellence
D.f.	-	Degree of Freedom
EDA	-	Exploratory Data Analysis
e-LMS	-	Electronic Learning Management System
Fr.	-	Father
GER	-	Gross Enrolment Ratio
HEI	-	Higher Education Institute
ISC	-	Intermediate Science
JHEI	-	Jesuit Higher Education Institutions
K-S test	-	Kolmogorov–Smirnov test
LR	-	Likelihood Ratio
LRT	-	Likelihood Ratio Test
M.A.	-	Masters in Arts
MCQ	-	Multiple Choice Questions

MoE	-	Ministry of Education
NAAC	-	National Assessment and Accreditation Council
NCTE	-	National Council for Teacher Education
NIRF	-	National Institutional Ranking Framework
OBC	-	Other Background Categories
PG	-	Postgraduate
Rev.	-	Reverend
SJ	-	Society of Jesus
UG	-	Undergraduate
UGC	-	University Grants Commission
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
VUCA	-	Volatile, Unsure, Advanced and Ambiguous

CHAPTER 1

INTRODUCTION

1.1 Brief Overview of the Education System

1.1.1 Global Perspective

Global education entails studying the cultures, history, geography, and contemporary concerns of every continent. It highlights how diverse and linked all peoples and their history are. The development of students' intercultural communication skills and the promotion of global citizenship among students are two benefits of global education. It is a lens that may be utilised across all subject areas, all grade levels, and the larger academic community. In the twenty-first century, where boundaries between people and nations are still being broken down, global learning is crucial. This fact is also reflected in the variety of the current communities. As a result, instructors play a crucial role in helping students develop into more knowledgeable and caring citizens.

In collaboration with “United Nations Educational, Scientific and Cultural Organization” (UNESCO), the portal for “International Association of Universities World Higher Education Database” (IAU WHED) offers data on 196 nations and territories' higher education systems, certifications, and more than 20,000 institutions that are formally authorised or recognised (hereafter, HEI). According to the World Bank in 2021 there were around 220 million tertiary education students in the world, up from 100 million in 2000¹.

1.1.2 Brief Overview of the Education System – Indian Perspective: Past vs. Present

India's early civilization centered the teaching and learning process around the "Gurukul System," which is when education first emerged in the country. It was a residential concept where students were taught in many branches of science, philosophy, and religion under the direction of a "Guru." The mediaeval colleges that arose in Europe much later are said to have had a striking similarity to these places.

¹ <https://www.worldbank.org/en/topic/education>

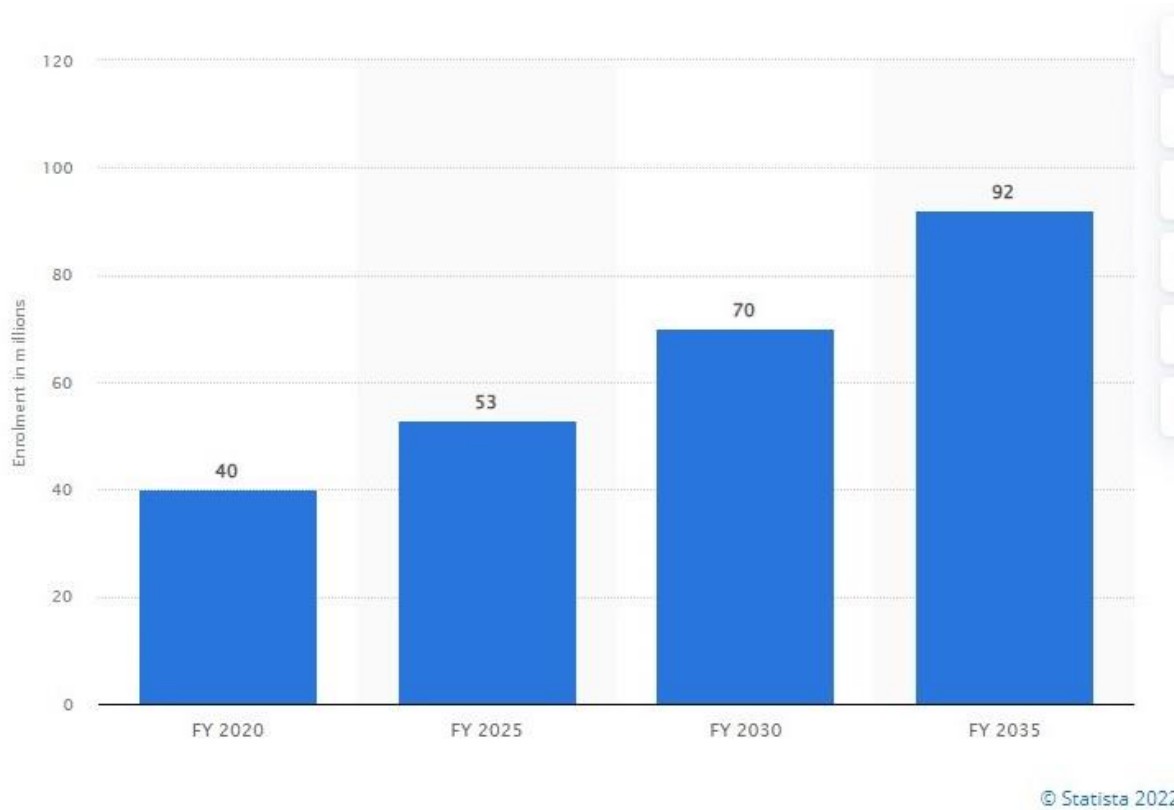
Due to later invasions and general chaos in the nation, India's first educational system gradually became muddled. Early modern India benefited from the Islamic influences, which also introduced the fields of geography, administration, law, and Arabic mathematics.

The European rulers brought about a significant shift in the design of higher education. The British built a systematic system of higher education centred on languages, literature, history, and philosophy. These learning institutes were designed to produce English-speaking working-class people for the British administrative services, army, and trade. The British model of the university system, influenced by the University of London, continued to spread across India, resulting in an increasing number of higher learning institutions by 1947.

Following independence, India's higher education system expanded. Today, India is on the path to economic prosperity and modernity. It expects high-tech businesses to lead the country to prosperity, including information technology and biotechnology. The higher education system in India currently benefits from a number of positive characteristics. The third-largest in the world, India's higher education market is sizable. It has a long academic legacy and employs English as the primary language of higher education and research. Academic freedom is valued, and a limited number of excellent schools can serve as the cornerstone of a high standard of education. Around 5% of those who were eligible for higher education were enrolled in 132 universities and 4,738 institutions by 1980. In comparison to both the United States and Europe, India has four times as many institutions as each of those continents. However, the system is plagued with problems due to the way of higher education as it is the State Government, not Central Government, that manages important responsibilities for higher education and provides for a variety of policies and methods.

According to All India Survey for Higher Education (AISHE), out of over 55 thousand HEI, there are 1,043 universities as of 2020 listed on the AISHE portal that is empowered to award degrees (AISHE, 2021). There were over 40 million students in higher education in India in the year 2020. By 2035, 92 million people are projected to be living in this country. In addition, India's higher education's gross enrolment ratio was 27.1% in 2021. (Statista, 2022).

Figure 1.1. Existing and projected student enrolment in India over the period from 2020 - 2035



1.2 Overview of Jesuit Education in India

At the present moment, this rapidly changing world demands not just quality education but also the enhancement in the knowledge, skills, and personalities of individuals. In this context, Jesuit education has been the needed tonic to provide the impetus to societal needs. The term "Jesuit education" can be traced back to the 15th century. St. Ignatius of Loyola, a soldier turned spiritual mystic and later canonized as a saint in the Catholic Church, laid the foundation of the "Society of Jesus". St. Ignatius founded the Society with his companions, St. Francis Xavier and St. Peter Faber. The Society established several Jesuit institutions, hence, ultimately giving birth to Jesuit education. "Jesuits" are the Catholic priests belonging to the "Society of Jesus". The society was approved as a religious order by the then Pope Paul III in 1540. The ultimate vision of the Society is to find God in all things. Jesuits not only practice their religion to an inexorable extent but also undertake myriad works aimed at the betterment of society which include education, charity, and many other social services with the greatest of conviction. Jesuits are not only priests, chaplains, and educators, myriad Jesuits are also specialized doctors, astronomers, and renowned lawyers. Jesuits are different in their approach from other

religious practitioners and people in that they are ready to undertake any kind of activity in any corner of the world, but they are especially known for their way of education.

There are certain principles or values of the Jesuits. The first one is “Magis” meaning more. This is the challenge to strive for excellence, the second one is "Men and Women for Others" which implies sharing gifts, pursuing justice, and having concern for the poor and marginalized. The third one is "Cura Personalis" which means regard for the individual, each person's status as a child of God, and all of God's creatures. The fourth one is Unity of Heart, Mind, and Soul which aims at fostering holistic development and integrating all facets of our life, the fifth one is the most important one which is “*Ad Majorem Dei Gloriam (AMDG)*” meaning for the Greater Glory of God and the last but a very strong principle is “Forming and Educating Agents of Change” which an objective of teaching moral and ethical behaviour that reflects critical thinking and responsible conduct.

After the death of St. Ignatius, it was Rev. Fr. Claudio Aquaviva, S.J. the elected fifth general of the Society of Jesus in 1581, gave a practical shape to the directives of St. Ignatius. After an appropriate review by Rev. Fr. Aquaviva and his team of 6 advisers, this draft was revised in 1591, and a properly structured and organized version was successfully promulgated by him in the year 1599. The quality of education they have been providing to society all over these years is inimitable and its relevance is ineluctable. Jesuit education has been largely influenced and guided by the "Ratio Studiorum" of 1599 which means "Plan of Studies." It initially appeared under the title "Ratio atque Institutio Studiorum Societatis Iesu” meaning “The Official Plan for Jesuit Education" and relied on classical subjects. This document is a set of regulations for the administrators, teachers, and students belonging to Jesuit institutions. The Fourth Part of the Constitution which St. Ignatius wrote deals with the Jesuits' own training and with their institutions. Its 13th chapter contains particulars of schedules, curricula, and pupil exercises. The Ratio Studiorum continued to guide Jesuit institutions until it got suppressed in 1773. After a long hiatus, it got restored in the year 1832. It was St. Francis Xavier who ensured that Jesuit education, spread to many other parts of the world, namely, Japan, India, and Sri Lanka. The first Jesuit institution in India also founded by St. Francis was St. Paul's College in Goa in the year 1532.

In this regard it is pertinent to mention that there was Jesuit presence in Mughal court. In 1576, Father Julian Pereira, Vicar-General of Bengal, suggested to Akbar about the presence of the Jesuits to his court. Fathers Antony Vaz and Peter Dias, two Jesuits who arrived in Bengal in

1576 at the invitation of the Bishop of Cochin, gave Akbar his first understanding of the Christian way of life and faith. In 1580, the first Jesuit mission arrived and spent roughly two years at the Fatehpur Sikri. Emperor Akbar was a religious man and tolerant ruler. Historians observe that he never for a moment forgot God. The Jesuits discussed Christianity with Akbar and engaged the ulema in a discussion about its benefits. Akbar was really intrigued by this information and wanted to learn more about the religion that placed such a high value on integrity. Akbar's ambassador arrived in Goa in September 1579 with a letter requesting the dispatch of two scholarly priests to Akbar's court. To paraphrase Akbar's letter: "... I am sending Abdullah, my ambassador, and Dominic Perez (an Armenian Christian, the interpreter) with the request that you will send me two learned Fathers and the books of Law, especially the Gospel, that I may know the Law and its excellence..."². He hoped they would impart to him and his Muslim and Hindu courtiers first hand understanding of the Christian faith. Among the Goan Jesuits, the invitation inspired high aspirations. Father Rui Vicente, the Provincial, picked three Jesuits to work on the project. Father Rudolf Acquaviva, the mission's leader, Father Antony Monserrate, and Brother Francis Henriques, were his companions.

Father Monserrate is credited as being India's first Jesuit geographer. When the crew departed Goa for the Mughal mission, he was told to keep a record of everything that happened, which he did scrupulously, adding much to its value with his geographical and astronomical observations. In 1580, while travelling from Surat to Fatehpur Sikri, he conducted a survey and recorded latitude readings. When Akbar marched to Kabul against his half-brother Mirza Muhammed Hakim in 1581, he brought Father Monserrate with him to continue the education of his second son Murad. Father Monserrate was urged by Akbar to make observations on route. In 1582, Francis Henriques and Father Monserrate left the court, while Father Acquaviva stayed back. It is pertinent to mention here that Fr. Monserrate's writings were used later in 1804, by Francis Wilford of the Bengal Engineers, to create an important map of the nation's west of Delhi.

In 1583, Father Acquaviva returned to Goa and would eventually die as a martyr in Goa and be hailed as blessed. In 1591 and 1595, two further missions were dispatched to the Mughal

² Jesuit mission at the court of Mughal emperor by Fr. J. Felix Raj, SJ in Telegraph published on 31 July 2021. <https://www.telegraphindia.com/west-bengal/calcutta/jesuit-mission-at-the-court-of-mughal-emperor/cid/1824645>

court in Lahore. On Akbar's request, a second expedition consisting of Father Edward Leita, Father Christopher de Vega, and Brother Stephen Riberio arrived in Lahore in 1591.

Father Manuel Pinheiro, Brother Bento de Goes, and Father Jerome Xavier, Francis Xavier's grand-nephew, arrived in Lahore on a third mission in May 1595. This time, Akbar granted them permission to establish churches in Lahore and Agra as well as to start schools. Father Xavier was given the task of translating the Dastan-i-Masih, or Life of Christ, into Persian by Akbar in 1602.

The Jesuits quickly came to believe that their efforts were in vain and that Akbar was using them to further his own agenda. The presence of Jesuit missionaries in Akbar's court benefitted art, literature, and history in India as well as in Europe. Islam and Christianity were better understood and communicated with by the first Jesuit mission. It signalled a significant interreligious dialogue in India, which Jesuits still pursue today.

Akbar had a son via adoption named Mirza-Zul-Qarnain (Zulcarnen), the first child of Armenian knight Mirza Iscandar who served in Akbar's court. A Jesuit College in Agra was founded by Mirza-Zul-Qarnain. He was raised in the palace by Queen Mariam and played with Jahangir and Shah Jahan as a young child. He served as the governor of Bengal, Sambar, Mogor, Babrich (Oudh), and Lahore. He was loved by both Jahangir and Shah Jahan, who recognised his steadfast faith and moral character as well as his administrative prowess. He constructed a church in Mogor. He consistently provided financial support to the Jesuits. He gave them a sizable quantity of money to start a mission in Tibet, to donate to the college in Agra, and to buy land in Salsette (Mumbai). He would send significant quantities of money to the Jesuits on all holy occasions throughout the year to be given as alms to the underprivileged Christians.

Shah Jahan's disputes with the Portuguese lead to the Jesuit priests' persecution. However, their release in 1635 was contingent upon the church being demolished. It was afterwards rebuilt in 1636. The church's next setback occurred when Ahmad Shah Abdali's forces plundered the building. However, in 1769, it acquired a new patron in the person of the European explorer Walter Reinhardt, who contributed to the church's reconstruction and expansion. This chapel is likely where he christened his wife, who would eventually go by the name Begum Samru. A new church was built in 1848 as a result of the congregation's quick growth. The majestic Cathedral of the Immaculate Conception is this structure, located near to Akbar's church and

commanding what is now a sizable complex of ecclesiastical structures. The cathedral has a Baroque facade on the front and, from the inside, resembles an enlarged replica of Akbar's Church with the same curving ceiling appearance. The altar in the two places of worship differs from one another. The Catholic Archdiocese of Agra is currently headquartered at the cathedral.

Even today, in the 21st century world, the gargantuan role and relevance of Jesuit education is no hidden secret. At present, there are 574 Jesuit institutions all over the world. This massive number of Jesuit institutions can be disintegrated into 190 Jesuit colleges and universities as well as technical and management institutions and 384 Jesuit higher secondary schools. The Association of Jesuit Colleges and Universities headquartered in Washington, USA, is a national consortium linking 28 Jesuit colleges and universities and 190 Jesuit institutions of higher learning all over the world. It is devoted to developing and organising joint activities, exchanging resources, and promoting Jesuit higher education at the national and worldwide levels in order to advance academic excellence. Another similar kind of organized body called The International Commission on the Apostolate of Jesuit Education (ICAJE) acts as a committee of advisors to the Secretariat for Education to Rev. Fr. General who is the current Superior General of the Society of Jesus with specific quality service in the field of education. ICAJE established in the year 1980, has also played a crucial part in establishing documents like "The Characteristics of Jesuit Education" and "Ignatian Pedagogy: A Practical Approach." The implementation of Jesuit education across the globe has benefited greatly from both publications. Not even this, an organized body to regulate Jesuit education in South Asia has also been developed in the year 1961 which is called The Jesuit Educational Association, officially titled as Jesuit Conference of India-Educational Section. It was constituted to provide Jesuits with a venue for reflection on the Society's educational apostolate in the perspective of changing situations in South Asia. The Jesuit Education Apostolate (JEA) represents all Jesuit educational institutes in South Asia.

In India, the presence of Jesuit institutions is synonymous in almost every state. In India, there are 52 university colleges, 17 institutes of business administration, and 220 high schools educating more than 3,60,000 students. Jesuit education is not only aimed at providing rich quality education to its students but also ameliorating the overall development of the students by teaching them moral values and being "men and women for others" thus instilling in them a spirit of being competent for serving the society in the long run. Jesuit education is strongly

based on crucial aspects of love, freedom, liberty, justice, equality, and fraternity. Jesuit institutions cater to all categories of students irrespective of caste, creed, religion, etc. Special preferential treatments are provided to the minority and underprivileged sections of society. There are more than 20,563 Jesuits spread all across the world who have taken the conceivable amount of works of any kind intending to serve the people's needs with the ultimate goal of "*Ad Majorem De Gloriam*" which means "for the greater glory of God." and developing individuals with Competence, Conscience, Compassion, and Commitment, sometimes known as the 4Cs of Jesuit education.

1.3 Overview of Higher Education in the state of West Bengal

Higher Education is a long-term investment in human capital, enabling people to learn and reflect resulting in the cultural, social, and economic development of a nation. It is a no-brainer that India has established itself as a hub of high-quality education terrain. Higher Education is not only attaining higher educational qualifications in colleges and universities but also imparting in-depth knowledge and understanding among the students so that they advance to the new frontiers of knowledge pools. Since the National Policy of Education (NPE, 1986) and the Programme of Action (PoA, 1986) document came into force, these two education-based bodies have debated setting up a council for enhancing the quality of education.

In the backdrop of the persistent percolation of education on Indian shores, the state of West Bengal has emerged as a crux state where education has become a synonym for religion. West Bengal is the place where imminent world-famous figureheads were born who metamorphosed the sphere of education. Be it, Rabindranath Tagore or Ishwar Chandra Vidyasagar, Sarat Chandra Chattopadhyay or Bankim Chandra Chatterjee, or myriad such personalities who have contributed to the field of education, West Bengal is famous for producing such figureheads. Education and an innate urge to learn have long been in the genes of the people of West Bengal albeit the system of modern education has been developed by the British and social reformists of India. Education in West Bengal is now being provided by both public as well as private universities. West Bengal is the home of many renowned schools, colleges and universities which are recognized as a high-ranked institution not only in India but also across the globe. Institutions like Visva Bharati University, University of Calcutta, Jadavpur University, Presidency University, Indian Institute of Management, Indian Institute of Technology and Marine Engineering and Research Institute and many other famous institutions lie in the heartland of the state of West Bengal.

The modern education system in the state of West Bengal can be dated back to 1817, when Hindu College was founded in Calcutta and afterwards called Presidency College. At present (as of 1st May 2020) there are 27 State Universities, 9 Central Universities and Institute of National Importance, 2 Deemed Universities, 11 Private Universities, 14 Research Institutes, and myriad primary, secondary, and higher secondary schools in the terrain of West Bengal. Truth be told, private education in India came into existence even before India achieved its independence. This form of education was created by philanthropists to serve the community. As a consequence, the government could provide more flexibility to the education system in West Bengal by regulating student enrolment and tuition fees. The increase in urbanization and a penchant for more demand for higher education finally triggered the emergence of the private form of education in the year 1994. This initiative was started by the University of Burdwan and Vidyasagar University who began offering correspondence courses to students. The government of West Bengal's epic 9th Plan saw Netaji Subhas Open University (NSOU) being established in the year 1998 to provide higher education to various disadvantaged groups having a proclivity for learning.

West Bengal's higher education administrative structure consists of the Department of Higher Education, the Education Directorate, and the Directorate of Technical Education while the Department of Higher Education alone consist of West Bengal State Council of Higher Education (WBSCHE), Universities and West Bengal College Service Commission (WBSC). WBSCHE was established in the year 1995 for the purpose of planning and coordinating the activities which are related in the area of higher education. The medium of communication/instruction is mostly English albeit Bengali, Hindi and Urdu constitute a medium of instruction in some institutions mostly private. Higher Education in today's modern society is all about disseminating and advancing knowledge and is seen as an antecedent to change. However, it is extremely important to focus on quality assessment when talking in the context of higher education especially in West Bengal. It is not a hidden secret that West Bengal has a rich legacy of education and has long been hailed as the forerunner of education.

The emergence of education in West Bengal stemmed from the societal changes which has already been mentioned a little earlier but we cannot undermine the other factors which have significantly contributed to the development of higher education in West Bengal. Factors such as the increase in literacy rate and unprecedented expansion of secondary and higher secondary education coupled with developments of several educational institutions, a hike in the income

level of rural and urban people, development and amelioration of infrastructural facilities, and globalization has fuelled the growth of higher education in West Bengal.

The Jesuit education in West Bengal can be traced back to the period of the late 15th century when the toil of few Jesuits saw the establishment of a Jesuit institution and a hospital in the Hooghly district of West Bengal though temporarily. The first Jesuit college to be established in West Bengal was St. Francis Xavier College in the year 1845 in Calcutta (present-day Kolkata) in West Bengal. Furthermore, the birth of Jesuit institutions in West Bengal inculcating Jesuit education among the masses of West Bengal has also propelled the desire and growth of higher education. As we know, Jesuit education aims in the overall holistic development of an individual. With time, Jesuit education bolstered in West Bengal largely due to the developments of more Jesuit institutions and massive awareness among the people of West Bengal regarding the beauty of such high-quality education. Subsequently, by the addition of education-oriented bodies by the government of India saw an astounding change in the domain of higher education in the whole country including West Bengal. Measures are still being taken to enhance the quality of higher education in this state of rich culture and heritage.

1.4 Conceptual Framework of the Study

The primary analytical framework used to assess public expenditure choices is cost-benefit analysis. The origins of cost-benefit analysis may be traced to the 1930s with the WPA water projects (dams) in the western U.S.A. The objective of CBA is to help society better allocate scarce productive resources. The societal goal behind the cost-benefit analysis is to achieve maximum economic efficiency such that benefits exceed the costs associated with the project and here the efficiency is concerned with the economic inputs as against the economic outputs. It is pertinent to state that a government economic cost-benefit analysis is different from financial cost-benefit analysis. The latter is another type of analysis relevant for business and private sector decisions. In order to make the best business decisions, the private sector has a clear interest in financial analysis and planning.

Extant literature on this subject suggests, that there are two types of such cost-benefit analyses, ex-ante and ex-post. Ex ante cost-benefit analysis helps to decide on a single project or to choose the best project out of numerous (under consideration) before the actual start of the project. Such studies contribute more toward the optimal allocation of resources. However, these studies are based on future benefits and costs and tend to offer weaker information due

to the high degree of uncertainty involved. On the other hand, ex-post analyses an issue after it is completed. Ex post-cost-benefit analyses are conducted after a project or study has been implemented and hence considered to be less speculative since all costs and benefits have already occurred. Although they have less authority to influence resource allocation for the current project, critics contend that they can influence resource allocation for comparable initiatives in future. Cost-benefit analysis is data-driven and it offers an agnostic and evidence-based evaluation of options. It further makes the decision simpler by reducing the decision under consideration to costs and benefits. However, there is always difficulty in predicting all the variables that may impact the decision under consideration. Even while a cost-benefit analysis may help you summarise the anticipated costs and advantages of the choice at hand, it might be difficult to anticipate every element that could have an influence. In addition, the decision is as good as the data used to complete as depending on inadequate or erroneous data to complete the cost-benefit analysis may result in an inaccurate or incomplete analysis.

The cost-benefit analysis process is traditionally completed in the following way:

1. A framework for analysis is required to be established and for the analysis to be accurate this will depend on the scope and nature of the study. We need to identify the goals and objectives we are trying to address with the proposal. This will be essential for understanding the costs and advantages of the analysis as well as for helping you discover them. Further, both costs and benefits should be measured in the same equivalent unit to accurately compare them.
2. We need to identify the costs and benefits associated with the study. The projected costs, and the expected benefits of the proposed project or action. Both direct and indirect costs will have to be considered. In the context of our study, the intangible costs pose a challenge. Any expenditures that are challenging to gauge and quantify fall under this category. Some instances may include an increase in cognitive skills levels as a result of pursuing and completing a course. Opportunity costs referring to the lost benefits arising out of the decision have been ignored in our study. However, evidence suggests that defining the costs and valuing the benefits are often more difficult.
3. The total value of benefits and costs are analysed and compared at the final stage. If total benefits exceed the total costs, then we proceed with the decision. If total costs outnumber total benefits, then we reconsider the proposal.

Expenditures of education often comprise both direct costs and opportunity costs incurred by the student who made the investment, or, in other words, the income he forfeited to pursue his degree. Tuition, books, and travel costs are only a few examples of the true costs associated with the investment in education. These are funded by the person who gains financially from education, and their total sum makes up each student's unique educational fees. The advantages of investing in education for each individual may be understood in the form of the skill sets acquired which in turn increases employability and hence additional income obtained during the life of the person who invested in education. Besides education costs and benefits entailed in the individual, theory also determines the costs and benefits brought to the society. The cost of education in many countries including India is supported by the society through government subsidies. In these circumstances, the total cost of a person's education includes both the costs funded by the individual and the social costs paid by society. In other words, it covers all education-related expenditures for an individual, regardless of who pays for them (Dickson and Harmon, 2011 and Taran-Morosan, Sava and Diaconescu, 2010). In the context of our study, we have considered only individual cost (in the form of fees) and individual benefits (in the form of employability).

1.5 Background of the Study

The present hyper-competitive modern society has a penchant for more success and prosperity. In this context, every business opportunity or proposal seeks to derive maximum benefits from the investments it makes. Cost-Benefit Analysis is an astounding procedure for estimating all costs incurred and the possible profits which could be derived from such investment. It takes into consideration both quantitative as well as qualitative factors for analysis of the value for money for a particular opportunity or proposal where the ultimate objective is to ascertain the soundness of any investment proposal and provide a basis for making comparisons. All the merits and demerits of the project are quantified in terms of money and then adjusted for their time value to obtain estimates for conducting a cost-benefit analysis procedure. The two main applications of Cost-Benefit Analysis include ascertaining if an investment is sound and by how much its benefits outweigh the cost incurred and comparing investments by probing into the total expected investment cost and total expected benefits of each option. Cost-Benefit Analysis is being increasingly used to analyse the effectiveness of higher education programs in higher educational institutions. The rich quality of education provided by the Jesuit Institutions have been receiving immense praise and appreciation worldwide. But a closer analysis of such institutions would reveal that these institutions go much beyond just providing

education of the highest quality to its students. Jesuit Institutions also leads to the holistic development of a student. There are myriad opportunities existing today in most of the Jesuit Higher Educational Institutions in the form of astounding innovative skill development programs and placement opportunities aiming at providing jobs to the outgoing students. Not only this, the aura surrounding a Jesuit Institution itself is an intangible bewildering force that cannot be undermined. Jesuit Institutions also provide a better quality ambience and a plethora of eye-twitching infrastructural facilities in aspects like classroom atmosphere, students exchange programs, student's development programs, faculty development programs, seminars and conferences, panel discussions, social get-together, etc. thereby going much beyond just educating students.

1.5.1 Rationale of the Study

The sector of education is stunningly metamorphosing with each passing day with a plethora of changes being incorporated which poses a huge demand on the part of students, academicians, administrators and educational institutions. In recent years, higher education has assumed special relevance in the Indian context. As a result, there has been a gargantuan surge in the enrolment of students in higher education as well as the emergence of myriad rules and regulations which needs to be complied with from time to time to fulfil the basic requirements of a quality higher education in HEIs.

It is utmost essential on part of the institutes of higher learning to provide not only quality education to its students but also a rich quality ambience which comprises of exquisite infrastructural facilities, academic supporting facilities, extra-curricular activities and active alumni. Higher education institutes that of late have been relentlessly trying to implement all such factors which can provide benefits to its students but have also laid adequate focus on shrinking costs involved in implanting such strategies. Such initiatives are likely to give HEIs a win-win situation. This is the essence of cost-benefit analysis.

Hayes (2021) describes cost-benefit analysis as a systematic procedure used by organisations to determine which actions to make and which to avoid. The cost-benefit analyst adds up the possible rewards of a scenario or action and then subtracts the overall expenses of pursuing that action.

The existent literatures deliberating upon cost-benefit and higher education is quite scarce, let alone literatures of cost-benefit that exist in the context of Jesuit HEIs. Moreover, existing

researches are highly in unstructured form and without proper empirical analysis. The motivation of the current study is exactly derived from this particular perspective. Hence, the absence of adequate evidence in the present domain of study along with robust empirical investigation forms the fulcrum of the research rationale.

1.6 Significance of the Study

The study would be of immense importance due to the following reasons:

- i. The study would be beneficial for administrators of various Jesuit Higher Educational Institutions from the perspective of managing their costs effectively as well as analysing their notable areas of benefits which they can provide to the society.
- ii. The study emphasizes on the key giveaways from the perspective of Jesuit Higher Educational Institutions and the key takeaways from the lens of the students.
- iii. The study adds to the present literature by making substantial contribution in the domain of cost-benefit exclusively in the sector of Jesuit higher educational institutions which is still an unexplored area of research.

1.7 Research Expectations

We propose to study the role of higher education in this country in the context of the Jesuit HEI. In this regard, we want to contribute to the literature by making a comparative analysis of the cost involved in providing Higher Education by Jesuit Institutions as against the Non-Jesuit Institutions in West Bengal. We will aim to analyse the contribution and benefit of Jesuit HEI in providing employability and job opportunities to the students.

1.8 Structure of the Thesis

The thesis is structured as follows:

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Data and Methodology

Chapter 4: Analysis and Findings

Chapter 5: Conclusion and Recommendations

CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

Knowledge has always been the basis for the development of the society as a whole. Since their creation, higher education institutions (hereafter, HEI) have been places of both knowledge reservation, by educating and training students, and knowledge creation, through research. According to Faustino-Pulliam and Ballesteros (2015), education may be considered as a transformative experience which allows for the expansion of human choices and human capabilities. The definition of the term “higher education” in Indian context, refers to the tertiary level education that is imparted after the completion of twelve years of schooling (including ten years of primary education and two years of secondary education). Higher education is third level education after school. It takes places at colleges and universities and normally includes undergraduate and postgraduate studies. It offers a chance to study a subject of interest. Kapetaniou and Lee, 2016 pointed out that HEI have to perform multiple roles in the domains of creating new knowledge and acquiring new capabilities, through challenging teaching, research, and extension activities to balance both the need and the demand. Further, according to them the contribution to social development and providing solutions to current social or industrial problems has become another core role of HEI. Faustino-Pulliam and Ballesteros, 2015 observed, the role of HEI is crucial especially if they are committed to promoting social justice through education and research. They go on to add that the vision of higher education is to realize the nation’s human resources potential to its fullest with equity and inclusion. As Nelson Mandela’s famous quote eloquently expressed, “Education is the most powerful weapon which you can use to change the world.”³

Blackmore and Sachs, 2007 argues that quality higher education is crucial for sustainable development. Further, higher education leads to acquiring analytical and problem-solving skills, thereby helping develop intellectual acumen and character. It induces students to identify and set career goals that make them ready for the professional world. Thus, a robust higher education system enables economic and social well-being of the students’ community.

³ Nelson Mandela On the Power of Education. Accessed on January 15, 2015. Retrieved from <http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/12/05/nelson-mandelas-famous-quote-oneducation/>

However, the operating environment of HEI has undergone a complete metamorphosis with increasing demand, technological advancement, evolving knowledge economy, and in response to the aspirations of the different stakeholders.

The Indian higher education system is possibly the most ancient education system. However, globalization had a profound impact on the evolving landscape of higher education across the globe and the Indian scenario was no different. As an emerging economy, India aspires to build a knowledge-based society that critically values scholarship. However, a growing number of complex learning issues and the requirement of students has challenged the quality of higher education, at all levels. The idea is to offer satisfactory and meaningful education which consistently attracts scholars and policymakers to comprehensively understand what comprises successful delivery of educational resources. Developed nations have made significant progress toward quality education but the developing world is experiencing numerous obstructions to guaranteeing quality education. International collaborations and global initiatives are critical for developing academic standards within our HEI.

The higher education sector has witnessed unprecedented expansion and growth in many aspects, namely, institutional capacity, enrolment, teacher-student ratio. This proliferation of the higher education system has brought several relevant issues related to access, equity, efficiency, and excellence. The mushrooming growth of private HEI has been instrumental in filling the void in the higher education sector and the contributions of private HEI in meeting the demand for higher education is appreciable. However, this also resulted in some concern on quality.

In ancient India, education was highly advanced. The centres of learning that existed in the Buddhist monasteries of the 7th century B.C. and up to the 3rd century A.D. Nalanda was remarkably much ahead of their times (Perkin, 2006). Many of these centres operated on a large and had several faculties. However, the ancient education system that prevailed in India slowly got extinguished following invasions. Historians suggest, these centres had a stark resemblance to the European medieval universities that emerged much later. Perkin, 2006 adds till the 18th century, India had three distinct traditions of advanced scholarship, Gurukulas, Viharas, and Madaras. Thereafter, the British set up institutional network to impart western education in English. In 1818, the first such college to impart western education was established at Serampore, West Bengal. Over the next forty years, many such colleges were established across India. In 1857, three federal examining universities were set up at Calcutta,

Bombay and Madras on the pattern of London University. All the existing 27 colleges that existed at that time were affiliated to these three universities. Later, more universities were established. In 1947, during independence, there were 19 universities and several hundred affiliated colleges (Cabe, 2005a). Given our colonial past, India was possibly amongst the first in the world, where English was established as a medium of communication in higher education. Higher education in English also provided a useful index of social developments, post-independence (Gupta, 2016). Today, the higher education system revolves around English as India is home to the world's second-largest English-speaking population after the USA and more than the United Kingdom.

The higher education scenario has grown exponentially in India, more so in the post-independence period, to become one of the largest systems of its kind in the world. By 1980, there were 132 universities and 4,738 colleges in the country enrolling around 5% of the eligible age group in higher education. Today, India is the third largest higher education system in the world (after China and the USA) in terms of enrolment, and the largest higher education system in the world in terms of number of institutions. The number of institutions is more than four times the number of institutions both in the United States and Europe (Munjal, 2018). In terms of the number of educational institutions, India has the world's largest higher education system with about 1,000 universities and 40,000 colleges whereas it ranks third in terms of size and diversity, but its presence in the international education system has been abysmally below its true potential⁴.

The higher education infrastructure in India is adequately equipped with many institutions offering world class resources facilitate interactive and 360-degree learning. Government initiatives and relentless efforts have led to India emerging as a major education hub for international students as well. The evolving nature of higher education, post pandemic, have posed major challenges and the long-term survival of educational institutions depends on its quality education delivery system. The paradigm shift in the higher education system is aided by the integration of the latest innovation and technology. The transformed system focuses on the inclusive development of the learners and the National Education Policy, 2020 ensures the

⁴ <https://www.newindianexpress.com/opinions/columns/2021/aug/01/indias-higher-education-set-for-global-leap-2338353.html>

same. The main purpose of this policy document is to rationalise the multidisciplinary, inclusive and technology-based with a larger outreach.

2.2 The Indian Higher Education Landscape⁵

The Indian higher education system is a three-layered structure, comprising of Universities, Colleges and Courses. The colleges and universities work in unison with regulatory as well as accreditation bodies to deliver standardized education. The college network is instrumental in enabling higher education in India can be affiliated either with central, state or private universities. The private colleges are mostly affiliated with state universities. Further, there are autonomous colleges (affiliated with a government university - central or state) that enjoy autonomy in terms of deciding curriculum, admissions and examination process.

The universities network, on the basis of management of the universities, may be classified as follows:

- i. Central Universities: Set up through an Act in Parliament and the establishment and operation are funded by the Union Government.
- ii. State Universities: Set up through an Act in the State Legislature and are primarily funded and operated by the State Government.
- iii. Private Universities: Set up through an Act in the State Legislatures and includes specialized institutions and multidisciplinary research universities.
- iv. Deemed Universities: These are well-performing institutes that are declared to be of equal standing as the universities by the Central Government on the advice of the Union Grants Commission (UGC).
- v. Institutes of National Importance: These are eminent institutions of India that are known to develop highly skilled individuals and include all the IITs, NITs and AIIMs institutes. They are funded by the Government of India.

The courses offered by the HEI can be generally classified into two categories:

- i. STEM Courses: STEM is an acronym for Science, Technology, Engineering and Mathematics and it encompasses all the courses providing education in these or related disciplines. The purpose of STEM courses involves cohesive learning and it focuses on

⁵ Developed on the basis of inputs available at: <https://www.studyinindia.gov.in/>

the practical application of the subjects. Effective education in STEM courses is not limited to theoretical learning but extends to experimental and research-based learning too.

- ii. **Other Courses:** This includes courses offered in disciplines like Humanities, Commerce, Arts, Business Management, and Social Affairs. These disciplines open a wide range of career opportunities where the skills and knowledge are made applicable.
- iii. **Vocational Courses:** A network of public and private polytechnics and vocational institutions exists in India. They are controlled and supervised by the Councils specializing in respective applicable discipline.
- iv. **Distance Learning:** India has also developed an Open University system to encourage distance learning. Indira Gandhi National Open University (IGNOU) was the pioneer and now there are 14 open universities (Munjal, 2018). This sector has expanded due to distance mode of education supported by new age information and communication technology (ICT). MOOC courses have also added a new dimension to this emerging sector. The possible reasons for the popularity of this avenue is the lower cost and the students need not leave their homes or profession.

2.3 Regulatory Structure

The entire ecosystem of higher education in India is primarily overseen by the following authorities:

- i. **University Grants Commission (UGC):** The University Grants Commission is the main regulatory body at the tertiary level and it is entrusted with the functions of advising the government, coordinating between the Centre and the States and enforcing the desired standards. It assists in providing funds to universities, establishing education standards and analysing the growth of the various HEI.
- ii. **All India Council for Technical Education (AICTE):** The regulatory body that coordinates, plans and develops technical education in the country. The objectives of the AICTE includes, promotion of quality, planning and coordinated development and regulations and maintenance of norms and standards in technical education⁶.

⁶ <https://www.aicte-india.org/about-us/overview>

- iii. National Assessment and Accreditation Council (NAAC): India has one of the largest and diverse education systems in the world. Privatization, widespread expansion, increase in the number of autonomous colleges and introduction of new programmes in emerging disciplines have improved access to higher education. This also led to widespread concern on the quality and relevance of the higher education. To address these concerns, the establishment of an independent national accreditation agency evolved. Consequently, in 1994 NAAC was established as an autonomous institution under the aegis of the UGC. NAAC is entrusted with the making quality assurance an integral part of the functioning of HEI⁷.
- iv. National Institutional Ranking Framework (NIRF): This framework outlines a methodology to rank institutions across the country. The parameters broadly cover - teaching, learning and resources, research and professional practices, graduation outcomes, outreach and inclusivity, and perception.
- v. Distance Education Council of India (DEC) was established to regulate universities, maintain the standard of education, encourage and organize activities of Open and Distance learning (ODL).

⁷ <http://naac.gov.in/index.php/en/>

Table 2.1 - Summary of the data on higher education for the period from 2012-13 to 2019-20

Data on	2019-20	2018-19	2017-18	2016-17[#]	2014-15	2012-13[#]
Universities	1,043	993	903	864	760	667
Colleges	42,343	39,931	39,050	40,026	38,498	35,525
Stand Alone Institutions	11,779	10,725	10,011	11,669	12,276	11,565
Universities in Rural areas	420	394	357	338	293	249
Colleges in Rural areas	60.56%	60.53%	60.48%	59.3%	58%	55%
The top 8 States in terms of highest number of colleges	Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Tamil Nadu, Madhya Pradesh and Gujarat	Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Haryana, Tamil Nadu, Gujarat and Madhya Pradesh	Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Telangana, Tamil Nadu and Madhya Pradesh	Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Tamil Nadu, Madhya Pradesh and Telangana	Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Tamil Nadu, Madhya Pradesh and Telangana	Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Tamil Nadu, Madhya Pradesh and Telangana
College density, i.e., the number of colleges per lakh eligible population (in the age-group 18-23 years)	Varies from 7 in Bihar to 59 in Karnataka as compared to All India average of 30.	Varies from 7 in Bihar to 53 in Karnataka as compared to All India average of 28.	Varies from 7 in Bihar to 51 in Karnataka and Telangana as compared to All India average of 28.	Varies from 7 in Bihar to 59 in Telangana as compared to All India average of 28.	Varies from 7 in Bihar to 60 in Telangana as compared to All India average of 27.	Varies from 6 in Bihar to 62 in Puducherry as compared to All India average of 25.
Total enrolment in higher education	Estimated to be 38.5 million with 19.6 million boys and 18.9 million females. Female constitute 49% of the total enrolment.	Estimated to be 37.4 million with 19.2 million male and 18.2 million females. Female constitute 48.6% of the total enrolment.	Estimated to be 36.6 million with 19.2 million boys and 17.4 million girls. Girls constitute 47.6% of the total enrolment.	Estimated to be 35.7 million with 19.0 million boys and 16.7 million girls. Girls constitute 46.8% of the total enrolment.	Estimated to be 34.2 million with 18.5 million boys and 15.7 million girls. Girls constitute 45.5% of the total enrolment.	Estimated to be 30.2 million with 16.6 million boys and 13.6 million girls. Girls constitute 45% of the total enrolment.

Data on	2019-20	2018-19	2017-18	2016-17 [#]	2014-15	2012-13 [#]
Gross Enrolment Ratio (GER) in Higher education calculated for 18-23 years of age group	27.1% and GER for male population is 26.9% and for female, it is 27.3%. For Scheduled Castes, it is 23.4% and for Scheduled Tribes, it is 18.0% as compared to the national GER of 27.1%.	26.3% and GER for male population is 26.3% and for females, it is 26.4%. For Scheduled Castes, it is 23% and for Scheduled Tribes, it is 17.2% as compared to the national GER of 26.3%.	25.8%, and GER for male population is 26.3% and for females, it is 25.4%. For Scheduled Castes, it is 21.8% and for Scheduled Tribes, it is 15.9% as compared to the national GER of 25.8%.	25.2%, and GER for male population is 26.0% and for females, it is 24.5%. For Scheduled Castes, it is 21.1% and for Scheduled Tribes, it is 15.4% as compared to the national GER of 25.2%.	24.3%, and GER for male population is 25.3% and for females, it is 23.2%. For Scheduled Castes, it is 19.1% and for Scheduled Tribes, it is 13.7% as compared to the national GER of 24.3%.	21.5%, and GER for male population is 22.7% and for females, it is 20.1%. For Scheduled Castes, it is 16.0% and for Scheduled Tribes, it is 11.1% as compared to national GER of 21.5%.
<p><i>Author's own compilation. Source: All India Survey on Higher Education, GOI available at https://aishe.gov.in/aishe/gotoAisheReports # No data is available for the years 2015-16 and 2013-14.</i></p>						

Table 2.2 - Summary of Staff Information and Pupil Teacher Ratio for the period from 2012-13 to 2019-20

Data on	2019-20	2018-19	2017-18	2016-17 [#]	2014-15	2012-13 [#]
Total number of teachers	15,03,156	14,16,299	12,84,755	13,65,786	14,73,255	13,08,571
Male	57.5%	57.8%	58%	59.4%	61.4%	61%
Female	42.5%	42.2%	42%	40.6%	38.6%	39%
Pupil Teacher Ratio (PTR) in Universities and Colleges (if regular mode enrolment is considered)	28	29	30	22	21	24
Support Staff	12,90,701	12,14,302	12,16,434	11,58,982	10,94,842	9,00,592
Male	66.3%	67.11%	68.1%	69.4%	71%	62%
Female	33.7%	32.89%	31.9%	30.6%	29%	38%
<p><i>Author's own compilation. Sources: All India Survey on Higher Education, GOI available at https://aishe.gov.in/aishe/gotoAisheReports # No data is available for the years 2015-16 and 2013-14.</i></p>						

2.4 Higher Education in West Bengal

Higher Education has always been a comparative advantage across disciplines and has traditionally laid a high social value on educational achievements. Historically, Kolkata was the first to develop a modern system of education. In 1784, Sir William Jones, established the Asiatic Society for the promotion of Oriental Studies. Missionaries like Ram Mohan Roy, David Hare, Ishwar Chandra Vidyasagar, and William Carey spearheaded the establishment of modern education in the city. The Sanskrit College (now a university), established in 1824, is one of the oldest educational institutions in India specialising in the study of Sanskrit, Indian languages and Indological Studies. The University of Calcutta was set up 1857 as was the first medical college. Hindoo College (later Presidency College and now a university) was set up in 1817. The National Council of Education, Bengal later became the Jadavpur University in 1955. Rabindranath Tagore founded Visva-Bharati University at Santiniketan in 1921. The missionary efforts in the spread of higher education in Bengal are well known. In 1860, St Xavier's College was set up by the Jesuits. Advances were also made in the field of science and technology. The Bengal Engineering College (now, Indian Institute of Engineering Science and Technology), Shibpur was founded in 1856. Indian Institute of Technology, Kharagpur is the oldest in India and has been ranked among the top institutions in the country. The Indian Institute of Management, Calcutta has consistently ranked as one of the premier business schools of the country. There are two categories of colleges in Bengal – (i) government colleges, and (ii) government-aided colleges. Government colleges are those that are entirely controlled by the State Government. Government aided colleges, including sponsored colleges, are also under the State Government. Several private colleges have also been established on a self-financed basis.

Table 2.3 – The number of Colleges and Universities in West Bengal

Colleges	Number
Government General Degree College	49
Government–Aided General Degree College	433
Government Teachers' Training College	06
Government– Aided Teachers' Training College	17
Government Physical Education College	04
Government–Aided Physical Education College	00
Government Engineering College	08
Universities	
Under the Jurisdiction of the Department of Higher Education	20
Under the Jurisdiction of Other Departments of the State Govt	6
Central Universities	4
<i>Author's own compilation. Source: https://banglaruchchashiksha.wb.gov.in/university_education</i>	

2.5 Jesuits and Higher Education

Higher education has been synonymous with the Society of Jesus. Saint Ignatius stressed on a rigorous academic formation for all those who desired to become Jesuits. This tradition of higher education was seen in the India from the time when Saint Xavier. On his arrival he was requested to take up the responsibility of forming the youth of the seminary as he himself had adorned a chair at the Paris University (Mendonça, Délio de. 2003).

The Jesuits have come to be particularly known for their educational work. In every country across the globe Jesuit academic institutions are synonymous with quality secular education with emphasis on spiritual and moral values and the development of an integrated human personality. India and the United States rank among the most important countries in regard to the size of the Jesuit educational undertakings. In the USA there are 45 Jesuit Universities, and 75 high schools. In Asian countries also the Jesuits have established reputed schools and university.

The “*Ratio Studiorum*” produced by the Jesuits in the 16th century is the cornerstone of Jesuit education. Its relevance is time tested due a number of reasons. First, is the willingness to use any branch of human knowledge, like languages, philosophy, theology, medicine, law, media and every branch of science and technology. Secondly, there is the stress on character formation coupled with the development of freedom. Third, the emphasis is on the continual drive towards self-improvement, by stretching talents and abilities in every field. Further, Jesuit education lays emphasis on the development of the moral and intellectual qualities of leadership, love for the country, integrity, human relations, organisational ability, cooperation and teamwork, and the power of expression in speech and writing. Fourth, Jesuit institutions was the priority given to the role of the teacher. The teacher is responsible for keeping instructions lively and students engaged. The teacher is also expected to set exemplary standards, through personal conduct and membership, that would inspire students to a life of moral and intellectual excellence and spiritual commitment. The Jesuit teacher served not only as instructor but also as mentor and spiritual father to his students (Rhodes, 1989).

Over the years a lot of initiatives have been made on education for sustainable development whose primary focus is on the environment. According to UNESCO, Education for Sustainable Development requires incorporation of issues like, climate change, biodiversity, poverty reduction, and sustainable consumption in teaching. It also requires participatory teaching and

learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for sustainable development consequently promotes competencies like critical thinking, imagining scenario planning and making decisions in a collaborative way.⁸

Beyond this traditional framing of education for sustainable development, we can also consider sustainable human development through education. According to Faustino-Pulliam and Ballesteros, 2015, volunteer work at Jesuit Commons: Higher Education at the Margins (JC: HEM) has been instrumental in achieving this and they consider education as an effective tool for social mobility and human development. Human Development Index (HDI) emphasizes that people and their capabilities, and not the economic growth by itself, should be the ultimate criteria for assessing the development of a country.⁹

2.6 Cost Benefit Analysis in Education

Education is now recognized as a form of investment in human beings, which yields economic benefits and contributes to the nation's future wealth by increasing the productive capacity of its people. Therefore, the expenditure on education can be partially justified in terms of the potential contribution of education to economic growth. Woodhall, 1992 argues that if education is a profitable form of investment for the individual as well as for society, then why do students, or their families, take this into account when making educational choices. This revolves around one basic issue: the relationship between the costs and the benefits of education, viewed as a form of social or private investment.

The term “cost-benefit analysis” (CBA) implies a systematic comparison of the magnitude of the costs and benefits of some form of investment, in order to assess its economic profitability (Woodhall, 1992). It is a tool of economic evaluation and analysis of the relationship between costs and outcomes of a programme. The purpose is to provide stakeholders with information for making decisions about how to allocate resources. The objective is to understand whether the benefits of the programme outweigh its costs and the returns on investments are sufficient to justify funding of a program. Thus, it allows a means of appraising these future benefits in

⁸ UNESCO. Education for Sustainable Development. Accessed on January 05, 2015. Retrieved from <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainabledevelopment/>

⁹ UNDP. Human Development Report, Accessed on February 6, 2015. Retrieved from <http://hdr.undp.org/en/content/human-development-index-hdi>

the light of the costs to be incurred in the present. Economists have paid increasing attention to the application of CBA analysis to public investment.

The use of CBA increased in the 1950s in the USA in connection with attempts to rationalize the large-scale development (Hough, 1993). Subsequently, it was extended to virtually all areas of public and private sector investment. It also gained popularity in the UK, and became commonly used throughout the developing countries as well (Press and Turvey, 1965).

Two main tools of economic evaluation are cost-effectiveness analysis (CEA) and Benefit Cost Analysis (BCA). CEA compares the costs of a programme with its impacts (measured in natural units) that occur in real life, like college attrition rates. CEA yields information about the percentage by which college attrition rates are reduced per rupee spent on a programme aimed at retaining students in HEI. On the other hand, BCA compares programme costs with programme outcomes or impacts that have been monetized. BCA provides information about the extent to which a programme increases a student’s future earning potential for every rupee spent on the programme (Barnett, 1985; Lee et al., 2012; Karoly, 2016). The application of economic evaluation to HEI, as evaluations in these contexts face increased study design challenges as well as a lack of standardized outcome measures (Hummel-Rossi and Ashdown, 2002).

Table 2.4 - Types of economic evaluation

Type of evaluation	Unit for benefit/effects	Formula	Summary measure
Cost-effectiveness analysis (CEA)	Natural units	Cost/Effects	Cost-effectiveness ratio
<i>Interpretation: If the cost-effectiveness ratio is Rs. 100:1 (Rs. 5,000/50 units), then the programme costs Rs. 100 for each unit avoided.</i>			
Benefit–cost analysis (BCA)	Rupees	Benefit/Cost	Benefit–cost ratio (BCR)
<i>Interpretation: The BCR is 2:1 (Rs. 12,000/Rs. 6,000), meaning the program generates Rs. 2 in savings for every Rs. 1 spent.</i>			

2.7 Research Gap and Objectives

The Indian higher education scenario is riddled with issues like financing and management including access; reorientation of programmes by emphasizing values and ethics; and quality of higher education together with the assessment of institutions and their accreditation. Further, India, due to its economic, cultural, and social issues, still grapples with equity and the quality of education. The demand for institutions that create a conducive learning environments for

students to succeed is growing. Further, private and public institutions of repute have witnessed serious regulatory impediments to internationalising or taking initiatives on their own.

The landscape of higher education is not monolithic, and thus examining the Jesuit pedagogy provides valuable insights primarily due to their unique organizational context. Jesuit education is known for critical thinking skills, strength as a leader, passion for learning, global understanding, commitment to social justice, and development of the whole person. Jesuit education is value-oriented. The service of faith through the promotion of justice remains the major focus. Jesuit education is interdisciplinary. A qualitative integration of inquiry that can lead to an appreciation of more comprehensive truth is the goal. The focus of Jesuit education today is global. The interdependence on this planet is becoming more evident every day in realities across a broad spectrum from economics to ecology. Further, the distinctive role of the Jesuits in Jesuit HEI is to share the Ignatian purpose and thrust with the educational community. The communication of the Society's apostolic inspiration to all members of the academic community is owed to these people, so that they can become sharers in it, each in his or her way.¹⁰

True education will occur when students and teachers respond to social realities around them and can enter into a proactive relationship with people. In the Indian context, considering the multi-religious and pluricultural society we are in, Jesuit higher education focuses on a secular and genuinely democratic approach to life and activities. Seminal research on the contribution of Jesuit HEI shows that Jesuits priests have contributed to science and social upliftment. Evidence suggests that Jesuit HEI brands took on an added significance. Job or employment offers came easily to students who passed out of Jesuit institutions which maintained high standards in higher education. Also, Jesuit HEI began with foreign-trained persons, and the quality of education was original. Presently, the positive contribution made by Jesuit higher education is seen in the courses that equip students in Physics, Mathematics, Communications (Media), Psychology (varied and graded programs for different purposes), Engineering (different technologies), and Management (Business administration techniques). Jesuit HEI has link-ups in rural areas and this too had added to the experiential learning programmes immensely¹¹.

¹⁰ Themes Of Jesuit Higher Education by Peter-Hans Kolvenbach, SJ.
(<https://Onlineministries.Creighton.Edu/Heartland3/R-Themes.Html>)

¹¹ Report of Jesuit Higher Education in South Asia: 2018-19 - JHEASA

Faustino-Pulliam and Ballesteros, 2015 portrayed the experience of two educators from Jesuit institutions. The study showed new ways to measure learning outcomes and offer interesting insights into how education can significantly contribute to human development. Social responsibility is taken into a much broader scope and it is not enough to simply educate but to bring about transformational change, a process that is sustainable and not a simple act of altruism¹².

Literature also seems to suggest, that many challenges are faced by Jesuit HEI today. Jesuit HEI is city-centric, is elitist, and caters mostly to the well-to-do. Fewer Jesuits opt for the apostolate in higher education since they consider pastoral care, as available in parish settings, more attractive and fulfilling. There also seems to be a lack of adequate financial resources for updating equipment and hiring competent staff.

Institutions and administrators regularly have to make difficult choices about how best to invest resources to serve the students' community. Fees and government grants provide funds for the development, conducting, and evaluation of innovative educational programs. The changing landscape in education, including increasing enrolment, expanding access, and decreasing government investment, is putting added pressure on education budgets. However, the principal issue is how can academic administrators make informed decisions about how to invest limited resources? The need to determine whether initiatives yield sufficient benefits to be worth the cost, and how can we provide evidence to the stakeholders. Many factors must be considered when making decisions about how to invest funds, including alignment of particular initiatives with institutional vision and missions, priorities, and strategic plans. Despite this economic evaluation or systematic analysis of the relationship between costs and outcomes of education, is relatively uncommon in higher education. This type of evaluation can be an important tool for decision-makers considering questions of resource allocation.

The tool often used for evaluating projects is the cost-benefit analysis (hereafter, CBA). Despite its limitations, governments and agencies rely on the framework's results in support of decision-making (Posner, 1999). The financing of HEI differs across countries. While public funding still provides two-thirds of the resources, the share of public funding to education expenditure on institutions has remained generally stable between 2010 and 2014 across all levels (OECD,

¹² This study was a part of Jesuit Commons: Higher Education at the Margins (JC: HEM), an initiative supported by various Jesuit institutions across the world to provide higher education to the marginalized.

Education at a Glance, 2017). Thus, it is reasonable to think about the rentability of this investment from an economic viewpoint (Damon and Glewwe 2011; Devereux and Fan 2011; Dickson and Harmon 2011; Li et al. 2011).

Since HEI across the globe is mainly publicly financed, one may think of an HEI as a project and hence the use of CBA assumes significance. The use of educational cost-benefit analysis is now widely accepted and has definite advantages but there is also considerable unease over its use (Hough, 1993; Perkins, Radelet, and Lindauer, 2006). CBA implies the enumeration and evaluation of all the relevant costs and benefits. It may be used to develop or justify new policies on financing education. In the context of our study, we propose to apply the conceptual framework of CBA in the case of HEI. Further, it is essential that research, especially on the social benefits of education, make further progress to make CBA a more robust tool. There is a need for contemplation on the effects of policy interventions on the desired outcomes. Such research should focus on ensuring that the interventions are attributable to outcomes. The aim is to develop a framework that shows what information is necessary for general to conduct a CBA on HEI. Our analysis proposes to explain whether to comply with the concept of CBA or not and how this affects their results in terms of explanatory power.

Education is transformational and life-changing. It provides opportunities for individuals to find gainful employment and become productive members of society. Beyond the economic benefits, education develops minds that enable individuals to question, explore, and analyse the situations around them. Thus, the role of HEI should be to emphasize research, teaching, and curriculum development on issues that cater to the core values of human development - equality, empowerment, diversity, and sustainability. Students should be able to examine the role of the governments and the industry players (who are the recruiters) and collaborate with other institutions to influence reforms; and participate fairly and equally regardless of religion and social class, in a well-functioning market economy which lays the foundation for sustainable economic development (Faustino., et al. 2015). Despite this, the role of HEI is not well documented. Thus, the state of higher education today, more specifically in the State of West Bengal, needs to be explored.

Education is now universally recognized as a form of investment in human beings, which yields economic benefits and contributes to a country's future wealth by increasing the productive capacity of its people (Woodhall, 1992). Thus, expenditure on education can be partially justified in terms of the potential contribution of education to economic growth. The other issue

that emerges is how education compares with other forms of investments and makes a greater contribution to the future. Further, is education a profitable form of investment and if so, do students, their families, and other stakeholders take this into account when making educational and occupational choices? Woodhall, 1992, points out that all these questions revolve around one basic issue: the relationship between the costs and the benefits of higher education. However, this emerging area of research has not been well documented, more so in the context of West Bengal. Further, literature is sparsely available on the comparative CBA of Jesuit as against Non-Jesuit HEI in West Bengal and the relevance of the CBA for educational planning.

2.8 Research Objectives

Based on the gap identified in the available literature, the objectives of this study include the following:

- i. To study the role of Higher Education in India with an emphasis on Jesuit HEI.
- ii. To make a comparative analysis of the cost involved in providing Higher Education by Jesuit Institutions vis-a-vis Non-Jesuit Institutions in West Bengal.
- iii. To analyse the contribution and benefit of Jesuit HEI in providing employability and job opportunities.

CHAPTER 3

DATA AND METHODOLOGY

This chapter is divided into two sections. The first section explains the tools applied in the collection of Primary data and the discussions related to Secondary Data. The second section describes the research methods we have implemented for analyzing the data.

3.1 Issues related to Data

3.1.1 Primary Data

The purpose of this research is to make a comparative analysis of the cost involved in providing Higher Education by Jesuit Institutions vis-a-vis Non-Jesuit Institutions in West Bengal. This has been done on the primary data collected and using it to analyze and derive fruitful results for the above-said purpose. The research also finds the contribution and benefit of Jesuit HEI in providing employability and job opportunities, for this purpose the data collected on the individuals of the institutes have been utilized and certain statistical tests were conducted to prove the significant effect of attributes and characteristics of an institute on Employability based on the responses collected.

The collection of data for this research purpose is done on the Jesuit and non-Jesuit HEI in West Bengal. A structured questionnaire is formulated to collect perceptions regarding the contribution of Jesuit Colleges and Non-Jesuit Colleges in West Bengal.

The data have been collected from twelve colleges, 4 Jesuit and 8 Non-Jesuit Colleges. Questionnaires were circulated and data was collected from the major stakeholders, namely, students, parents, alumni, faculty, and institutions themselves. The questions were laid according to meet the interest and objective of the research. The questions were choice based along with some details of the students, parents, alumni, and faculty, respectively.

The student, parent, alumni, and faculty questionnaire start with details such as name, age, gender, institute of study, year of study, course name, and email. The remaining subjective questions were choice based question. All responses were collected from the respective respondents according to a Likert scale (one to five), with one being an extremely positive response, and five being an extremely negative response.

The research methodology adopted for this study is explained in terms of Research Design, Collection of Data, Sampling Design, Sampling Size, Secondary Data, Target group, and Questionnaire.

a) Research design

The Primary data is collected from the Jesuit and Non-Jesuit HEI of West Bengal. The sample comprises twelve colleges, out of which four colleges from Jesuit, and eight colleges from Non-Jesuit HEI using a sampling technique of convenience sampling. Then we selected our demography as student, parent, alumni, and faculty, where we determined the sample size of 380 students from Jesuit and 380 students from Non-Jesuit HEI, respectively, which was calculated based on a 95% Confidence Interval and Z-score.

Accordingly, we have sent our structured questionnaire to these twelve colleges and set responses were collected from different target groups in institute, faculty, alumni, student, and parents.

The study has used primary data to draw our main conclusions using various methods to analyse the data. Various statistical tools were applied to analyse the numerical data, such as Kolmogorov-Smirnov and Shapiro-Wilk test. Crosstabs and Chi-square test have been used to highlight the relationship between numerous factors, and the Likelihood Ratio Test to re-confirm the findings.

b) Sampling technique

The study has implemented **Convenience Sampling** for sampling the target institutes. The Jesuit and Non-Jesuit Institutes in West Bengal were sampled with this sampling scheme, for our research data. The study used Probability Sampling for sampling the student, parent, alumni, and faculty responses.

c) Sampling Size

At Jesuit Higher Education Institute, the total number of students across all selected four colleges is 12,976, this figure **is the population size**. Our sample size for the same is based on 95% Confidence Interval and Z-score, the minimum number of respondents required for this

study is 374. The total number of students in the sample for Jesuit Higher Education Institute is 380.

At Non-Jesuit Higher Education Institutes, the total number of students across all selected eight colleges is 17,738, this figure will be our **population size**. The sample size for the same is based on 95% Confidence Interval and Z-score, the minimum number of respondents required for this study is 376. The total number of students in the sample for Non-Jesuit Higher Education Institute is 380.

d) Target Group

In this study, the target group is the Jesuit Higher Education Institutes and Non-Jesuit Higher Education Institutes of West Bengal, India. Data and information has been collected from the websites of the institutions and from the questionnaire responses received from the following institutions which are discussed in detail below.

A) Jesuit Institutes:

Jesuit priests have established colleges and universities across the world. Currently, there are 3,897 Jesuit institutions in 96 countries educating about 29,28,806 students. The details of the Jesuit HEI used for the purpose of our research are as follows:

I) St. Xavier's College (Autonomous), Kolkata (1860)

A christian minority higher academic institution, St. Xavier's was established in 1860 and affiliated to the University in 1862. St. Xavier's College is closely held and managed by the Jesuits of the Kolkata province of the Society of Jesus. Rev. Fr. Dr. Savio, SJ, is presently the Principal of the College. The motto of the College is "Nihil Ultra" (nothing beyond). The native address of the College for future reference is 30, Mother Teresa Sarani, Kolkata-700016, West Bengal, India.

St. Xavier's College is an Autonomous college empowered to formulate its syllabus and conduct exams and publish the results. The degree certificates are issued by the University of Calcutta, with the signature of the Vice Chancellor, and the Principal of the College.

St. Xavier's College offers under and post graduate courses in Arts, Science, Commerce, Management Studies, and Education. Certificate courses are offered by Career Orientated Programmes and Computer Centre. The College also offers Ph.D. in nine disciplines, including Commerce. The full student strength of the College is 8,705 with 350 teaching staff. The medium of instruction is english. The college has evolved into an institution of repute, multifaceted, and co-educational institution.

II) St. Joseph's College, North point, Darjeeling (1927)

St. Joseph' College is a Catholic Minority co-educational degree and postg graduate college managed by the Darjeeling Jesuits. The College is accredited by NAAC with a score of A+ with CGPA of 3.06 out of 4. The full student strength of St. Joseph's College, North Point is 2,521 with 48 teaching staffs. The moto of the College is "Sursum Corda (Lift up your hearts)." The native address of the College for future reference is Lebong Cart Road, North Point, Darjeeling-734104, West Bengal, India.

The College was established in 1888. In 1927, they started offering the Intermediate Course. By 1949, the College was fully commissioned to permit courses in B.A. and B.Sc. Later, with the establishment of the University of North Bengal in 1962, the college was affiliated to it. The College aims at the radical transformation of the modern society based on the principles of social justice, equal opportunities to all, freedom, respect for religious, moral, and cultural values. It aims at creating a humane society. The College believes in producing students to become effective men and women, not only for their own progress and prosperity but collectively for the transformation of the society they live in. Thus, they are expected to become agents of modification and progress in their own communities.

III) North Bengal St. Xavier's College, Jalpaiguri (2007)

North Bengal St. Xavier's College is a Christian Minority institution established in 2007 by the Darjeeling Jesuits of North Bengal with permanent affiliation to the University of North Bengal. The College offers courses in Arts, Science, Commerce and Business Administration. The medium of instruction is English. Students are offered German language classes. It provides fifteen courses. The full student strength is 1,050 with 46 teaching staffs.

The College believes in tutorial excellence along with varied co-curricular activities. The College insists on class attendance, with importance given to weekly tests, sports and cultural festivals, seminars and projects. The College aims to help the tea garden workers. Career orientated programmes, career guidance, communication with the parents are designed to enrich the education imparted. The College aims at social justice, equality of opportunities, freedom, respect for moral and religious values, as enshrined by the Constitutions of India.

Rev. Dr. Lalit P Tirkey, SJ, is the present principal of the College. The motto of the College is “Gyan Vigyan Vimukte (liberation of people through knowledge and wisdom).” The native address of the College for future reference is Rajganj - 735 134, District: Jalpaiguri, West Bengal.

IV) St. Xavier’s College, Burdwan (2014)

St. Xavier’s College, Burdwan was established in 2014 and inaugurated by Bishop Cyperianb Monis, in the presence of Rev. Fr. Jeyaraj Veluswamy, SJ, Provincial. The College aims at the integral, personal formation of the youth. The total student strength of the College is 700 with 40 teaching staffs. The College is affiliated to the University of Burdwan. The motto of the College is “Truth, Justice” . The native address of the College for future reference is St. Xavier’s Road, P.O. Sripally, Bardhaman, West Bengal-713103.

B) Non-Jesuit Institutes (Missionary)

Non-Jesuit Missionary Colleges are those establishments that are not administered by the Jesuits. However, they are affiliated of the Roman Christian church or Protestant Church or the other religious affiliations. These institutions appreciate education, literacy, social justice, health care, and economic development. Several of them even have branches in many nations. The mission colleges were set up in the colonial era for the education of the native people.

In this thesis, we have collected data from four Non-Jesuit Missionary Colleges within the State of West Bengal. The main points of these four Non-Jesuit Missionary Colleges are mentioned below.

I) Scottish Church College, Calcutta (1830)

With the unfolding of the European education in alliance with the thought of Christian missionary zeal in the nineteenth century, Scottish Church College, established in 1830. The College is currently administered by the Church of North. It is affiliated to the University of Calcutta. It, however, enjoys autonomous status for post graduate studies. It offers honours course in fifteen under-graduate discipline and post-graduate courses in two subjects. The Department of Teacher Education caters to female students for the Bachelor of Education degree.

To keep with the vision of its founder, the Scottish Church faculty inspired tutorial excellence additionally by promoting temperament development, community service and refinement of aesthetic sensibilities. The splendorous design of the College as well as its splendid prayer hall is a testimony to its unaltered heritage and the pioneering vision. The College has initiated national and international linkages. The entire student strength of the College is 700 with 146 teaching staffs. The College is affiliated to the University of Calcutta and the motto is “nec tamen consumebatur (the bush burns, however, isn't consumed).” The native address of the college for future reference is 1 & 3, Urquhart Square, Kolkata-700006, West Bengal, India.

II) St. Paul's Cathedral Mission College, Kolkata (1865)

St. Paul's Cathedral Mission College, having a Christian foundation, is one in all the oldest establishments of the country located at the centre of Kolkata. St. Paul's Cathedral Mission College was established in 1865 by the Church Missionary Society (CMS). With sixteen departments and over 1,300 students, the five buildings of college surround a sizeable field in Amherst Street. A lot of the city's heritage is captured within the college campus, the oldest building being over one hundred years old. St Paul's Cathedral Mission College has witnessed extraordinary growth in the field of intellectual advancement and has celebrated its sesquicentenary in 2014-15. It is already seen three NAAC Peer Team visits, initial in 2005, second in 2011 and eventually in 2019. As per recommendation of the Peer Team in 2011 the Department of English has begun its Post-Graduate Section since November 2013.

The campus recently spruced itself up with technological advancements sort of a wi-fi campus, a state-of-the-art seminar rooms. There are social and out reach programs that examine gender sensitization, equitable distribution of education facilities and additionally encourage social

work. Today the College offers eleven honours courses, and a few general ones. The thrust of this establishment has continuously been to form smart and worthy individuals.

The College is presently being led by Principal, Dr. Aninda Banerjee, giving a complete of seventeen courses. The motto of the College is, "I Press Towards the Mark of Excellence and Perseverance."

III) Loreto College, Kolkata (1912)

In 1842, Loreto House, Calcutta, opened its doors to sixty "Young Ladies". In 1843 Loreto Day College Bowbazar, was founded, whereas by 1857, Loreto Day College, Sealdah was formally inaugurated. With the dictum to "love the poor", categories began for orphans at the Murgihatta Cathedral. A branch orphanage was opened near Serampore, and another private College was supported in Chandannagar. In 1847, orphans and boarders from Murgihatta, Serampore and Chandannagar were shifted to the gorgeous grounds of Loreto Convent, Entally. In 1879, Loreto Day college Dharamtalla, founded earlier by lay people, was handed over to the Loreto Sisters.

The College is affiliated to the University of Calcutta. It has been awarded the best rating of five stars in 2000. The College was re-accredited by NAAC in 2006 and was awarded an A grade and in the third cycle of re-accreditation by NAAC in 2012 was awarded an A grade. The UGC has recognised Loreto faculty as a College with Potential for Excellence in 2006 and once more in 2011.

The courses offered at this College include B.A. (Honours & General) in Education, English, History, Political Science, science & Geography; B.Sc. (Honours & General) in earth science & economic science; B.A. (General) in Bengali, Hindi, Economics, Journalism, Film Studies, Sociology, Human Rights & Mathematics. Course in Human Rights was initiated from July 2013. The library is computerized and has a wonderful assortment of educational books and journals. Extra-curricular activities are nurtured by the faculty, through variety of student societies just like the Debating Society, the Dramatics Society, the Literary Society and therefore the Leadership coaching Society. The faculty hosts an annual inter-collegiate fest, Samagam.

Loreto College aims to develop high academic standards and inculcate values of leadership, commitment, and unselfish service. A Women's Cell was established in 1996. Faculty members (retired and current) provide voluntary service to adult attainment programmes for deprived young women.

Affiliation to the university was granted, initial in 1912-1913, for Intermediate Arts and later for BA (Bachelor of Arts), ISC (Intermediate Science) and BT (Teacher Training). The recent building was knocked down and therefore the gift one in-built 1959 -1961. In 1997 affiliation for BA line of work and Communicative English was sanctioned. there is currently a pc center which is self-financing. A Women's Cell conducts categories for economically and socially disadvantaged illiterate young women. It aims at employment through attainment and skills. The lyceum lecturer's college was opened in February, 1913. The courses initial offered were for the student of Teaching and Bachelor of Teaching. Nowadays it offers a one year post graduate Bachelor of Education degree.

IV) Ramakrishna Mission Vidyamandira, Howrah (1941)

The Ramakrishna Mission Vidyamandira may be a residential degree college for boys affiliated to the University of Calcutta established in 1941 by the Ramakrishna Mission. The name 'Vidyamandira' was given by Swami Vivekananda in 1898 who had pictured such an establishment sculptured on the traditional Indian 'Gurukula' system. With the idea of giving form to Swamiji's comprehensive theme of education, the authorities of the Ramakrishna Mission started the Vidyamandira as an Intermediate Arts faculty in 1941. Although originally it had been an Intermediate Arts College, it received in 1945 affiliation in some commerce subjects and in 1946 in some science subjects. The College was upgraded to a three-year degree college from July 1960. In this College the scholars get close contact with their lecturers and try is created to impart a well-rounded coaching in an environment of serenity, discipline and ethical purity that facilitate them to turn into worthy voters of the country with a way of real pride in their hoary cultural traditions.

It had been authorized 'A++' grade by the National Assessment and certification Council (NAAC), Bharat in 2022. In 2022 the faculty was re-accredited by the National Assessment and certification Council with CGPA 3.58 out of four in line with this gradation policy. The University Grants Commission (UGC) recognized Vidyamandira as a 'Centre of Potential for Excellence' (CPE) in 2010. Vidyamandira was awarded with 'Autonomous' standing in tutorial

affairs, implying that Vidyamandira are ready to frame the syllabus, introduce new courses at the collegian and postgraduate levels, formulate teaching-learning-evaluation strategies and supply degrees of its own.

C) Non-Jesuit Institutes (non-Missionary)

These are government assisted colleges that get aid from the government, that is, they get support from the government. There are some notable establishments that receive such special privileges. It is to be noted that government assisted college is different from a government college in this it is closely held and controlled by a personal management however gets aid from the government whereas in an exceedingly government college the curriculum, study materials, fee structure, syllabus, examinations, and so forth are all controlled by the government. In this thesis, we have got chosen four Government assisted colleges in the state of West Bengal.

D) City College of Commerce and Business Administration, Kolkata (1879)

City College of Commerce and Business Administration, Kolkata is a commerce college. It is affiliated to the University of Calcutta. Established in 1861 by Brahma Arya Samaj Society it was providing B.Com. Honours and Pass courses with specialization in business and Finance/Marketing. It is a solely Boys Evening College. B.A. was introduced in 1884; a Law Department came up in 1885, and M.A. classes were introduced and conducted till the new rules of the University terminated them.

Initially, the College was housed in a recent building, however afterward, it was shifted to a different house at 13, Mirzapur Street (now Surya Sen Street). The inaugural ceremony was performed in 1884 by Lord Ripon, the then Governor-General of India. In 1905, the College was brought under the management of a society known as "The Town Faculty Institution", currently referred to as the "Brahmo Samaj Education Society", whose chief objective was to push the expansion of education and contribute towards the well-rounded development and well-being of the human community.

The present principal is Dr. Sandip Kumar Paul. The student strength is nine hundred with 36 teaching staffs. The College is affiliated to the University of Calcutta. The motto of the College is "Shraddhavan Labhate Jnanam (A trustworthy person achieves divine knowledge)." The

native address of the college for future reference is 13, Surya subunit Street, Kolkata-700012, West Bengal, India.

II) Rishi Bankim Chandra College, Naihati, West Bengal (1947)

Rishi Bankim Chandra College is a multi-faculty (Arts, Science and Commerce faculties) co-education College, providing Honours and General Courses connected to the West Bengal State University.

The College boasts of being acknowledged by the UGC for its hardworking service to the state for over fifty years. It had been accredited by NAAC. Rishi Bankim Chandra College, placed within the district of North 24 Parganas, West Bengal, was established in 1947. On the eve of the Independence Day, the concept of establishing a College at Naihati was born.

The College is presently under its the thirty sixth Principal, Dr. Sanjib Kumar Saha, providing a complete of twenty-seven courses with a NAAC score of B++. The whole student strength of Rishi Bankim Chandra College, Naihati is 4,059 with 98 teaching staffs. The College is connected to West Bengal State University with the motto “Bande Mataram (Mother, I bow to thee)”. The native address of the college for future reference is East Kanthalpara, Naihati-743165, twenty-four Parganas (North), West Bengal, India.

III) Prafulla Chandra College, Kolkata (1954)

Placed within the prime section of South Kolkata, Prafulla Chandra College, includes a made inheritance of providing teaching since 1955. The College was started with the aim of providing commerce education to male students; with growing demands the college was reborn into a co-educational college providing variety of subjects as well as five honours courses in Commerce, Humanities and Science. In its long journey of over sixty years, the College has created many graduates who have later established themselves within the society and are revered in their own fields. The second cycle of NAAC assessment, the College has been ranked with ‘B+.’

As a progressive initiative, the College has introduced regular post-graduation course in Commerce under the University of Calcutta. The College has already adopted variety of technology-enabled infrastructural facilities as well as workplace automation, on-line admission, students’ management system. The college introduced ‘Electronic Learning Management System (e-LMS)’ to continue teaching-learning process.

The College continuously believes not solely in tutorial excellence, however additionally in ingraining values among the scholars so on guarantee their holistic development that may change themselves to realize their goals in life.

This leading evening college is connected to the University of Calcutta since 1955, recognized by the University Grants Commission in 1961, licensed by the National Assessment and certification Council in 2007 and reborn into a co-educational establishment by the University of Calcutta in 2012. It offers Three-Year Degree (Honours and General) Courses in the Bachelor of Arts, the Bachelor of Science and therefore the Bachelor of Commerce.

IV) Bhairab Ganguly College, Belghoria (1968)

Bhairab Ganguly College (hereafter, BGC) is a reputable tutorial establishment placed at the northern fringe of Kolkata metropolis of West Bengal. The College was established on 3rd September 1968, with the initiative lately Jibandhan Ganguly, a noted altruist of Belgharia. He liberally contributed eleven bighas of land from his family property with the declared aim of gap the avenue of upper education for native students' happiness to various socio-economic status. The Degree College was finally named after the late grandparent of Jibandhan Ganguly as BGC.

The College is proud to possess a large field comprising of twenty-five bighas of land (8.33 acres) on which three separate buildings are erected to supply sensible infrastructural facilities. Its distinctive infrastructure is so commendable because the College has maintained an idyllic campus adorned with greenery, flower gardens, soccer ground, a huge Indoor Sports area, an area equipped with the progressive acoustics system (Alapan), earth science Observatory, a history deposit (Heritage), outside Theatre (Mukto Mon), healthful Garden (Niramoy Nikunja), Rain Water harvest home theme (MeghKalas), Butterfly garden, a well-equipped faculty Gymnasium, new faculty Canteen, Girls' and Boys' living room and so forth.

Sir J.C. Satyendra N. Bose analysis Unit was setup to facilitate research activities of faculties. A seminar hall equipped with all up-to-date technical facilities has been found out and named once A.P.J. Abdul Kalam. For higher safety and security of the College, CCTV has been put in at different strategic points for a centralized watching system.

Though the faculty started its journey with solely twenty-one students and four teachers, over the years it is reworked itself into a centre of educational excellence. The College now has total student strength of five thousand, impartation learning in various areas of Humanities, Commerce and Basic Sciences. There are Honours courses in twenty-two disciplines and General Courses in twenty-four subjects. new rising subjects within the field of Applied Sciences corresponding to Science, Electronic Science, Food and Nutrition and a few extremely tightened disciplines in the sphere of Humanities such as Journalism and Mass Communication are given due emphasis. one in every of the key milestones achieved by this establishment has been the commencement of PG Courses with affiliation to West Bengal State University (WBSU) from 2009-10 in accordance with the institution's vision of advancement of learning, need-based teaching and to cater to the ever-ascending demand for PG studies. At present, the College offers self-financed PG Courses in four subjects, namely, English, Geography, Urdu, and Commerce.

The primary assessment by the National Assessment and certification Council (NAAC) Peer Team was conducted in 2008 with Grade 'B' (CGPA of 2.24). On the second visit in 2016, the NAAC recognized BGC as an 'A' Grade (CGPA of 3.01) institution, therefore acknowledging its persistent enterprise to create better members for a stronger society.

The College has created and maintained an instructional atmosphere that promotes the well-rounded development of the scholars. The aim of the College is to bring to light the inherent qualities of budding learners, to enlighten the human values and to convey the advantages of education to those untouched by the gifts of progress. Since its origination BGC has shown consistent performance in academics, extra-curricular spheres, and extension activities towards the society. The College endeavours perpetually to develop as an enabling academic institution, grooming the general temperament of the young voters with the absolute best stress on moral and social values. BGC is a co-educational College.

The present College Principal is Dr. Minakshi Ray. It provides twenty-nine courses. The student strength of the college is 3,869 with 147 teaching staffs. The College is connected to West Bengal State University with the moto "Utistha Jagrata Prapya Nibhodata (arise, awake, the nice ones, notice out, learn of them)."

e) Features of Questionnaire

The primary data were collected for the research by serving five well-structured questionnaires from the target groups related to stakeholders. The five questionnaires are framed according to the stakeholders namely,

- i. Student Questionnaire
- ii. Parent Questionnaire
- iii. Faculty Questionnaire
- iv. Alumni Questionnaire
- v. Institution Questionnaire

Out of the five questionnaires, the first four are targeted for individuals which accepts response from one person. The demographic features are name, age, gender, institute of study, year of study, course name and other details. Then the remaining questions are framed according to research purpose and are very objective in nature.

The institution questionnaire deals with the details of the education institutions. The initial questions are on basic information such as name, year of establishment, number of courses, total student counts and courses division. The second part of this questionnaire deals with detailed counts and numbers, as in it focuses on detail student counts with proper division and finally the total cost of the courses per institutes. Here we are focusing on getting information to perform cost benefit analysis on the institutes, and the data collected is strictly coming from the institutes itself.

3.1.2 Secondary Data

For this research propose the study have used the Secondary data as available from different reports of Ministry of Education, Government of India and the University Grants Commission. The University Grants Commission has the unique distinction of being the only grant-giving agency in the country which has been vested with two responsibilities: that of providing funds and that of coordination, determination and maintenance of standards in institutions of higher education.

The primary regulatory agency at the tertiary level is the University Grants Commission, which is tasked with providing advice to the government, coordinating between the Center and the States, and enforcing the intended standards. It helps in funding universities, setting educational standards, and tracking the development of different HEI.

3.2 Issues related to Data Analysis Tools

Based on the research objective, two methods are chosen to draw conclusions namely Exploratory data analysis and Inferential Data analysis. The two methods employed are described in the following section.

3.2.1 Exploratory Data Analysis

To conduct exploratory data analysis, this study applies pictorial representations using bar and line plots. Time series graph is utilized to depict the growth and fall of the different attributes of the primary institutional data. This allowed us to get a clear picture of the institution growth in terms of finance and student body. Other graphs like pie chart are also used here to perform comparative analysis of the Institution's Achievements and other salient features of any institution have been explored here. Bar graph helped us to draw a side-by-side comparison of the numerical data collected on the student count and Institution.

3.2.2 Inferential data analysis

Test of normality on the coded variable are conducted here to check if they follow a normal distribution. If they do not follow a normal distribution then we go for Chi-Square test, and for crosschecking our results we then apply Likelihood-Ratio Test. The following tests are necessary to be conducted in this study.

a. Test for normality:

Kolmogorov–Smirnov test (K-S test): In statistics, the Kolmogorov–Smirnov test (K-S test or KS test) is a nonparametric test of the equality of continuous (or discontinuous, see Section 2.2), one-dimensional probability distributions that can be used to compare a sample with a reference probability distribution (one-sample K–S test), or to compare two samples (two-sample K–S test).

The Shapiro-Wilk test is a way to tell if a random sample comes from a normal distribution.

b. Chi-Square Test:

The Chi-square test of independence is a statistical hypothesis test used to determine whether two categorical or nominal variables are likely to be related or not.

Null Hypothesis: there is no relationship between the study variables

Alternative hypothesis: there is a relationship between the study variables

First, we must calculate the expected value of the two nominal variables. We can calculate the expected value of the two nominal variables by using this formula:

$$E_{i,j} = \frac{\sum_{k=1}^c O_{i,j} \sum_{k=1}^r O_{k,j}}{N}$$

Where,

$E_{i,j}$ = Expected Value

$\sum_{k=1}^c O_{i,j}$ = Sum of *i*th Column

$\sum_{k=1}^r O_{k,j}$ = Sum of the *j*th Row

N = Total Number

After calculating the expected value, we will apply the following formula to calculate the value of the Chi-Square test of independence:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{i,j} - E_{i,j})^2}{E_{i,j}}$$

Where,

χ^2 = Chi – Square test of Independence

$O_{i,j}$ = Observed Value of two nominal variables

$E_{i,j}$ = Expected Value of two nominal variables

Degree of freedom is calculated by using the formula:

$$DF = (r-1) (c-1)$$

Where, r = number of rows

c = number of columns

c. Likelihood Ratio Test:

In statistics, the likelihood-ratio test assesses the goodness of fit of two competing statistical models based on the ratio of their likelihoods, specifically one found by maximization over the entire parameter space, and another found after imposing some constraint. If the constraint (i.e., the null hypothesis) is supported by the observed data, the two likelihoods should not differ by more than sampling error. Thus, the likelihood-ratio test tests whether this ratio is significantly different from one, or equivalently whether its natural logarithm is significantly different from zero.

Let $X_1, X_2, X_3, \dots, X_n$ be a random sample from a distribution with a parameter θ .

Suppose that $L_{(x_1, x_2, \dots, x_n; \theta)} = f_{X_1, X_2, \dots, X_n}(x_1, x_2, \dots, x_n; \theta)$

Hypothesis:

$$H_0: \theta = \theta_0,$$

$$H_1: \theta = \theta_1,$$

We define,

$$\lambda_{(x_1, x_2, \dots, x_n)} = \frac{L_{(x_1, x_2, \dots, x_n; \theta_0)}}{L_{(x_1, x_2, \dots, x_n; \theta_1)}}$$

To perform a likelihood ratio test (LRT), we choose a constant c . We reject H_0 if $\lambda < c$ and accept it if $\lambda \geq c$. The value of c can be chosen based on the desired α .

3.3 Summing up

This chapter deals with the methods employed for data collection. Furthermore, the research methods are discussed. The next chapter will discuss on analysis and findings.

CHAPTER 4

ANALYSIS AND FINDINGS

4.1. Introduction

Knowledge has always been the basis for the development of society as a whole. Since its creation, HEI has been place of both knowledge reservation, by educating and training students, and knowledge creation, through research. HEI have to perform multiple roles, like creating new knowledge, acquiring new capabilities, and producing an intelligent human resource pool, through challenging teaching, research, and extension activities to balance both the need and the demand.

The higher education system in India has grown exponentially, more so in the post-independence period, to become one of the largest systems of its kind in the world. In terms of the number of educational institutions, India has the world's largest higher education system with about 1,000 universities and 40,000 colleges whereas it ranks third in terms of size and diversity, but its presence in the international education system has been abismally below its true potential that remains unexplored.

Jesuit education is known for critical thinking skills, strength as a leader, passion for learning, global understanding, commitment to social justice, and development of the whole person. Jesuit education is value-oriented. There is no aspect of education, not even the so-called hard sciences, which is neutral. All teaching imparts values. The service of faith through the promotion of justice remains the major focus. Further, the distinctive role of the Jesuits in Jesuit HEI is to share the basic Ignatian purpose and thrust with the educational community.

The relationship between Jesuits and India began in the 16th Century with the arrival of St. Francis Xavier on the shores of India and continues till today. Together with their collaborators, Jesuits have contributed and continue to contribute to the nation-building in India. Their tireless efforts over the years have culminated in many well-known colleges, universities, and premier B-Schools that are constantly working for the betterment of youth in India.

The role of higher education in India with an emphasis on Jesuit Higher Education Institution is the crux of the study. For this, the study has utilized the secondary data available from the

Ministry of Education (MoE) website and University Grant Commission (UGC). A spatial picture of higher educational scenario has been arrived at with the help of the four indicators of colleges and universities – namely the number of HEI, state-wise distribution of HEI, faculty and GER.

This chapter explains the nature of the data and methodology adopted for this study. It also gives the conceptual framework of the study explaining the variables for conducting the tests and the analysis and interpretation of the data.

4.2 Nature of the Data and Methodology Adopted

The data collected through the survey were cleaned using Microsoft Excel for further operations. Then SPSS version 20.0 was used to analyze, and subsequent tests were conducted. The responses of the 5 category types of questionnaires data points were collected and were taken on Likert's Scale of one to five, that is, Highly satisfied = 1, Satisfied = 2, Neutral = 3, Dissatisfied = 4, Highly Dissatisfied = 5. Accordingly, the responses were coded and the tests were conducted. Cross tab analysis were conducted to draw a basic conclusion on the potential relation between different variables and their satisfaction levels. This enabled us to make very direct conclusions on the satisfaction level in relation to each other.

To check if the data follows the normal distribution, Kolmogorov-Smirnov test and Shapiro-Wilk test were conducted and from the results, it was found that the variables do not follow normal distribution. Since the variables do not follow normal distribution, so test of independence of the variable were followed, and done with the help of Chi-square test and Likelihood ratio test. With that conclusion were drawn about the significant relationship between the variables. This is done on student questionnaire, parent questionnaire, faculty questionnaire and finally alumni questionnaire. The result drawn from this test have been used to prescribe future recommendations.

Here, the study utilized the secondary data to perform basic exploratory data analysis to gather the base of our population size and our sample size. This also helped us to visualize our target audiences, giving us a clear idea of the Jesuit HEI population compositions as well as their spread over India. Thus, we chose the Jesuit HEI and Non-Jesuit HEI in West Bengal as the sample study and conclude.

According to our research purpose, we have utilized the Institutional questionnaire data to draw Exploratory data analysis. This enabled us to visualize the time series growth of different attributes of institutes over the past ten years. The chart reveals the steep growth and comparison over different attributes of an institute. Thus, providing us with a clear picture of the fee structure at a glance. The enrollment per year was visualized and significant conclusions are drawn from the analysis.

The next section deals with the pictorial representations to substantiate the role of higher education in India.

4.3 Analysis on the role of higher education in India

The following pictorial representations are displayed to portray the role of higher education in India.

4.3.1 Number of Colleges and Degree Awarding Universities/Institutions in India

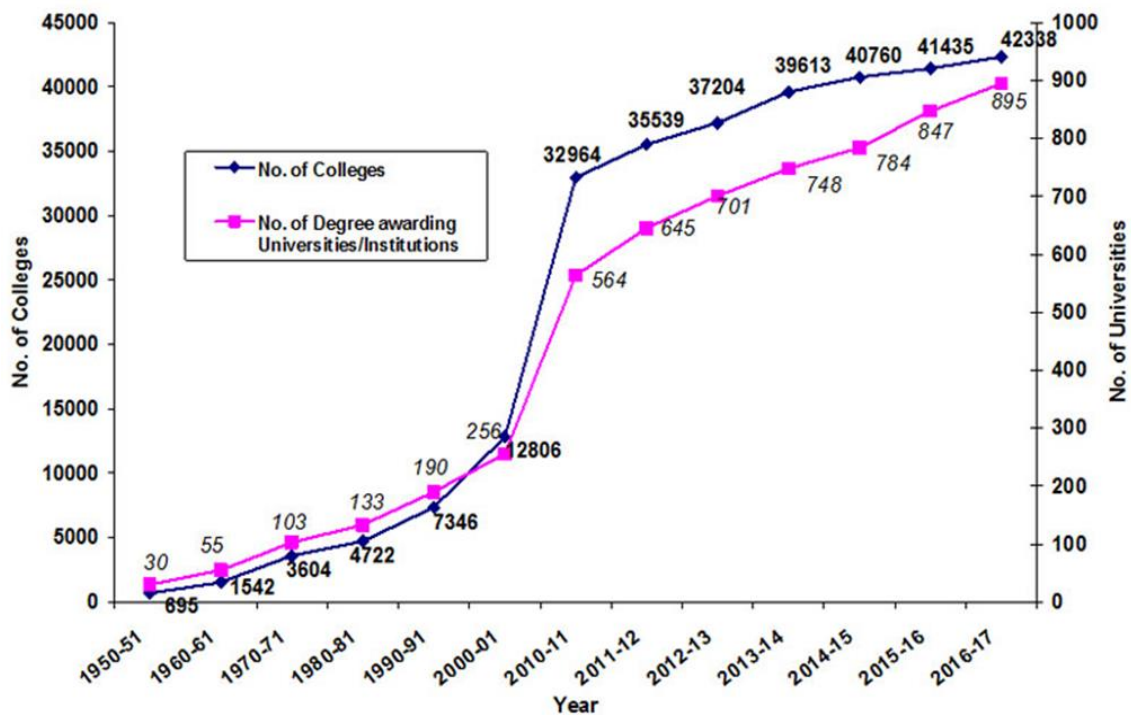


Figure 4.1 - Number of colleges and degree awarding universities/institutions in India.

The above graph from UGC (University Grant Commission) shows the trend of the number of college and degree offering Universities in the India from the year 1950 to 2016 with

cumulative count of the number of colleges and University with the time period 10 years. The number of colleges in India have seen a steady growth as seen in the figure 4.1, from year 1950 to year 2000 the college growth rate is stable, then it experienced a very steep hike in between the year 2000 and 2010, followed by constant growing trend. Figure 4.1 shows that since 1950, the number of universities in India has been incrementally rising. However, there had been a significant rise respectively 2000 and 2010, which was swiftly followed by a pattern of stable growth. In the past 50 years the Number of colleges in India have increased by forty Thousands and similarly the number of degree awarding universities have incremented by 800.

4.3.2 Number of Degree awarding University/Institution by Type

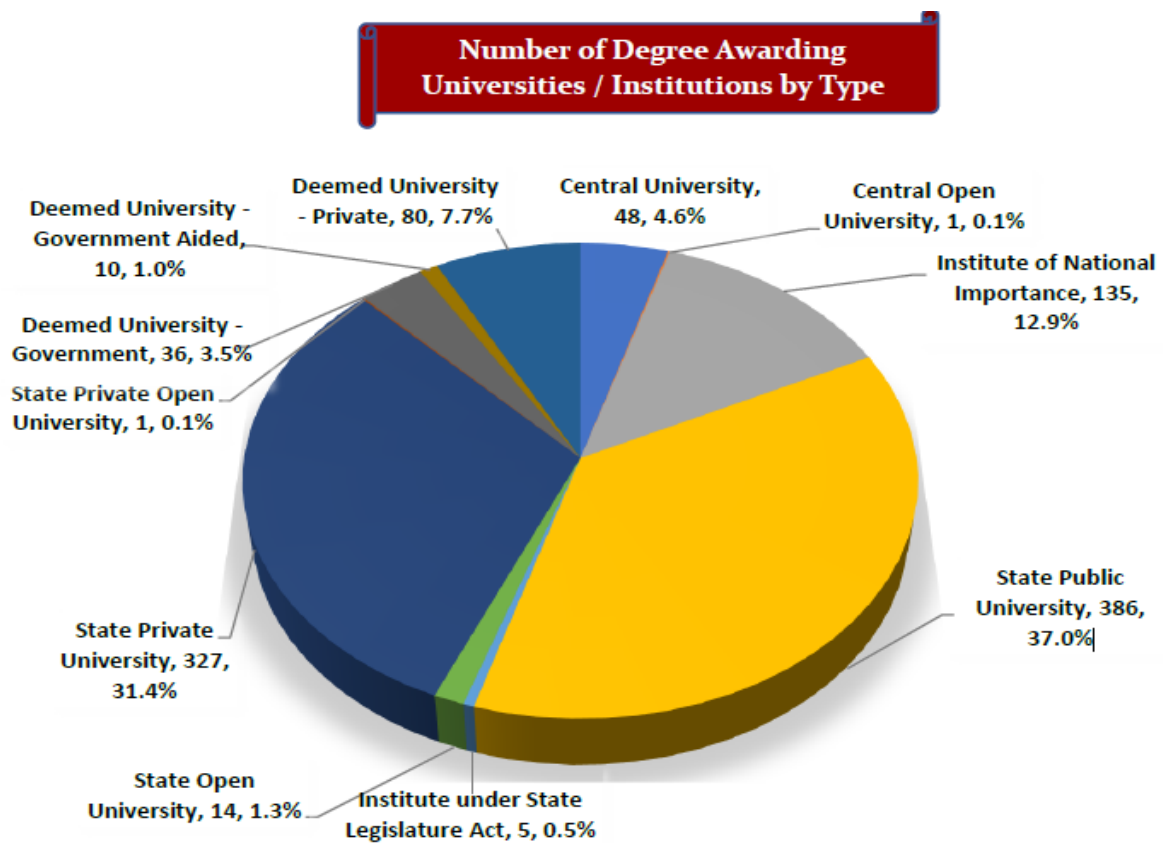


Figure 4.2 - Number of Degree awarding University/Institution by Type

The above figure from the MoE (Ministry of Education) shown a comparison of different Type of Degree awarding University in India in the year 2017. From the graph it can be seen that State Public University is the highest with a percentage of 37.0% of totality, followed by State Private Universities with 31.4%. Then the numbers drop to 12.9% with the count of Institute of National Importance, followed by Deemed University – Private with 7.7%.

Central University is taking up 4.6% of the totality and Deemed University – Government having 3.5% of the total number of Degree awarding University. Followed by State Open University 1.3% and Deemed University – Government Aided with a percentage of 1.0%. Finally we have The Institute under State Legislature with mere count of 5 in total number in India taking up 0.5%, followed by Central Universities and State Private Open University both with count of 1 and percentage of 0.1%.

4.3.3 Comparison of College type and Management type

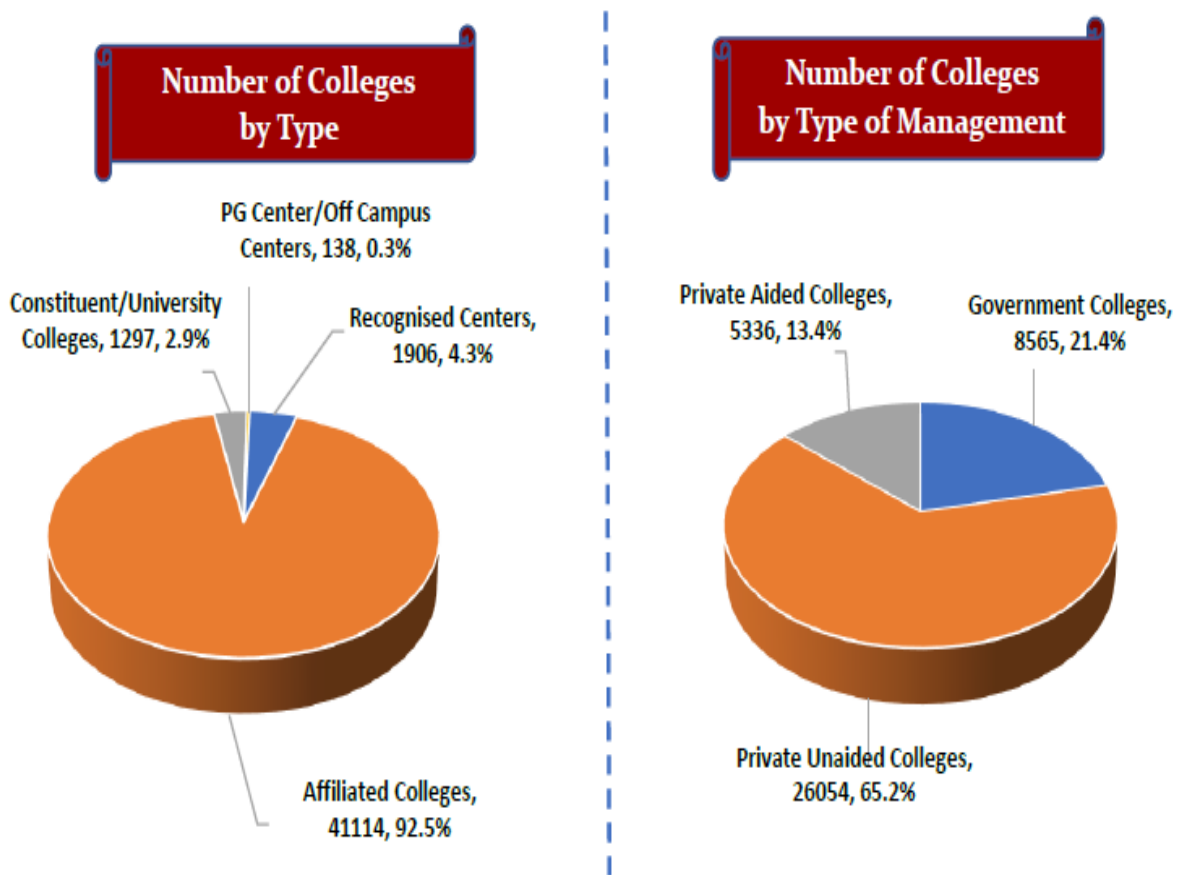


Figure 4.3 - Comparison of College type and Management type

The graph on the left compares the number of colleges by kind and is based on information from the Ministry of Education website. Affiliated Colleges account for the highest percentage of the total, at 92.5 percent. Following this are Constituent/University Colleges, which make up 2.9 percent, and Recognized Centers, which make up 4.3 percent. With 0.3 percent of all incidents, PG Centers/Off Campus Centers had the fewest incidents.

The right-hand graph displays the number of colleges with various management styles. Private Unaided Colleges account for the largest share of this group, at 65.2 percent, followed by Government Aided Colleges at 21.4 percent, and Private Aided Colleges at 13.4 percent.

4.3.4 The State-wise breakup of the number of colleges

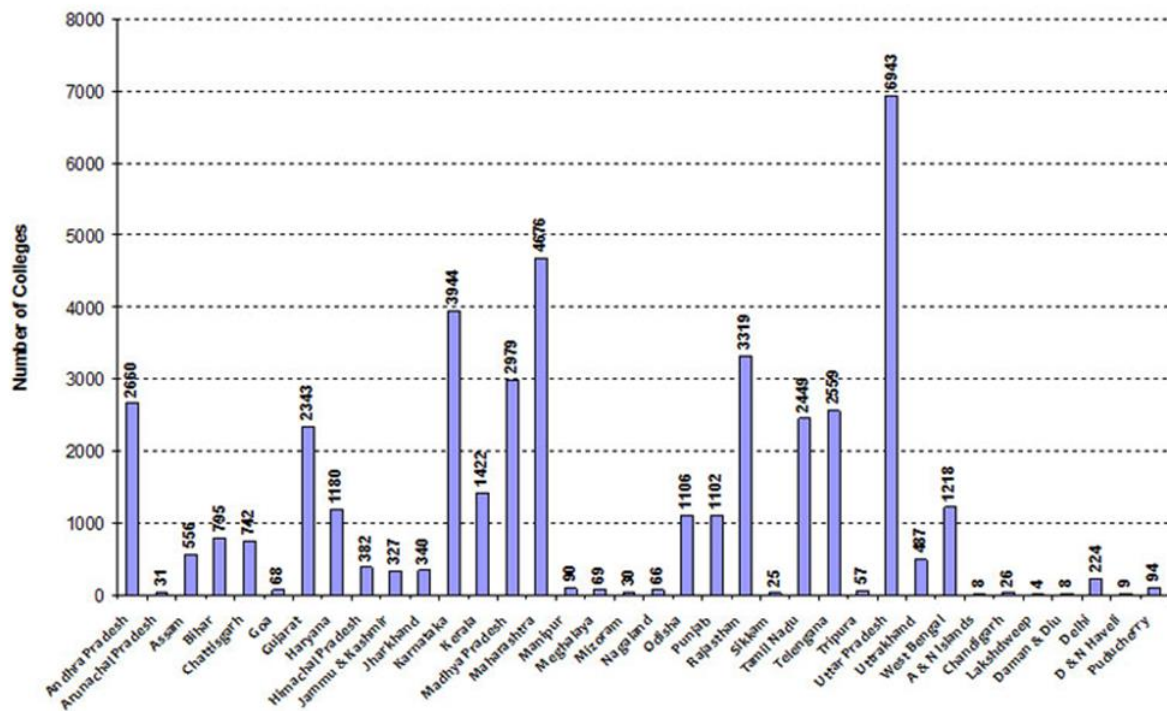


Figure 4.4 - The State-wise breakup of the number of colleges

The above graph from UGC (University Grant Commission) shows the comparison of the state wise breakup of number of colleges. Uttar Pradesh having the greatest number of colleges with 6943 numbers of colleges. Followed by Maharashtra with 4676 number of colleges and Karnataka with 3944 colleges. The state of Lakshadweep having the lowest number of Colleges in India with total of 4 Colleges. The dominating figure are Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Maharashtra, Rajasthan, Tamil Nadu, Telangana and Uttar Pradesh, as all these mentioned names are having more than 2000 colleges. Overall, the college composition throughout India is more or less heterogeneous but it ensures that education reaches all the parts of India without any compromise.

4.3.5 The State-wise breakup of the number of Degree Awarding Institutions

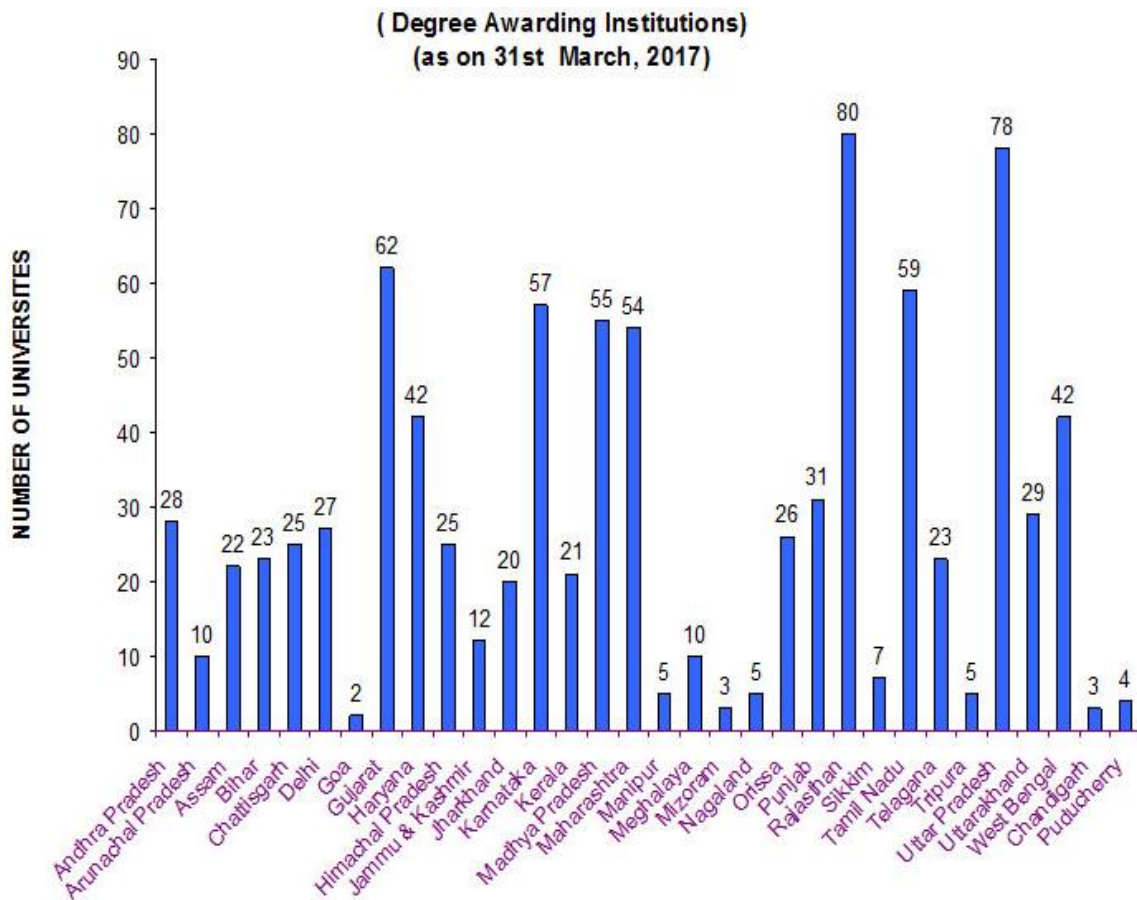


Figure 4.5 - The State-wise breakup of the number of Degree Awarding Institutions

The above graph from UGC (University Grant Commission) shows the comparison of the state wise breakup of number of University. Rajasthan (80) has the highest and Goa (2) has the lowest number of Degree Awarding Institutions.

It is evident from the above that the distribution of Colleges and Universities revealed wider inter-state variation in the country. Wide regional variations exist given the area and population density of the states being different.

4.3.6 Growth in HEI, Faculty and Student Enrolment over the period 1950-51 to 2016-17

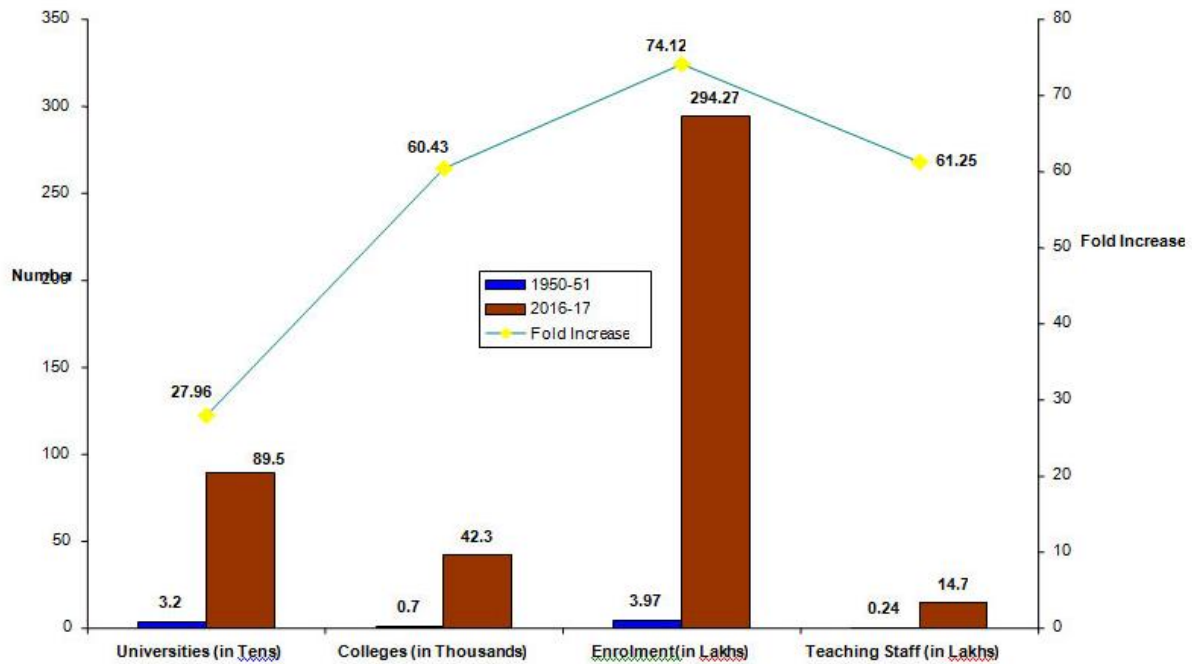


Figure 4.6 - Growth in HEI, Faculty and Student Enrolment over the period

The above chart has been generated by the data which is available in UGC (University Grant Commission). In the figure 4.1.6 we are provided with the University count (in tens), College Count (in thousands), Enrolment count (in Lakhs), Teaching staff (in lakhs) demography with according to the years 1950-1951 and 2016-2017.

Starting with the Universities count, we can see that it increased by 27.96 folds and a count increase of 8630. The number of colleges increased from 700 to 42300 with 60.43-fold increase. The number of enrolment of students have increased from 3.97 Lakhs to 294.27 Lakhs, and corresponding folds' increase is 74.12. The teaching staffs have increased from 0.24 Lakhs to 14.7 Lakhs and 61.25 folds increase. This shows that the Higher Education Institution of India have experienced a burst in the number compared to in 1950.

4.3.7 The growth in Teaching staff over the period 1950-51 to 2016-17

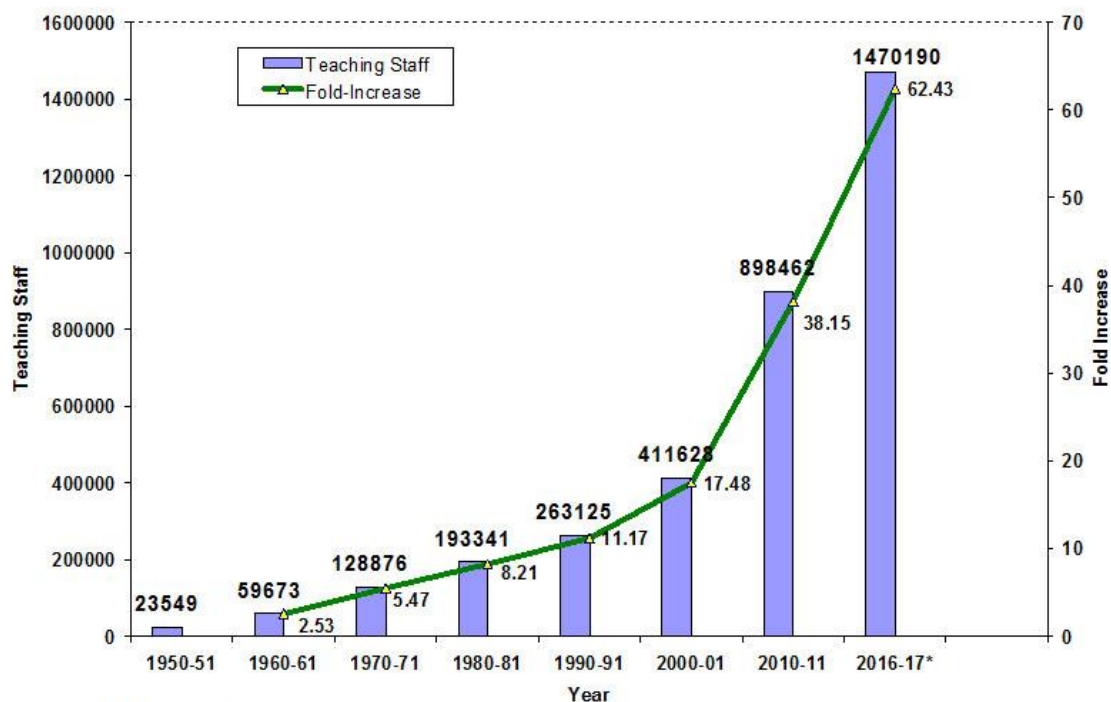


Figure 4.7 - The growth in Teaching staff over the period 1950-51 to 2016-17

The above chart has been generated by the data which is available in UGC (University Grant Commission). In the figure we can see that it encapsulates the total number of teaching staff in the time frame of 1950 to 2016 with a time period of 10 years. On the X-axis we have the years from the year 1950 till 2017 with groups of tens, on the left Y-Axis we have the count of the teaching faculty and on the Right Y-Axis we have the folds increasing scale. Through this graph it can be interpreted that the number of teaching staff has increased in an exponential rate, starting from the figure 23549 in 1950 to 1470190 in the year 2016. The growth of the teaching staff experienced a slow steady linear growth from the year 1950 up till 2000, after that it followed a steep rising linear trend. Total growth of 62.43 folds has been witnessed in the teaching staff count in the past 60 years.

4.3.8 Number of Teaching Staffs by Post and Gender

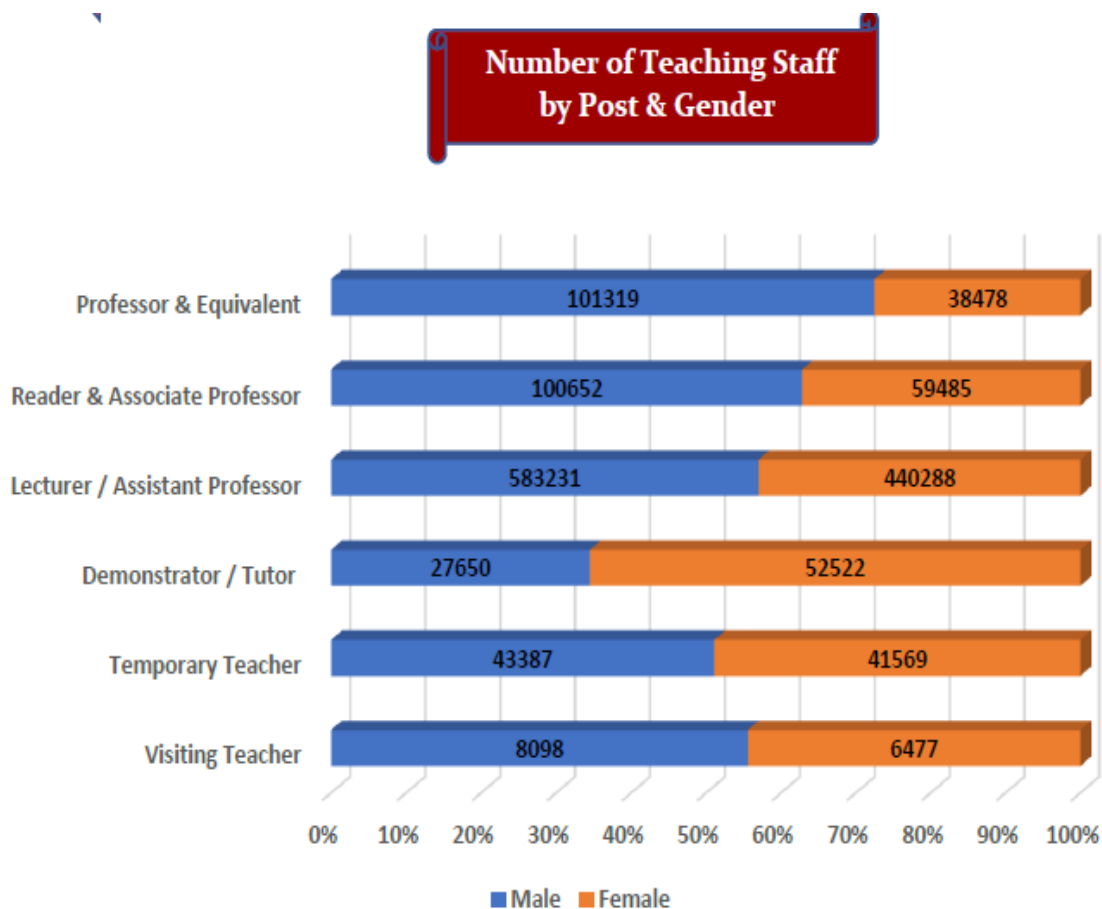


Figure 4.8 - Number of Teaching Staffs by Post and Gender

The above chart has been generated by the data which is available in UGC (University Grant Commission). This figure shows a 100% stacked bar chart of the comparison between Post and Gender of number of teaching staff. In the X-axis we have the Percentages and Y-axis have the categorical data related to the types of post held by teaching staffs. Here, the chart shows us that around 70% of Professors and equivalent are Male and rest 30% are female. Amongst the Readers and Associate Professors, it's been observed that 60% of the teaching staffs are male and rest 40% are female. In Lecturer and Assistant Professor, 55% of the staffs are male and rest 45% are female. There are 32% of Demonstrator and Tutors are male and rest 68% are female. 48% of the Temporary Teachers are Male and 52% of them are female. About 52% of the visiting teachers are Male and the remaining 48% are female.

4.3.9 Number of Teaching and Non-Teaching Staffs by Social Group and Gender

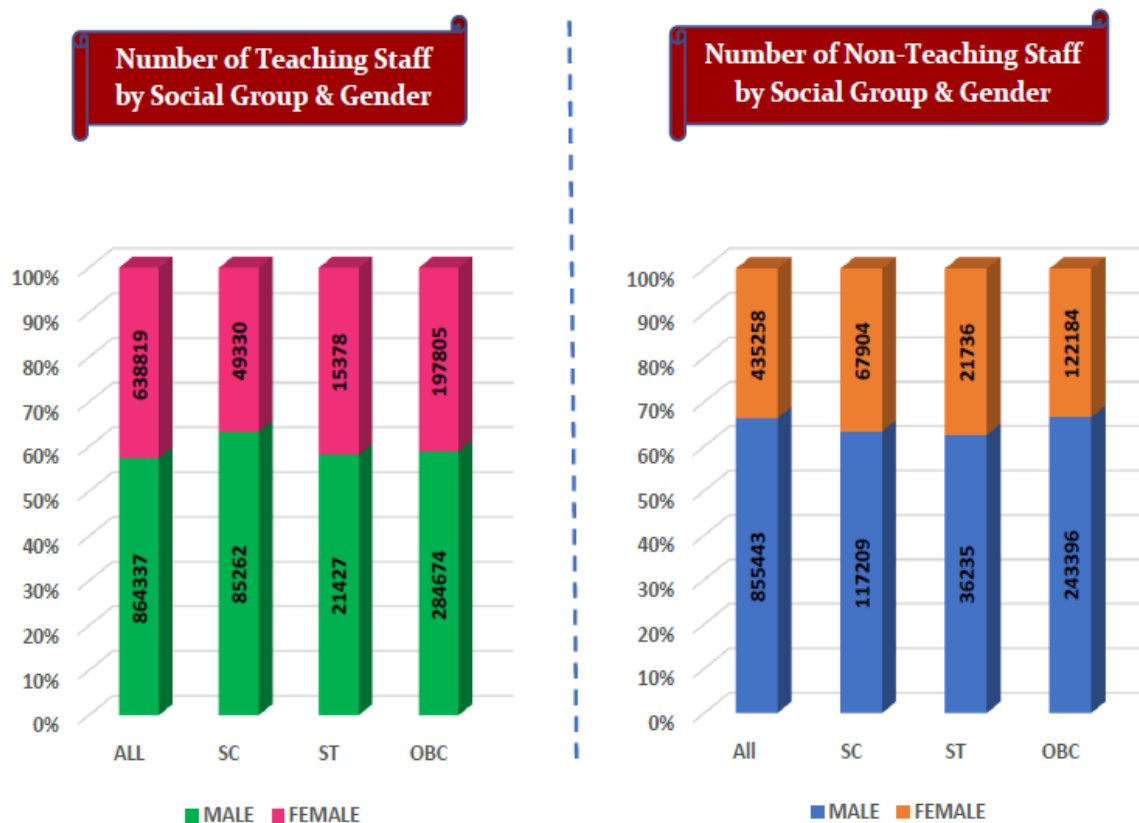


Figure 4.9 - Number of Teaching and Non-Teaching Staffs by Social Group and Gender

The above chart has been generated by the data which is available in UGC (University Grant Commission). This figure shows a 100% stacked bar chart of the comparison between Social Groups and Gender of number of teaching staff and non-Teaching staffs. In the Y-axis of both the graphs we have the Percentages of male and female counts and Y-axis have the categorical data related to the types of Social Groups held by teaching staffs and non-Teaching Staffs. Around 60% of the SC, 55% of the ST and 55% of the OBC among the Teaching staffs are males, and correspondingly 40% of SC, 45% of the ST and 45% of the among the Teaching staffs are females. In total 52% of the Teaching staffs are Male and rest 48% of them are females. It is observed that the teaching staffs are having more or less balanced gender count.

Around 58% of the SC, 59% of the ST and 61% of the OBC among the non-Teaching staffs are males, and correspondingly 42% of SC, 41% of the ST and 39% of the among the non-Teaching staffs are females. The total count of the Non-Teaching staffs is biased towards the male cohort with a total of 60% of the total and 40% takes up the female.

4.3.10 The Growth in the Gross Enrolment Ratio

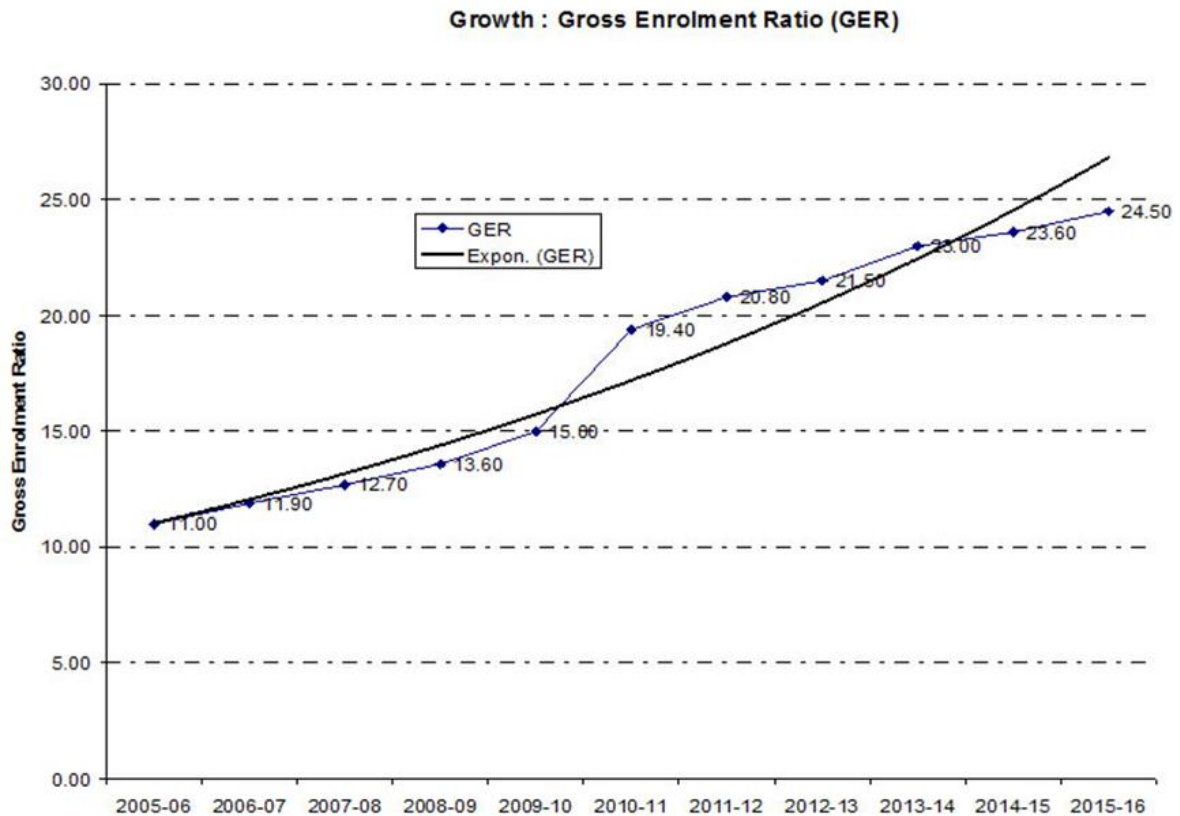


Figure 4.10 - The Growth in the Gross Enrolment Ratio

The above chart has been generated by the data which is available in UGC (University Grant Commission) in the time period of 2005-06 to 2015-16. GER is a statistical measure used by the United Nations to measure the education index of a nation. In the context of higher education, the GER is calculated from the ratio of persons of all ages enrolled in HEI divided by the total population in the age group 18-23 and multiplied by a hundred. The national average of 20.8 percent, lags behind as compared to the developed as well as developing countries such as the United States (95), Russia (77), the United Kingdom (61), France (57), Malaysia (36), and China (24) (UNESCO, 2011).

4.3.11 The Role of Jesuit Higher Education Institution

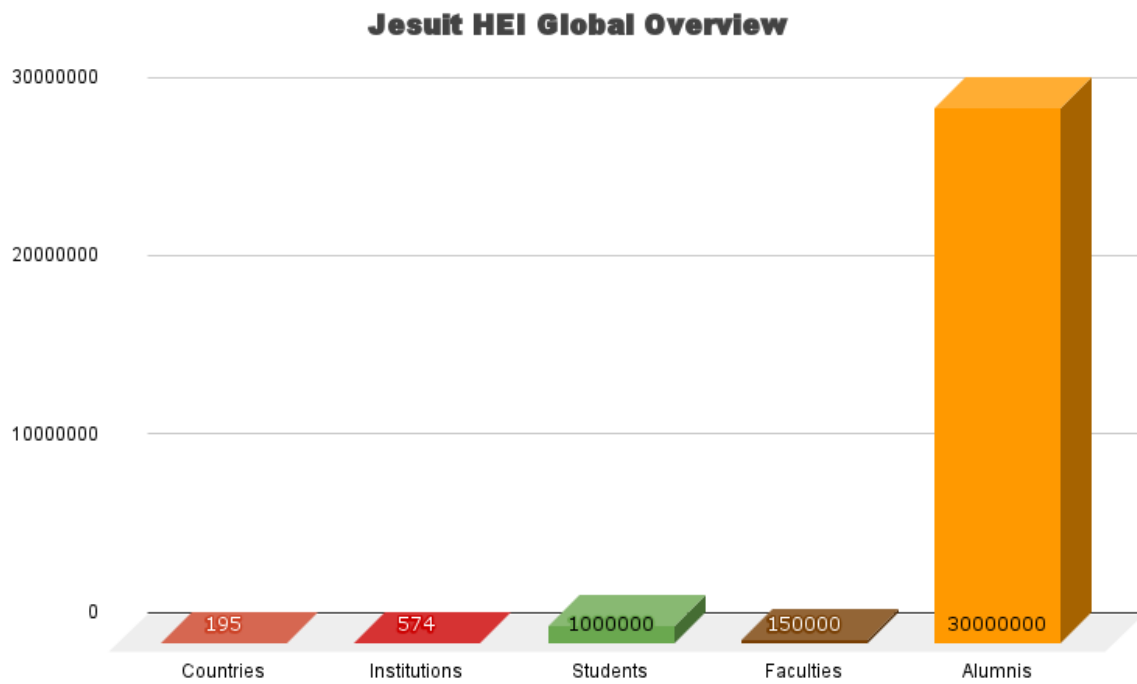


Figure 4.11 - The Role of Jesuit Higher Education Institution

4.3.12 Jesuit Higher Education in World, India and West Bengal

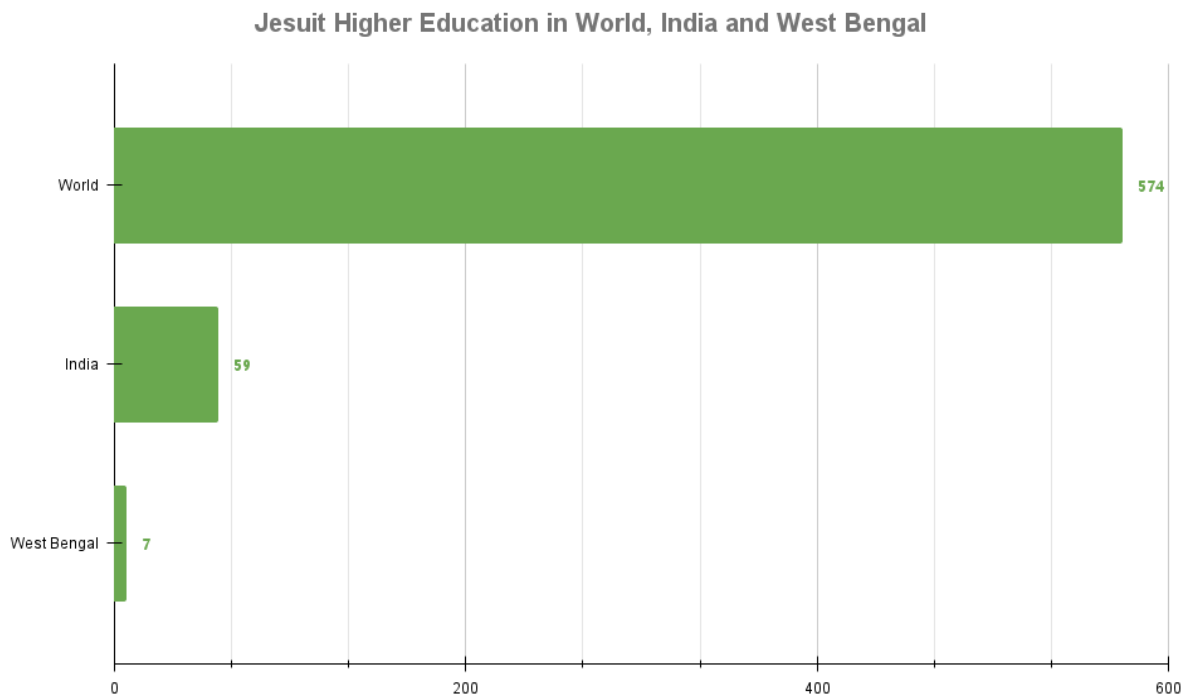


Figure 4.12 - Jesuit Higher Education in World, India and West Bengal

The data for this chart have been collected from the secondary data available on jheasa website. This figure represents the Jesuit Higher Education Institutes Global Overview. The relevance of Jesuit Higher Education is immense and is available in a very unstructured manner as discussed earlier. To overcome this shortcoming a graphical representation has been put forth. Currently there are 574 Jesuit HEI across the globe educating more than 1 million Students and catering to more than 150000 faculties and more than 30 million Alumni. In India there are 59 Jesuit HEI and in the state of West Bengal there are 7 Jesuit HEIs.

4.4 Analysis related to the role of Jesuit Higher Education In India

4.4.1 The following table highlights on the number of Jesuit Higher Educational Institutions in India.

Table 4.1-Member Institution of Jesuit Higher Education

Sl. No.	INSTITUTIONS	NUMBER
1	Universities	2
2	Autonomous Colleges	14
3	Affiliated Colleges	23
4	Management Institutes	7
5	B. Ed Colleges	9
6	Engineering Colleges	3
7	Law College	1
	Total	59

The corresponding pictorial representation is :

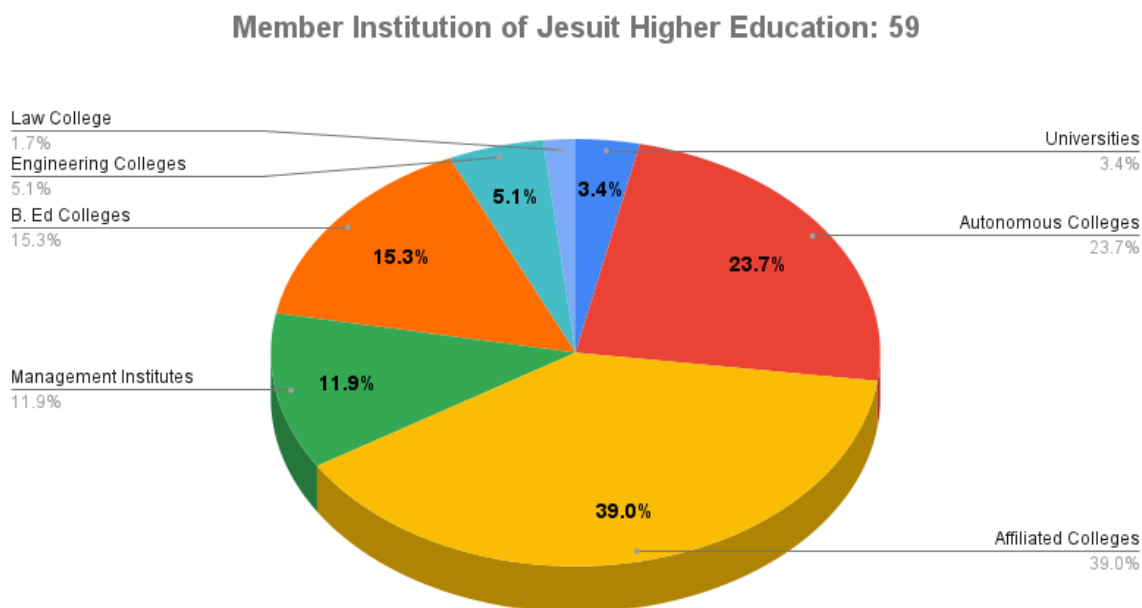


Figure 4.13 - Member Institution of Jesuit Higher Education

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore and a graphical representation of the table 4.5.1. The following data shows the number of different member institution of Jesuit higher education in India. Affiliated College by far holds the majority of the count with 39.0% of the totality followed by Autonomous colleges with 23.7%. 11.9% of the total Jesuit Colleges are Managerial Institutes and followed by B. Ed Colleges having 15.3%, Engineering Colleges with 5.1%, Law Colleges having 1.7% and Universities 3.4%. From this it is evident that Affiliated and Autonomous Colleges are extremely well known in India as part of high education institutions.

4.4.2 State wise distribution of Jesuit Higher Education Institutions in India

The following table highlights on the number of Jesuit Higher Educational Institutions across states in India.

Table 4.2 - Number of Jesuit HEI across States in India

Sl. No.	State	No. of Jesuit HEI
1	Andhra Pradesh	5
2	Assam	1
3	Bihar	2
4	Delhi	1
5	Gujarat	1
6	Jharkhand	9
7	Karnataka	11
8	Kerala	2
9	Madhya Pradesh	3
10	Maharashtra	5
11	Meghalaya	2
12	Tamil Nadu	10
13	West Bengali	7
TOTAL	13	59

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore. The data represents the state wise distribution of Jesuit Institution Composition in the year 2019. There are total of 59 Jesuit Colleges in India. From the table it is notable that Karnataka have the most count of Jesuit Institutions with a total of 11 Institutions. Gujrat, Assam and Delhi have least number of Jesuit Institute with only one Institution each. West Bengal have 7 Jesuit Institute thus making it a good sample choice to represent the population of all the Jesuit Institute in India.

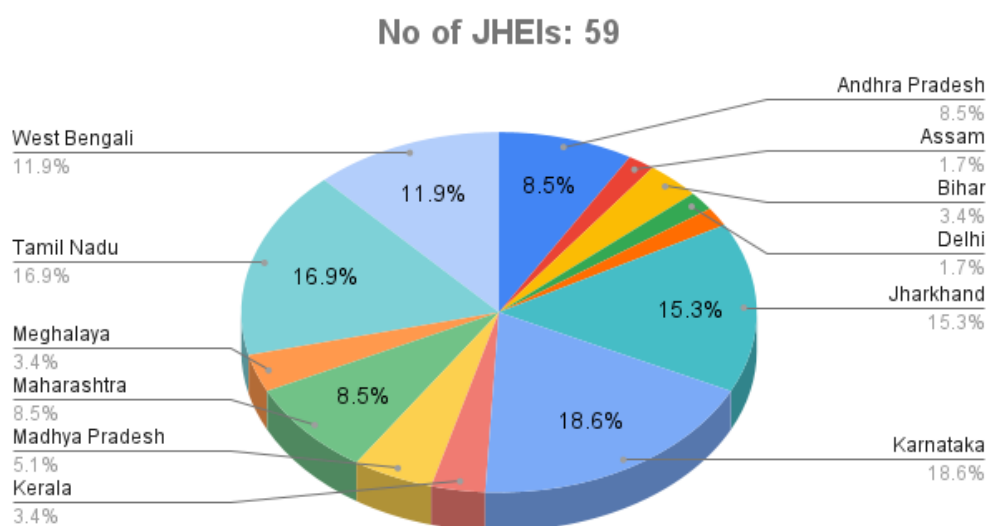


Figure 4.14 - Number of Jesuit HEI across States in India

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore and a graphical representation of the table 4.2. The information depicts the composition of Jesuit institutions by state in 2019. In India, there are 59 Jesuit colleges overall. From the figure, it can be seen that Karnataka, with a total of 18.6%, has the highest number of Jesuit institutions. With just one institution each, Gujarat, Delhi and Meghalaya have the fewest Jesuit institutions. Since there are 11.9% Jesuit Institutes in West Bengal, it serves as a decent sample of all Indian Jesuit Institutes.

4.4.3 Table 4.3-State wise distribution of JHEI in India - 2019 (number of teachers)

Sl. No.	State	No of Teachers
1	Andhra Pradesh	579
2	Assam	18
3	Bihar	47
4	Delhi	55
5	Gujarat	94
6	Jharkhand	441
7	Karnataka	801
8	Kerala	53
9	Madhya Pradesh	44
10	Maharashtra	203
11	Meghalaya	36
12	Tamil Nadu	1267
13	West Bengali	672
TOTAL	13	4310

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore. The information depicts the composition of the teaching staff at Jesuit institutions by state in 2019. In India, there are 4310 Jesuit teaching staff members in total. The data shows that, with a total of 1267 staff members, Tamil Nadu has the highest number of Jesuit teachers. There are just 18 and 36 Jesuit teaching staff members respectively in Assam and Meghalaya. Given that West Bengal has 672 Jesuit teaching staff members, it is a decent sample of the total number of Jesuit teaching staff members throughout India.

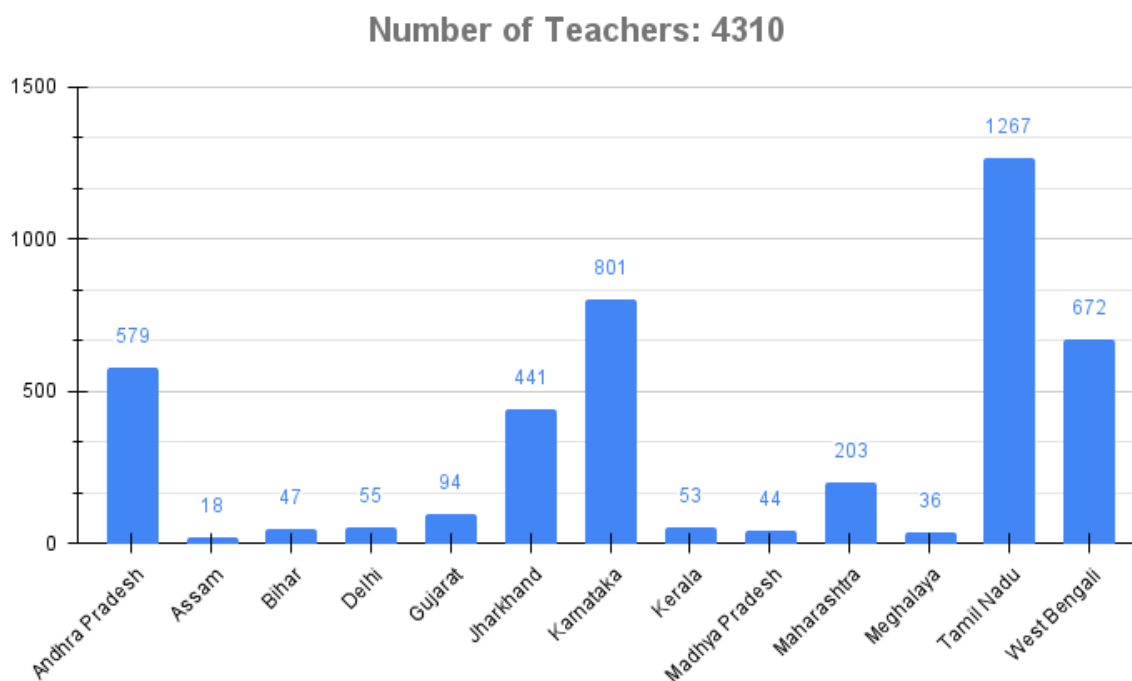


Figure 4.15 - State wise distribution of JHEI in India - 2019 (number of teachers)

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore and a graphical representation of the table 4.3. The data shows the makeup of the faculty at Jesuit colleges in each state in 2019. There are a total of 4310 Jesuit teachers working in India. The statistics reveals that Tamil Nadu has the most Jesuit professors, with a total of 1267 staff members. In Assam and Meghalaya, there are just 18 and 36 Jesuit teaching staff members, respectively. Given that West Bengal has 672 Jesuit teachers, it is a reasonable representation of the overall number of Jesuit teachers in India.

4.4.4 State wise distribution of Non-Teaching Staff in Jesuit Higher Education Institutions in India

The following table highlights on the State wise distribution of Non-Teaching Staff in Jesuit Higher Education Institutions in India.

Table 4.4 - State wise distribution of Non-Teaching Staff in Jesuit Higher Education Institutions in India

Sl.No.	State	No of non-Teaching Staff
1	Andhra Pradesh	258
2	Assam	4
3	Bihar	39
4	Delhi	15
5	Gujarat	52
6	Jharkhand	658
7	Karnataka	380
8	Kerala	26
9	Madhya Pradesh	56
10	Maharashtra	250
11	Meghalaya	7
12	Tamil Nadu	731
13	West Bengali	402
TOTAL	13	2,878

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore. The information depicts the composition of the non-teaching staff at Jesuit institutions by state in 2019. In India, there are 2878 Jesuit non-teaching staff members in total. The data shows that, with a total of 731 staff members, Tamil Nadu has the highest number of Jesuit non-teaching staffs. There are just 7 and 4 non-teaching staff respectively in Meghalaya and Assam. Given that West Bengal has 402 non-teaching staff, it is a decent sample of the total number of non-teaching staff members throughout India.

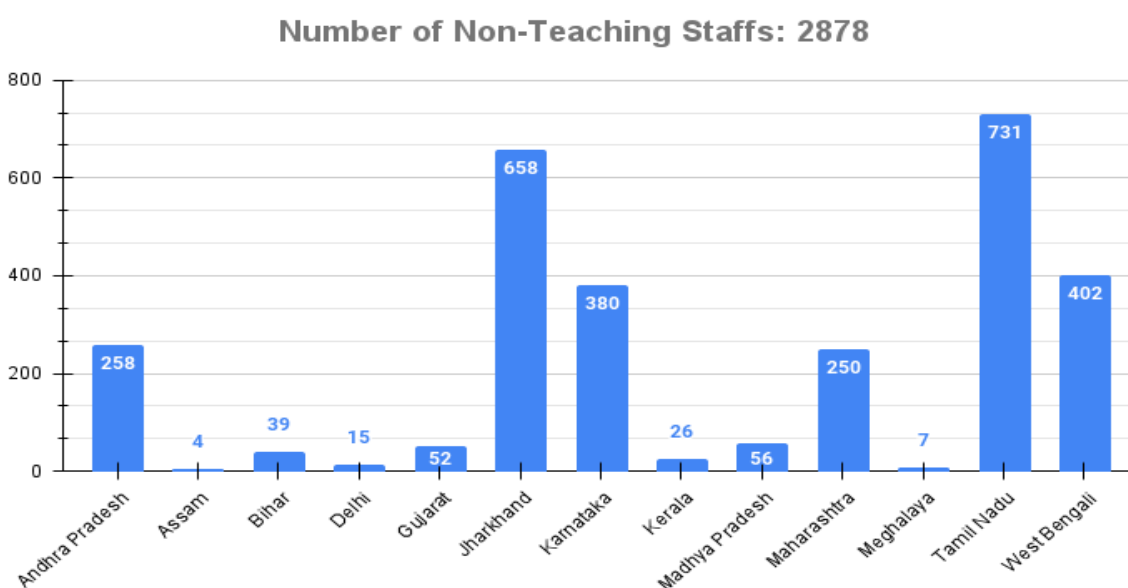


Figure 4.16 - Number of Non-Teaching Staff

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore and a graphical representation of the table 4.4. The data shows the non-teaching staff makeup of Jesuit institutions by state in 2019. There are a total of 2878 Jesuit non-teaching employees in India. The data reveals that Tamil Nadu has the greatest proportion of Jesuit non-teaching personnel, with a total of 731 staff members. Meghalaya and Assam, there are just 7 and 4 non-teaching staff members, respectively. Given that there are 402 Jesuit non-teaching employees in West Bengal, this statistic is a good representation of the overall number of Jesuit non-teaching employees in India.

4.4.5 Statewise Distribution of students in Jesuit Higher Education Institutions in India

The following table highlights on the Statewise Distribution of students in Jesuit Higher Education Institutions in India.

Table 4.5 - Statewise Distribution of students in Jesuit Higher Education Institutions in India

Sl. No.	State	No. of students
1	Andhra Pradesh	15,095
2	Assam	185
3	Bihar	1,450
4	Delhi	2,700
5	Gujarat	3,471
6	Jharkhand	17,957
7	Karnataka	21,515
8	Kerala	1,216
9	Madhya Pradesh	929
10	Maharashtra	8,683
11	Meghalaya	1,032
12	Tamil Nadu	27,942
13	West Bengali	16,505
TOTAL	13	1,18,680

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore. The information depicts the composition of the students at Jesuit institutions by state in 2019. In India, there are 1,18,680 Jesuit students in total. The data shows that, with a total of 27,942 students, Tamil Nadu has the highest number of Jesuit Students. There are just 929 and 185 Jesuit students respectively in the Madhya Pradesh and Assam. Given that West Bengal has 16,505 Jesuit students, it is a decent sample of the total number of Jesuit students throughout India.

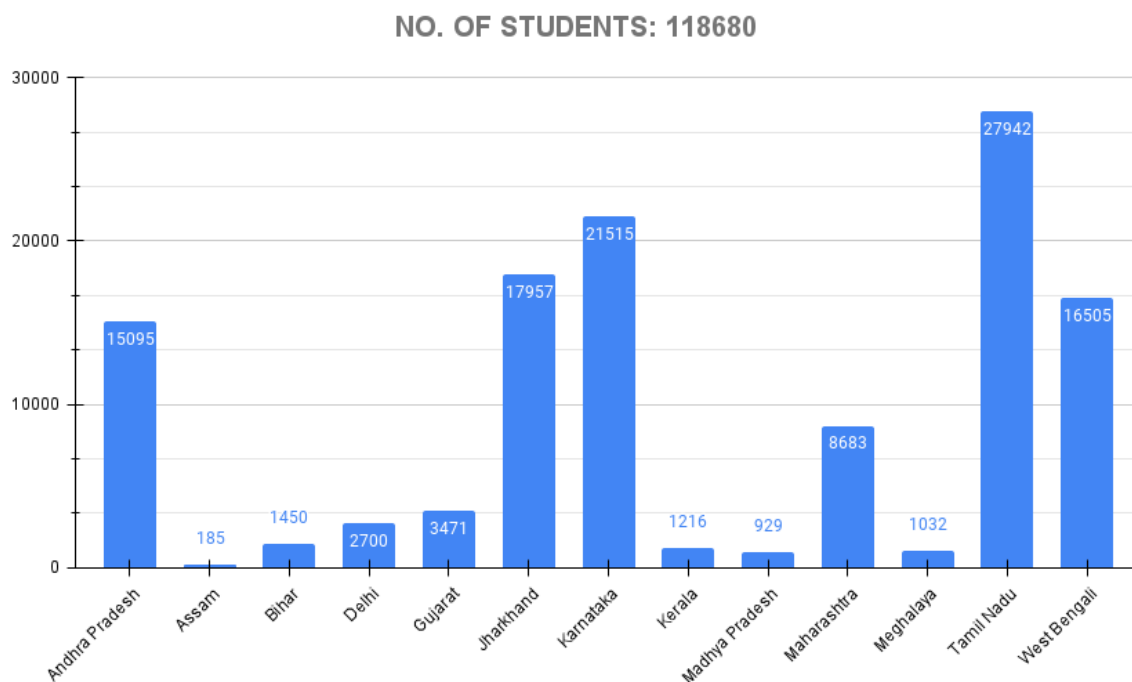


Figure 4.17 - Number of Students

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore and a graphical representation of the table 4.5. The information depicts the composition of the students at Jesuit institutions by state in 2019. In India, there are 1,18,680 Jesuit students in total. The data shows that, with a total of 27,942 students, Tamil Nadu has the highest number of Jesuit Students. There are just 929 and 185 Jesuit students respectively in Madhya Pradesh and Assam. Given that West Bengal has 16505 Jesuit students, it is a decent sample of the total number of Jesuit students throughout India.

4.5 Analysis on the role of Jesuit Higher Education Institutions in West Bengal

4.5.1 Jesuit Higher Education Institutions in West Bengal

The following table highlights on the profile of Jesuit Higher Education Institutions in West Bengal.

Table 4.6 - Jesuit Higher Education Institutions in West Bengal

Institutions	No. of teaching Staff	No. of Non-teaching Staff	No. of Students
7	672	402	16,505

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore. This data shows the institution, students, teaching and non-teaching staff composition in West Bengal in 2019. Through this data it is evident that West Bengal have a substantial number of students with a count of 16505. There are total of 7 Institutions with 402 Non-Teaching staffs and 672 Teaching staffs in West Bengal. This Table gives an idea about the significance of West Bengal in the Jesuit Family and how impactful it is in terms of numbers to become a good representative the pan-India level Jesuit institutes.

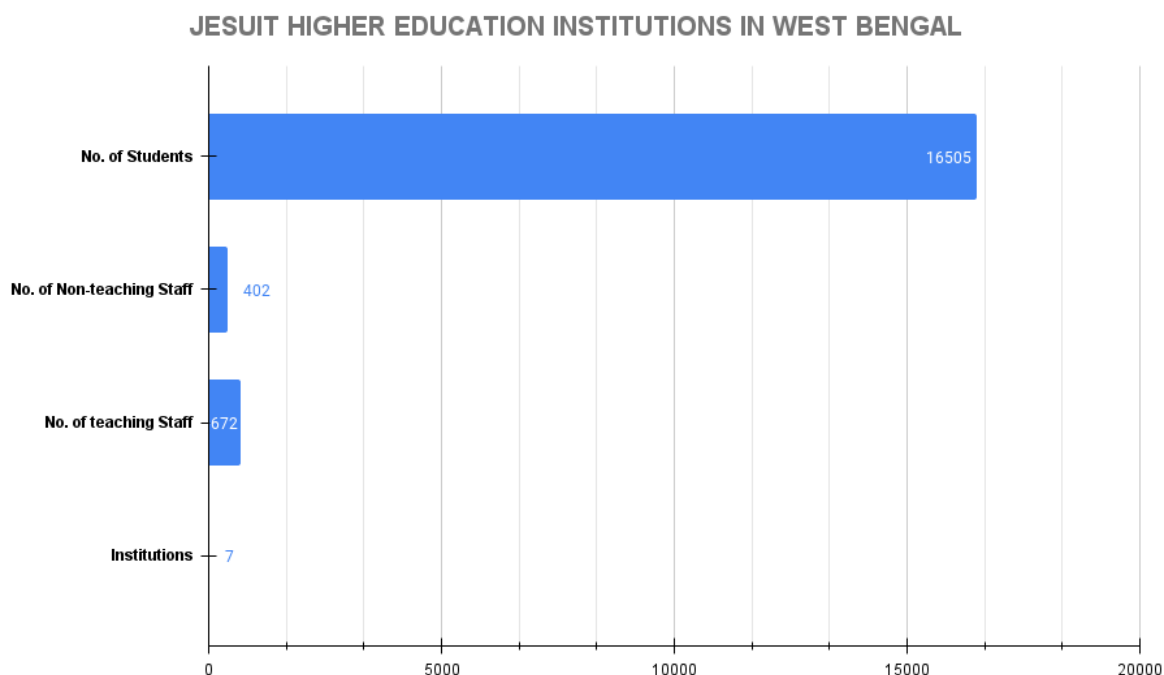


Figure 4.18 - Jesuit Higher Education Institutions in West Bengal

The data for this chart have been collected from the secondary data available on Indian Social Institute, Bangalore and a graphical representation of the table 4.1.6. This information depicts the West Bengal institution, students, teaching personnel, and non-teaching employees for the year 2019. With a student count of 16505, it is clear from the data that West Bengal has a sizable population of students. In all, West Bengal has 7 institutions with 402 non-teaching staff members and 672 teaching personnel. This table provides insight into West Bengal's

importance within the Jesuit Family and the financial influence it has in being a strong representative of Jesuit institutes across India.

The next section illustrates on the inferential analysis related to perceptual responses collected through questionnaires from respective stakeholders of selected Higher Jesuit Educational Institutions in West Bengal.

4.6 Exploratory Analysis of the Institution Fees and Enrollment Study

The goal of this section is to throw some light on the enrollment and fees structure of all the Jesuit and Non-Jesuit colleges we have considered in the study. This is thoroughly done by using the methods of Exploratory Data analysis. Graphs and time series plots have been used to highlight the salient features of the study and conclusions are drawn appropriately. The objective statement of this section is “To make a comparative analysis of cost involved in providing Higher Education by Jesuit Institutions vis-a-vis Non-Jesuit Institutions in West Bengal.”

For this Study, three kinds of institutions are taken into account:

- a) Jesuit Higher Education Institution
- b) Non-Jesuit Missionary Higher Education Institution
- c) Non-Jesuit Non-Missionary Higher Education Institution

This classification is done based on their relative fees level and for homogeneity of the data. Convenience sampling was done to select 4 units from each of the abovementioned categories and data was collected according to information required for the study. The institutional questionnaire (attached in the appendix) contains the question corresponding to which relevant data was collected for this study.

In the following section, the fees’ structure analysis is done respective to the above-mentioned classification, followed by the enrollment count analysis. This will also give us the broad idea about the growth of the institution over the years in terms of financial and special growth.

4.6.1 Fees Structure Analysis

Under this section the main objective is to highlight the shift, changes and the time series analysis of the Fees structure of Jesuit and Non-Jesuit Colleges. Here line plot and time series analysis methods were used to determine the significance of fees trends and patterns. The first step used under this section is to collect all the institutional data through the institutional questionnaire, after that the data was processed and cross verified for any discrepancies. Next, all the fees were accumulated and calculated for each financial year, thus our time points here are the individual financial year. This have been done for 10 consecutive years starting from the financial year of 2009-2010 to 2018-2019, in both Jesuit Higher Education Institute and Non-Jesuit Higher Education Institutes. Then the entire year worth of data is coagulated using additive method and then portrayed on graph with Fees in Rs in the Y-axis, and the Years in X-axis. This method was repeated for all the three types of institutions of interest and insightful conclusions were made.

It is expected that the fees structure of each of the different classifications will have their own weight and it is fair to compare their trend within the classification. From this sample conclusion related to the population of the Jesuit Higher Education Institution and Non-Jesuit Higher Education Institution were drawn. Clear contrast and difference between each institution fees can be affected by several factors. Few of these factors are introduction of new course, hike in the enrollment of students, campus growth, getting affiliated with any university, financial or economical fluctuation in the region of the institution, boost in public image, etc. These factors are very crucial to the direct growth of the institution and thus pose a very dire need for study and analyzing.

Bar plot have been used to highlight the comparison between the fees of the respective institutions of each classification over each year. It is also used to get the relative increase of fees from year to year. Line plot, or time-series plot have been used to study the trend of the time series. The increasing trend of the fees and the underlying causes of it is studied through the line diagram. In the following section, all the time series and bar plots are displayed and discussed in detail.

A) Trend of Fees in case of Selected Jesuit Colleges

Jesuit Colleges Fees Trend from 2009-10 to 2018-19

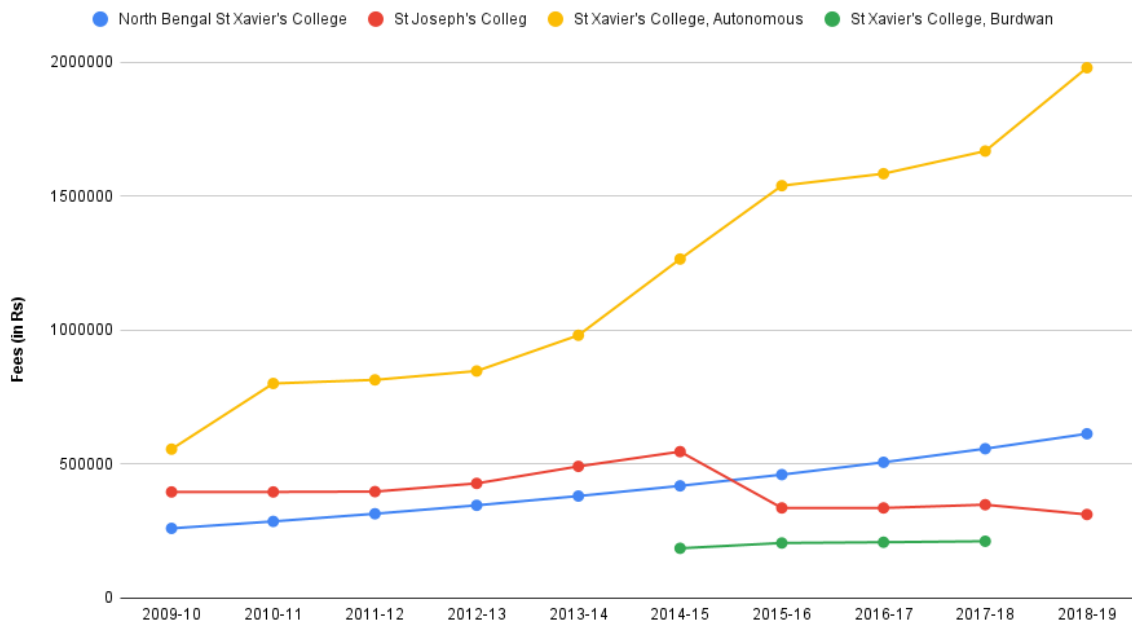


Figure 4.19 - Trend of Fees in case of Selected Jesuit Colleges

Studying the above graph, a direct conclusion about the fees trend of St Xavier's College is clearly leading the graph can be made. St Xavier's College, Kolkata is having a rising trend with sharp rise during the year of 2013-2014 and during the year of 2017-2018. Followed by St Joseph College, Darjeeling which is having a almost constant trend from the year 2009-2010 and it experience a steep fall in the year 2014-2015 and continues to follow a constant trend. North Bengal St Xavier's College, Jalpaiguri follows a very gradual rising trend throughout the 10 years. Lastly, St Xavier's College, Burdwan experience a very constant trend from year 2014-2015 to the year 2017-2018.

One of the possible reasons for St Xavier's Kolkata to have such steep rise compared to the other trends is because of the striking growth in terms of number of courses offered by the college in the years. Another cause maybe is due to the hike in the enrollment rate throughout the years. The other colleges have experienced a very gradual upward trend with no very prominent sudden rise in the trend unlike St Xavier's College, Kolkata.

B) Trend in Fees with regard to Selected Non-Jesuit Colleges (Missionary):

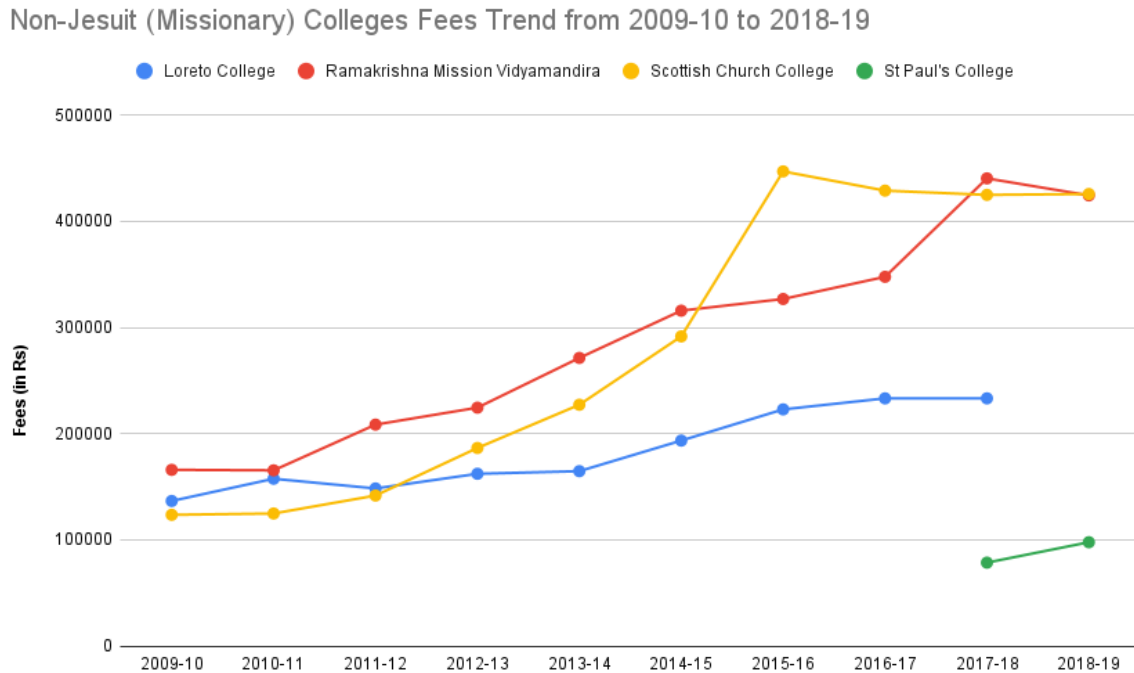


Figure 4.20 - Trend in Fees with regard to Selected Non-Jesuit Colleges (Missionary)

Responses collected regarding the profile of institutions (Non-Jesuit Colleges, Missionary) from the academic year 2009-2010 to 2018-2019. The fee structure of Scottish Church College, Kolkata projects highest bar in 2015-16 but Ramakrishna Mission Vidyamandira, Howrah also attains the same in 2017-18.

In this graph we can observe that almost all the colleges have a very prominent positive rising trend through the 10 years. Here, the first trend line we study is Ramkrishna Mission Vidyamandira having a very gradual upward trend and experienced a hike in the year 2016-2017 followed by a gradual fall. Scottish Church College having a exponential rise in the trend which peaked in the year 2014-2015 and then maintained a stable constant trend. Loreto college have a very stable steady trend till the year 2013-2014 after that it met with a very steady upward growth in the trend and stabilized again in the year 2016-2017. St Paul's College have a general rise from the year 2018 to 2019.

C) Trends in College Fees in case of Selected Non-Jesuit Colleges (Non-Missionary):



Figure 4.21 - Trends in College Fees in case of Selected Non-Jesuit Colleges (Non-Missionary)

Responses collected regarding the profile of institutions (Non-Jesuit Colleges, Non-Missionary) from the academic year 2009-2010 to 2018-2019.

Here we can see City College of Commerce and Business Administration shows the rising trend in fees followed by Bhairab Ganguly College and then Prafulla Chandra College. City college having a very steep rise from 2009-2010 and it stabilize in the 2010-2011 and yet again rises up again in the year 2012-2013 and then shows a gradual decline in fees trend. Bhairab Ganguly College have a very steady constant trend. Same goes for Prafulla Chandra and Rishi Bankim Chandra College. Compared to City college of commerce and business administration the other college fee structure is very low.

D) All College Fees Trend

Jesuit Colleges, Non-Jesuit Colleges (Missionary) and Non-Jesuit Colleges (Non-Missionary) Fees Trend from 2009-10 to 2018-19

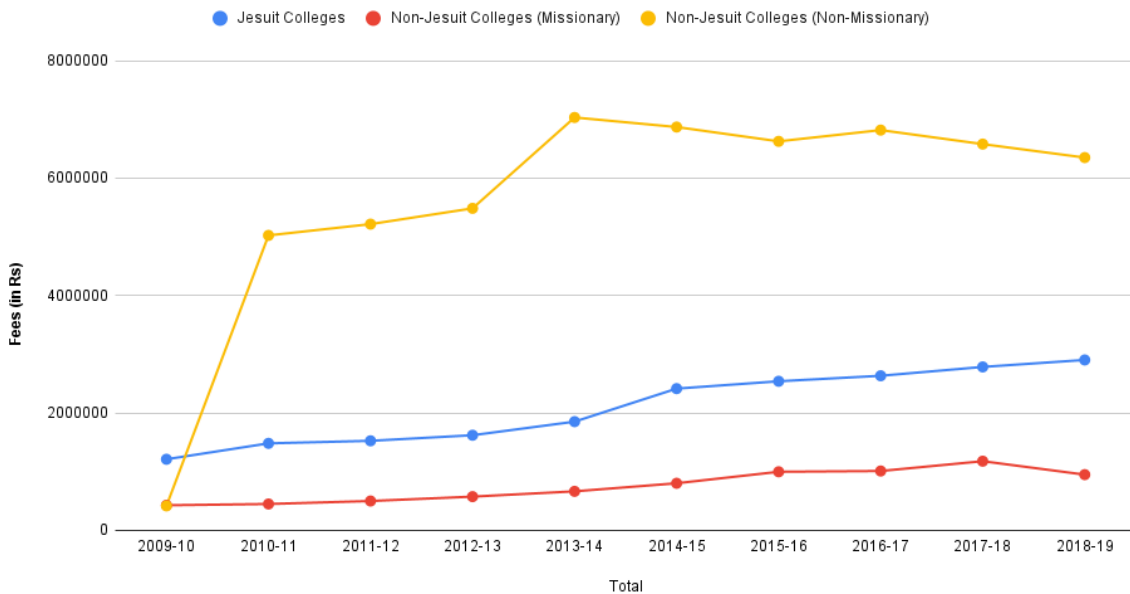


Figure 4.22 - All College Fees Trend

Responses collected regarding the profile of institutions (Jesuit, Non-Jesuit) from the academic year 2009-2010 to 2018-2019.

The major finding is represented by the continuous higher fee structure of Non-Jesuit Non-Missionary Colleges over the Jesuit colleges. Jesuit Institutes are having a very steady growth in the trend as a whole with stable rises. Same goes for the missionary colleges, having a steady growth, though lower in magnitude than Jesuit Institute, and in the year 2017-2018 it experienced a gradual fall in the fees amount.

The Non-Missionary colleges have a very steep rise in the fees amount in the year 2009, maximum contribution from City College of Commerce and Business Administration. The curve here peaks in the year 2013-2014 and then follows a slow fall.

E) Bar Graph regarding Fees of Selected Jesuit Colleges:

Jesuit Colleges Fees Trend from 2009-10 to 2018-19

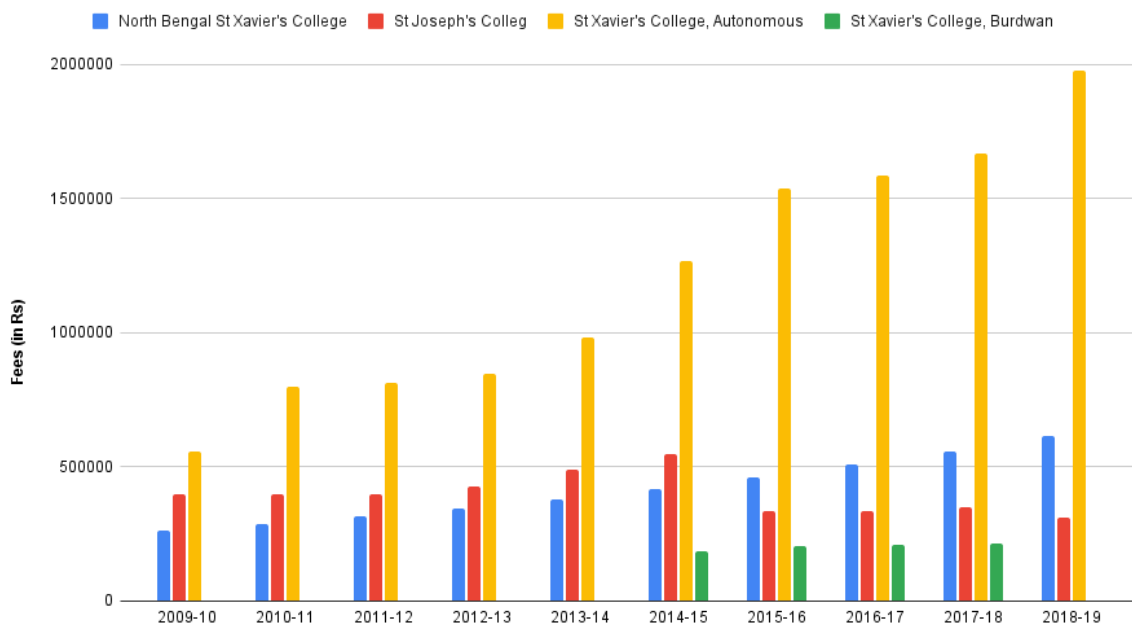


Figure 4.23 - Fees of Selected Jesuit Colleges

When analysing the aforementioned graph, it is evident that St. Xavier's College is clearly outpacing the fees trend. St. Xavier's College in Kolkata is on the rise, with significant increases in both the academic years 2013–2014 and 2017–2018. St Joseph College in Darjeeling came in second, having had a significant decline in the years 2014–2015 but continuing to follow a steady trajectory from the years 2009–2010. The 10-year upward tendency of North Bengal St. Xavier's College, Jalpaiguri, is quite modest. Last but not least, from the years 2014–2015 to 2017–2018, a highly consistent pattern was seen at St. Xavier's College, Burdwan.

The startling increase in the number of courses the institution offers throughout the years is one of the potential causes for St. Xavier's Kolkata to have such a sharp climb in comparison to other trends. The increase in enrollment rates over time may also be a contributing factor. In contrast to St Xavier's College, Kolkata, the other institutions have had a relatively moderate increasing trend rather than a highly noticeable rapid spike in the trend.

F) Bar Graph regarding Fees of Selected Non-Jesuit Colleges (Missionary)

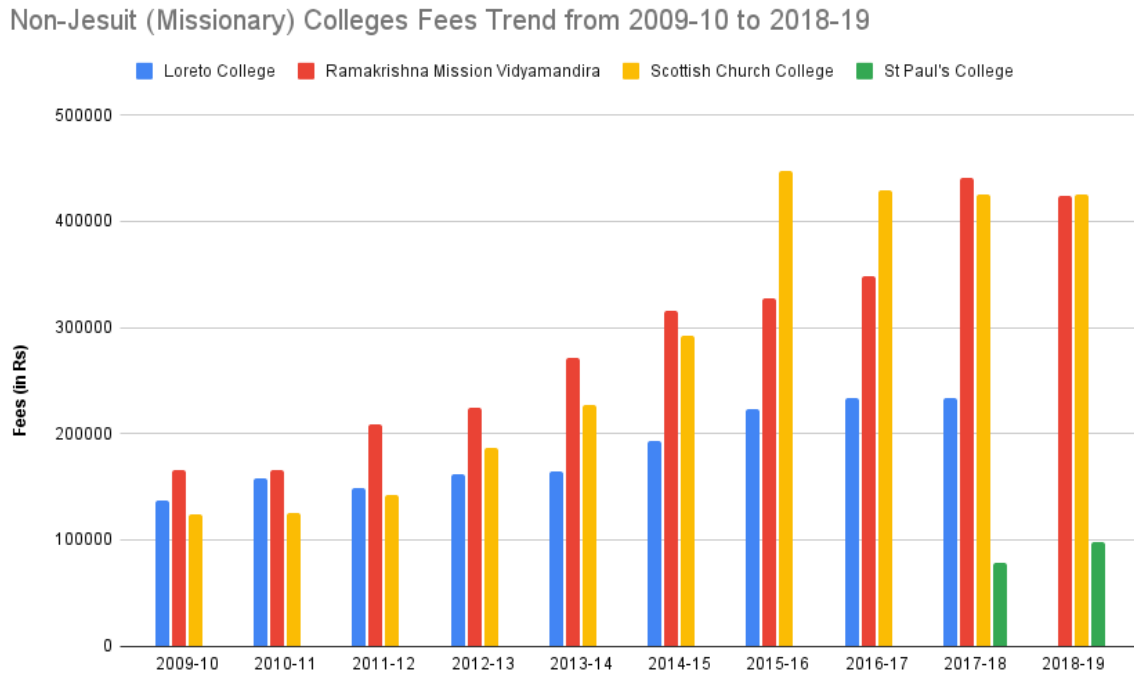


Figure 4.24 - Fees of Selected Non-Jesuit Colleges (Missionary)

From the academic year 2009–2010 to the current one, responses were gathered about the profile of schools (Non–Jesuit Colleges, Missionary). The highest bar is projected by the price structure of Scottish Church College, Kolkata for 2015–16, however Ramakrishna Mission Vidyamandira, Howrah also achieves it for 2017–18.

We can see from this graph that practically all universities have had a very noticeable upward trend over the past ten years. Here, the Ramkrishna Mission Vidyamandira is the first trend line that we examine. It has a very steady rising tendency and had a rise in 2016–2017, followed by a gradual decline. The trend at Scottish Church College was exponentially rising, reaching its peak in 2014–2015, and then remaining steady and consistent. Up until the years 2013–2014, the trend at Loreto College was quite stable and consistent. After that, the trend had a very steady upward increase and stabilised once again in the years 2016–2017. From 2018 to 2019, St. Paul's College saw an overall increase in enrollment.

G) Bar Graph regarding Fees of Selected Non-Jesuit Colleges (Non-Missionary):

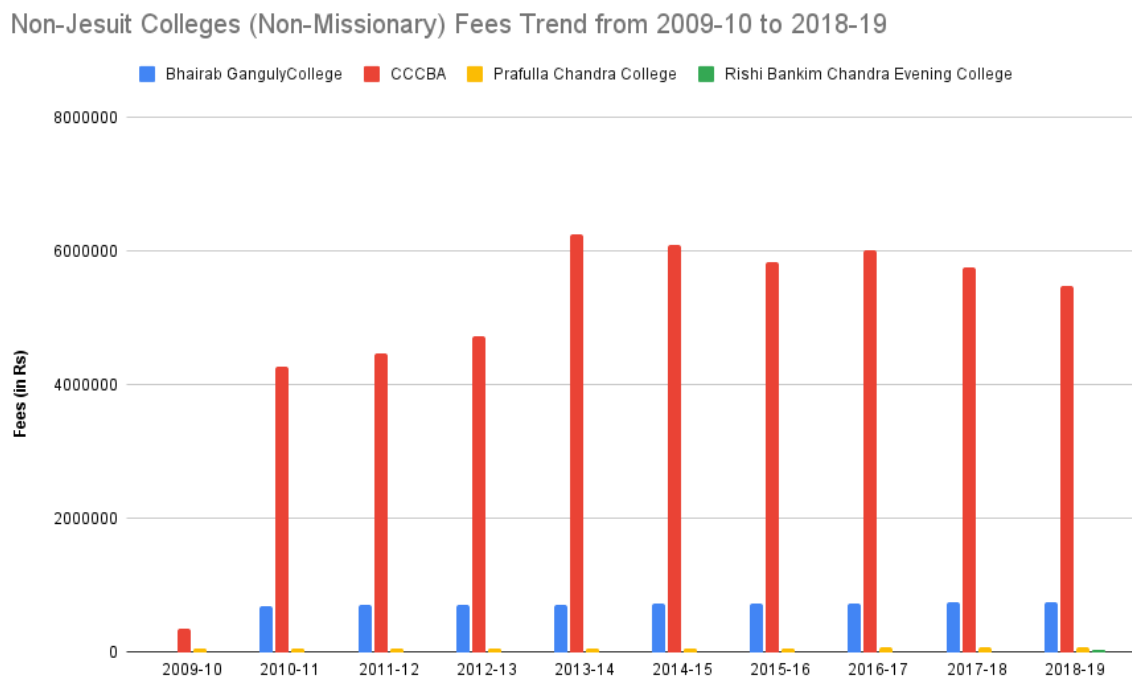


Figure 4.25 - Fees of Selected Non-Jesuit Colleges (Non-Missionary)

From the academic year 2009–2010 to the current one, responses were gathered on the profile of institutions (Non-Jesuit Colleges, Non-Missionary).

The City College of Commerce and Business Administration, Bhairab Ganguly College, and Prafulla Chandra College are the next colleges in order of the fee trend, which is upward. City College's tuition increased dramatically between 2009 and 2010, stabilized in 2010, and then increased once again between 2012 and 2013, before beginning to gradually fall. The trend of Bhairab Ganguly College is quite consistent and stable. The same is true for Rishi Bankim Chandra College and Prafulla Chandra. The other colleges' cost structures are quite affordable as compared to City College of Commerce and Business Administration.

H) Comparison of Fee Structure across Jesuit and Non-Jesuit Colleges

Jesuit Colleges, Non-Jesuit Colleges (Missionary) and Non-Jesuit Colleges (Non-Missionary) Fees Trend from 2009-10 to 2018-19

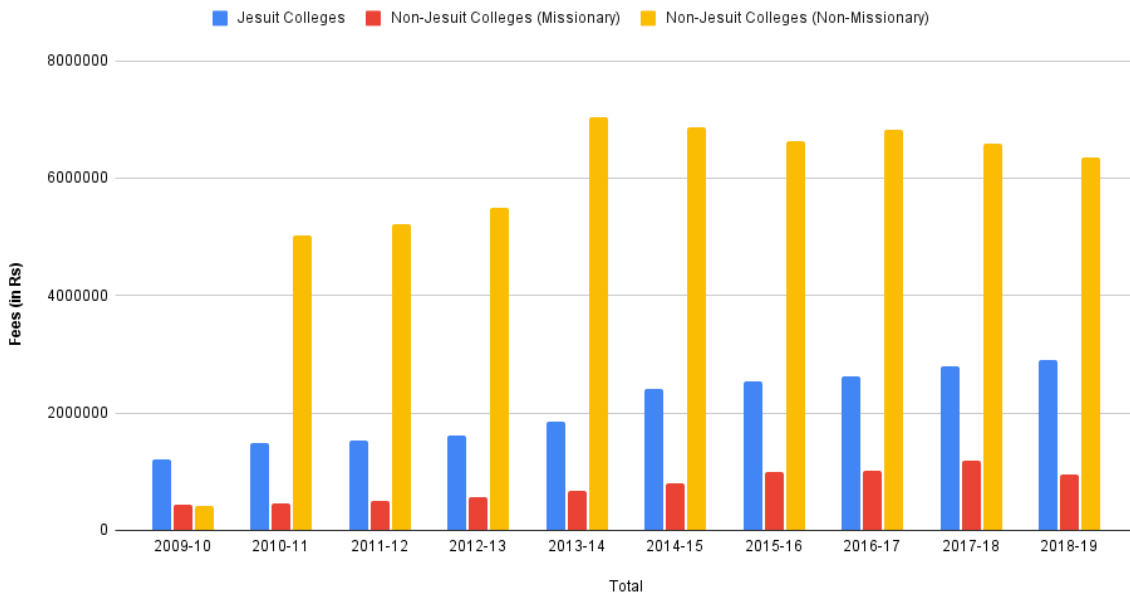


Figure 4.26 - Comparison of Fee Structure across Jesuit and Non-Jesuit Colleges

Responses gathered about the (Jesuit, Non-Jesuit) profile of institutions during the academic years 2009–2010 to 2018–2019.

The key conclusion is illustrated by the consistently higher tuition charged by non-Jesuit non-missionary institutions compared to Jesuit universities. Jesuit Institutes are seeing sustained increases and a fairly steady growth in the overall trend. The same is true of Missionary institutions, which have suffered modest fee increases from 2017–2018 although with a slower rate of rise than Jesuit Institute.

The amount of fees for non-missionary institutions increased significantly in 2009, with City College of Commerce and Business Administration contributing the most. Here, the curve reaches its peak in the years 2013–2014 and then gradually declines.

4.6.2 Enrollment Count Analysis

This section's main objective is to highlight the changes, alterations, and time series analysis of college enrollment trends at Jesuit and Non-Jesuit schools. Here, time series analysis and line plot techniques were used to assess enrollment trends and patterns. To collect all the institutional data for this section, the institutional questionnaire is employed as the first step. The data is then processed and tested against itself for discrepancies. Our time points in this section are the individual financial years as a result of the subsequent addition and calculation of all enrolment for each fiscal year. This has been done in both Jesuit higher education institutions and non-Jesuit higher education institutions for ten years straight, beginning with the fiscal year 2009-2010 and ending with the fiscal year 2018-2019. The data is then combined using the additive approach and plotted on a graph with enrolment in Rs on the Y-axis and Years on the X-axis. For all three of the institutions of interest, same methodology was used again, and illuminating findings were drawn.

It is reasonable to examine each classification's enrollment structure's trend within each classification as each is anticipated to have its own weight. Conclusions on the demographics of Jesuit higher education institutions and non-Jesuit higher education institutions were obtained from this sample. Enrollment may be impacted by a number of circumstances, with each school being clearly contrasted and different. A few of these include the addition of a new course, an increase in student enrolment, campus development, affiliation with a university, changes in the region's financial or economic conditions, an improvement in the institution's reputation, etc. The direct growth of the institution depends on these aspects, making research and analysis of them urgently necessary.

The enrolment of the individual institutions of each categorization over each year has been highlighted using a bar plot. It is also employed to determine the relative enrolment growth from year to year. To investigate the trend of the timeseries, line plots and time-series plots have been employed. The line diagram is used to study the rising enrolment pattern and its underlying factors. All of the time series and bar plots are shown and thoroughly described in the section that follows.

A) Jesuit Colleges Enrollment Trend

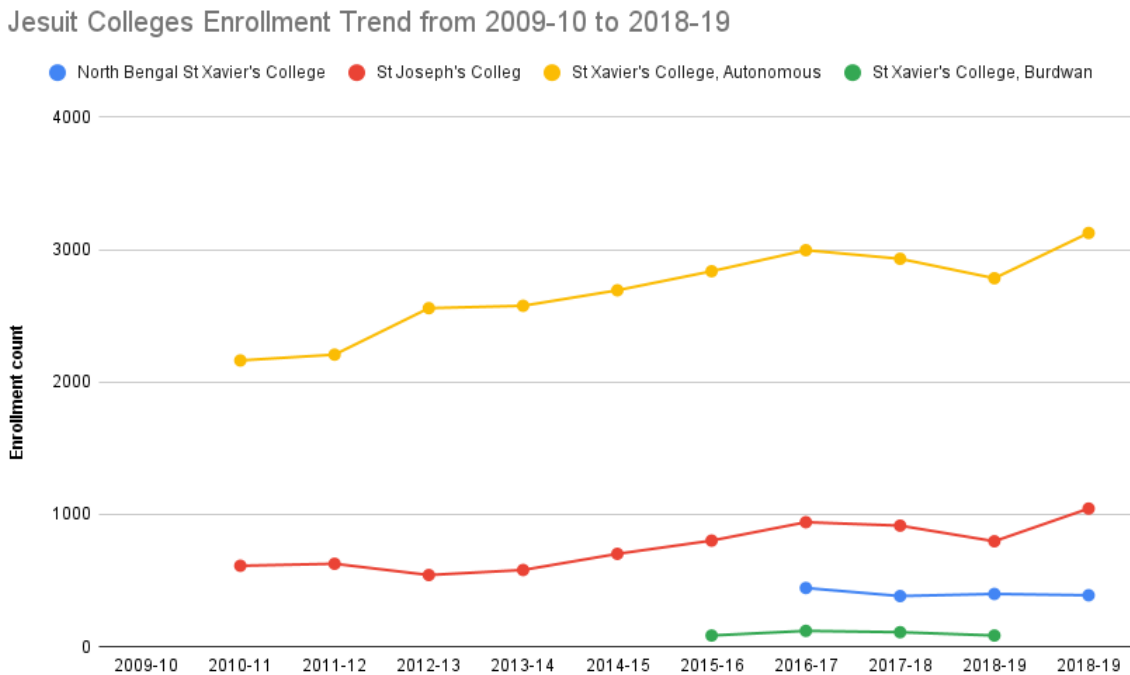


Figure 4.27 - Jesuit Colleges Enrollment Trend

Responses collected regarding the profile of institutions (Jesuit) from the academic year 2009-2010 to 2018-2019.

Here we can see St. Xavier's College (Autonomous), Kolkata is leading the chart with maximum enrollment and highest student count comparatively, followed by St Joseph College and then St. Xavier's, College, Rajganj and then St Xavier's College, Burdwan. Here St Xavier's College Autonomous is following a gradual rise in the trend from year 2010-2011 and it peaked in the year 2016-2017 and again plummeted in the year 2018-2019. St Joseph college experienced a very steady constant trend with local peaks and falls, but overall the trend was more or less constant. North Bengal St Xavier's college also showed a constant trend in the enrollment of the students. St Xavier's College, Burdwan also showed a very stable constant trend from the year 2015-2016 to 2018-2019.

B) Non-Jesuit Colleges (Missionary) Enrollment Trend

Non-Jesuit Colleges (Missionary) Enrollment Trend from 2009-10 to 2018-19

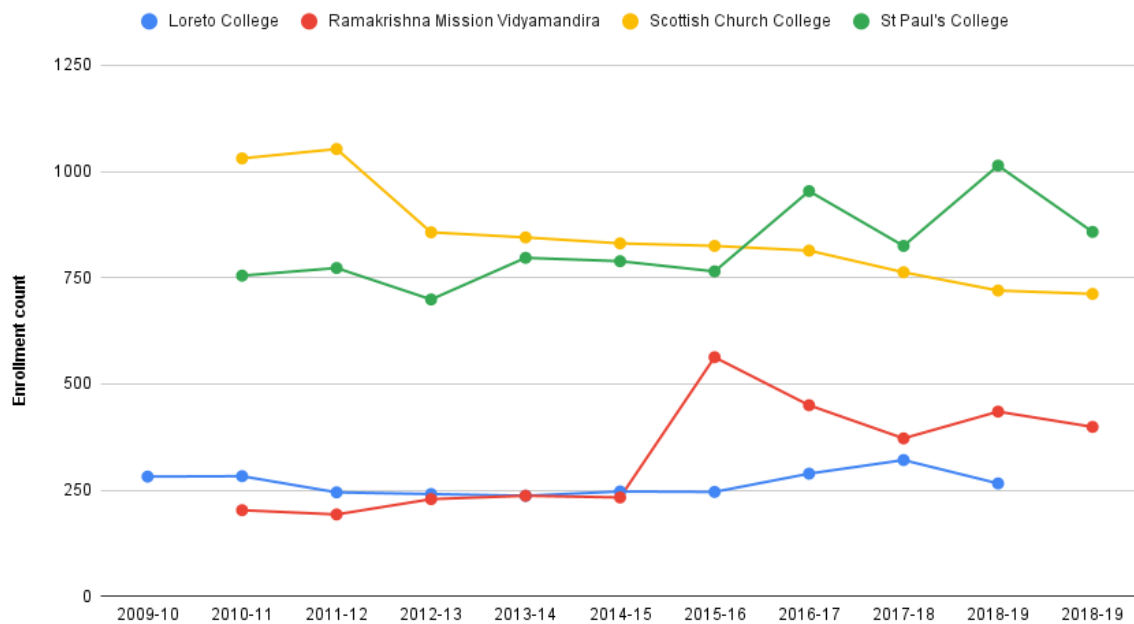


Figure 4.28 - Non-Jesuit Colleges (Missionary) Enrollment Trend

Responses collected regarding the profile of institutions (Non-Jesuit Colleges, Missionary) from the academic year 2009-2010 to 2018-2019.

Here we can see St. Paul's Cathedral Mission College, Kolkata is leading the chart with maximum enrollment and highest student count in recent years, followed by Scottish Church College, Kolkata and then Ramakrishna Mission Vidyamandira, Howrah and Loreto College, Kolkata. Ramakrishna Mission Vidyamandira have shown a steady enrollment count and it suddenly jumped in the financial year 2014-2015 and it peaked at the year 2015-2016, which again saw a steady fall and it then followed a steady trend. Loreto College enrollment count following a steady constant trend for 10 years. St Paul's College have shown a steady trend with rise and fall alternating pattern in the year 2015-2016 to the year 2018-2019. Scottish Church have experienced a slow fall in the trend and it continues to follow this trend for ten years' data.

C) Non-Jesuit Colleges (Non-Missionary) Enrollment Trend

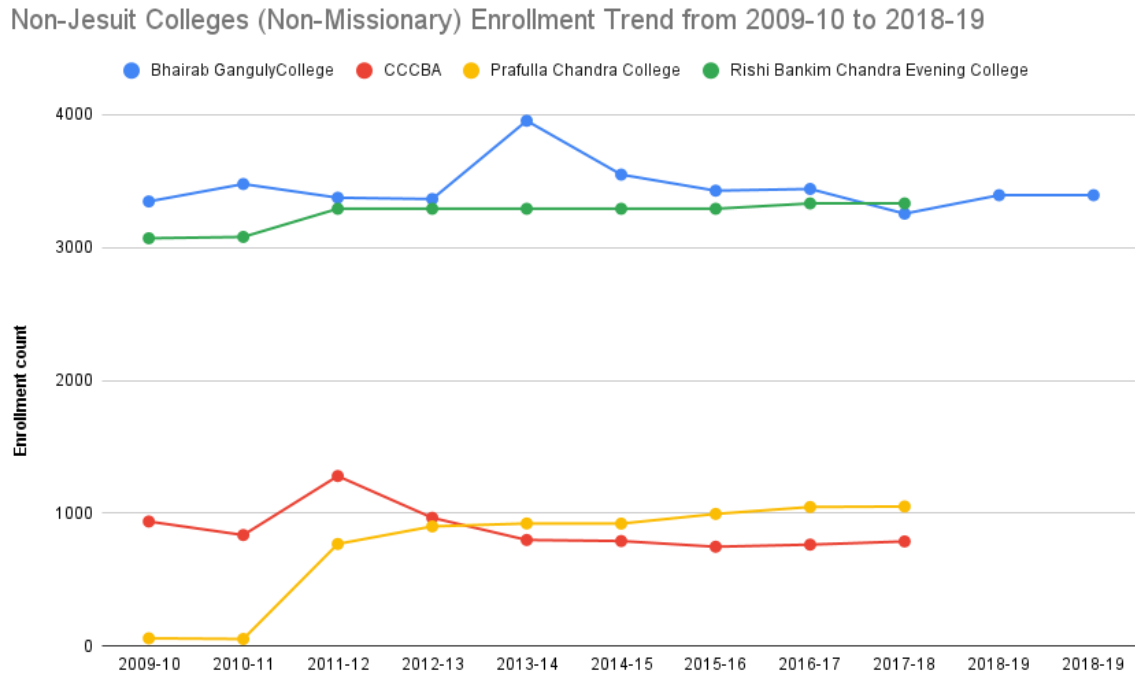


Figure 4.29 - Non-Jesuit Colleges (Non-Missionary) Enrollment Trend

Responses collected regarding the profile of institutions (Non-Jesuit Colleges, Non-Missionary) from the academic year 2009-2010 to 2018-2019.

Here we can see Bhairab Ganguly College and Rishi Bankim Chandra Evening College is leading together with steady rise and fall but stable overall, followed by Prafulla Chandra College and City College of Commerce and Business Administration. Bhairab Ganguli have most of the student enrollment count which shows a normal steady trend throughout the 10 years with peak in the year 2013-2014. Rishi Bankim Chandra College have shown a steady trend and it continues to do so from the year 2009-2010 to 2017-2018. There has been a steady rise in the trend of student enrollment then it me with a steady exponential decrease in enrollment count year by year from the year 2011-2012 in the college of City College of Commerce and Business Administration. Prafulla Chandra college have seen a steep rise in the year 2010-2011 and it holds its enrollment count till the year 2017-2018.

D) All Colleges Enrollment Trend

Jesuit Colleges, Non-Jesuit Colleges (Missionary) and Non-Jesuit Colleges (Non-Missionary)
Enrollment Trend from 2009-10 to 2018-19

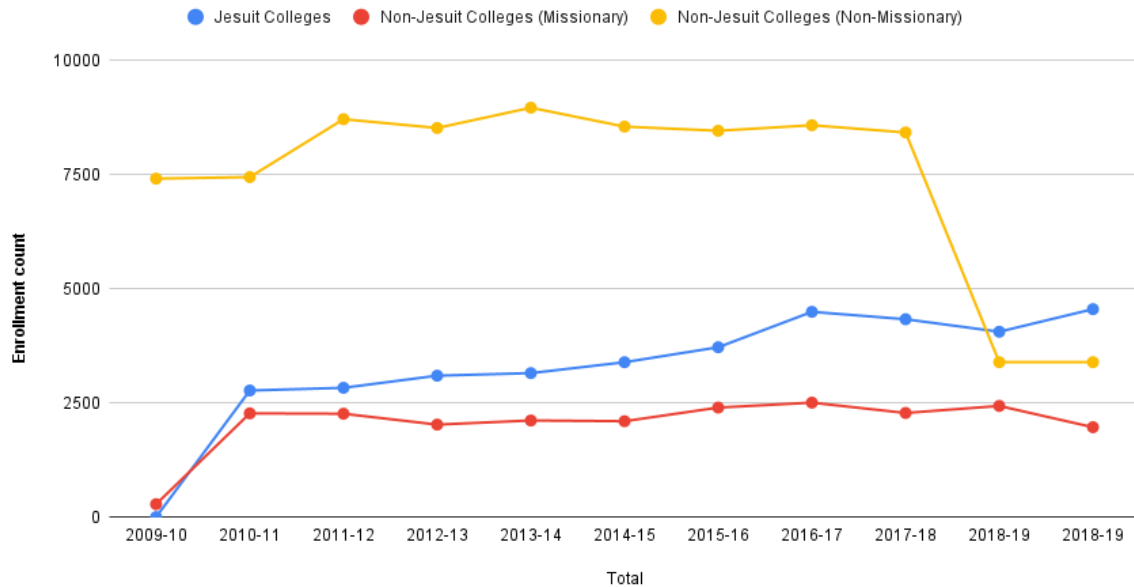


Figure 4.30 - All Colleges Enrollment Trend

Responses collected regarding the profile of institutions (Jesuit, Non-Jesuit) from the academic year 2009-2010 to 2018-2019.

Here we can see Non-Jesuit Non-Missionary had maximum enrollment count but then the data plummeted on the year 2018-19. Jesuit College experienced a steady rise throughout the years and so did Non-Jesuit Missionary. The Non-Missionary colleges have maintained its trend from year 2009-2010 to the year 2010-2011 before it rises and maintained the constant enrollment trend but suffered a massive fall in the year 2018-2019. Missionary Colleges have a steep rise in the year 2009-2010 and it held its steady trend throughout. The Jesuit Colleges have seen a steep rise in the year 2009-2010 and it also maintained a stable steady growth in the trend of its enrollment.

E) Jesuit Colleges Enrollment Comparison

Jesuit Colleges Enrollment Trend from 2009-10 to 2018-19

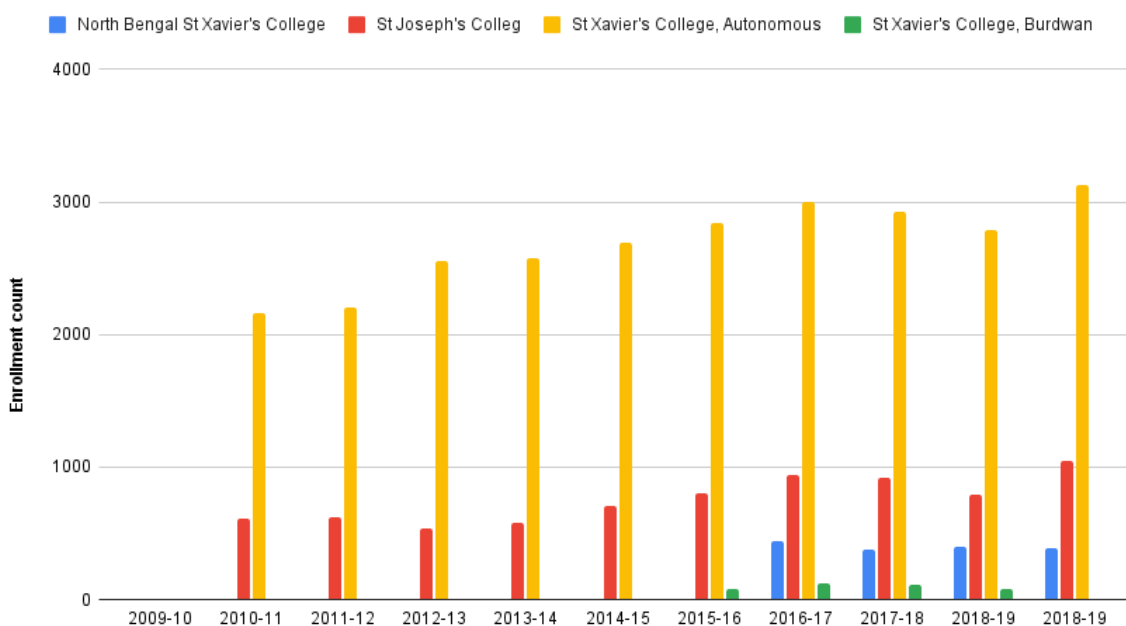


Figure 4.31 - Jesuit Colleges Enrollment Comparison

Information gathered in response to the (Jesuit) institution profile from the academic years 2009–2010 to 2018–2019.

According to this figure, St. Xavier's College (Autonomous), Kolkata is at the top with the greatest student population and maximum enrolment, followed by St. Joseph College, St. Xavier's College, Rajganj, and St. Xavier's College, Burdwan. Here, St. Xavier's College Autonomous is following a pattern that began to gradually climb in the years 2010–2011, peaked in 2016–2017, and then again declined in 2018–2019. Local peaks and valleys punctuated the general trend at St. Joseph College's relatively steady constant trend, which was more or less constant. Bengali North St. Xavier's College likewise shown a consistent pattern in terms of student enrolment. St. Xavier's University, Burdwan also showed a very stable constant trend from the year 2015-2016 to 2018-2019.

F) Non-Jesuit Colleges (Missionary) Enrollment Comparison

Non-Jesuit Colleges (Missionary) Enrollment Trend from 2009-10 to 2018-19

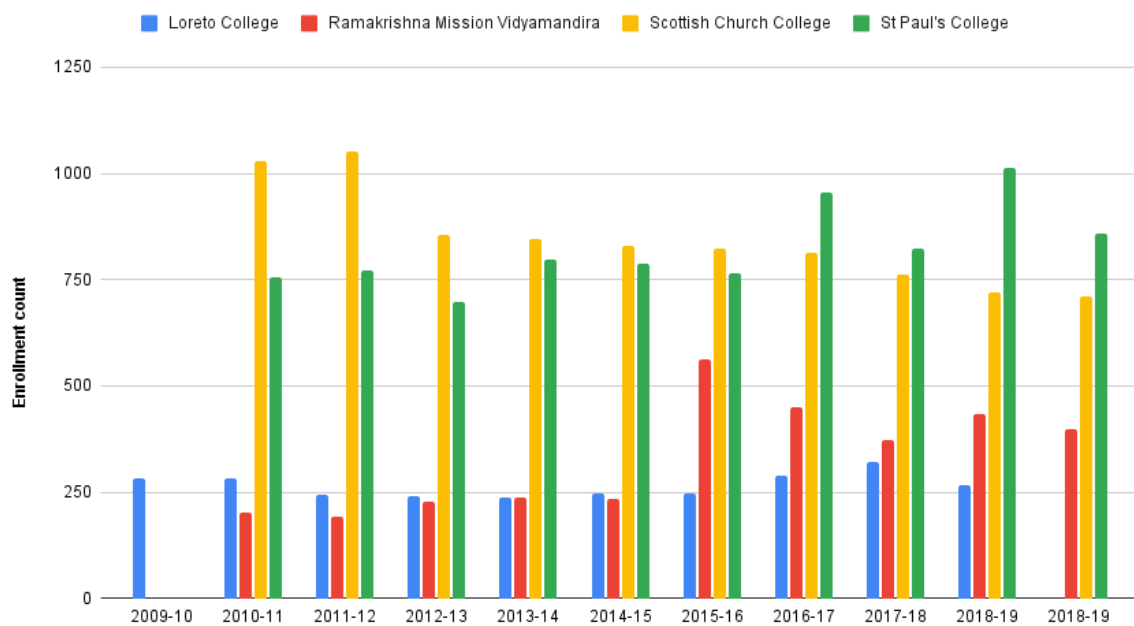


Figure 4.32 - Non-Jesuit Colleges (Missionary) Enrollment Comparison

From the academic year 2009–2010 to the current one, responses were gathered about the profile of schools (Non–Jesuit Colleges, Missionary).

St. Paul's Cathedral Mission College in Kolkata, which has the greatest student enrolment and enrollment in recent years, is at the top of the list, followed by Scottish Church College in Kolkata, Ramakrishna Mission Vidyamandira in Howrah, and Loreto College in Kolkata. Ramakrishna Mission Vidyamandira had showed a consistent enrollment count, but it abruptly increased in the fiscal year 2014–2015, peaked in the following year, then continued on a steady path. For ten years, the number of students at Loreto College has been trending steadily upward. From the years 2015–2016 to 2018–2019, St. Paul's College had a consistent trend with an alternating pattern of growth and decline in enrollment. Scottish Church has seen a modest decline in the trend, which it has been following for ten years of data.

G) Non-Jesuit Colleges (Non-Missionary) Enrollment Comparison

Non-Jesuit Colleges (Non-Missionary) Enrollment Trend from 2009-10 to 2018-19

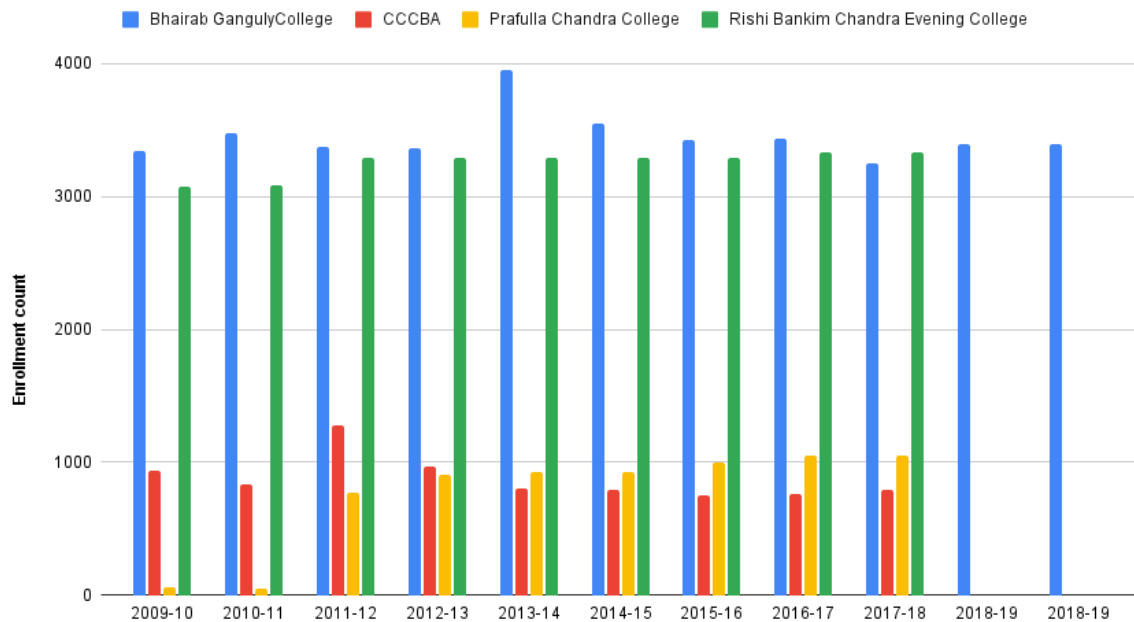


Figure 4.33 - Non-Jesuit Colleges (Non-Missionary) Enrollment Comparison

From the academic year 2009–2010 to the current one, responses were gathered on the profile of institutions (Non-Jesuit Colleges, Non-Missionary).

Here, we can see that Rishi Bankim Chandra Evening College and Bhairab Ganguly College are dominating with a solid overall position despite occasional ups and downs, with Prafulla Chandra College and City College of Commerce and Business Administration following closely behind. The majority of the student enrollment statistics belong to Bhairab Ganguly and they exhibit a typical steady trend over the course of ten years, peaking in the years 2013–2014. From 2009–2010 to 2017–2018, Rishi Bankim Chandra College has maintained a consistent trend. Since the academic year 2011–2012, the trajectory of student enrolment at the City College of Commerce and Business Administration has been steadily increasing, followed by a steadily exponential decline in enrollment count year after year. In the academic year 2010–2011, Prafulla Chandra College had a sharp increase in enrolment, which it maintained until the academic year 2017–2018.

H) All Colleges Enrollment Trend

Jesuit Colleges, Non-Jesuit Colleges (Missionary) and Non-Jesuit Colleges (Non-Missionary)
Enrollment Trend from 2009-10 to 2018-19

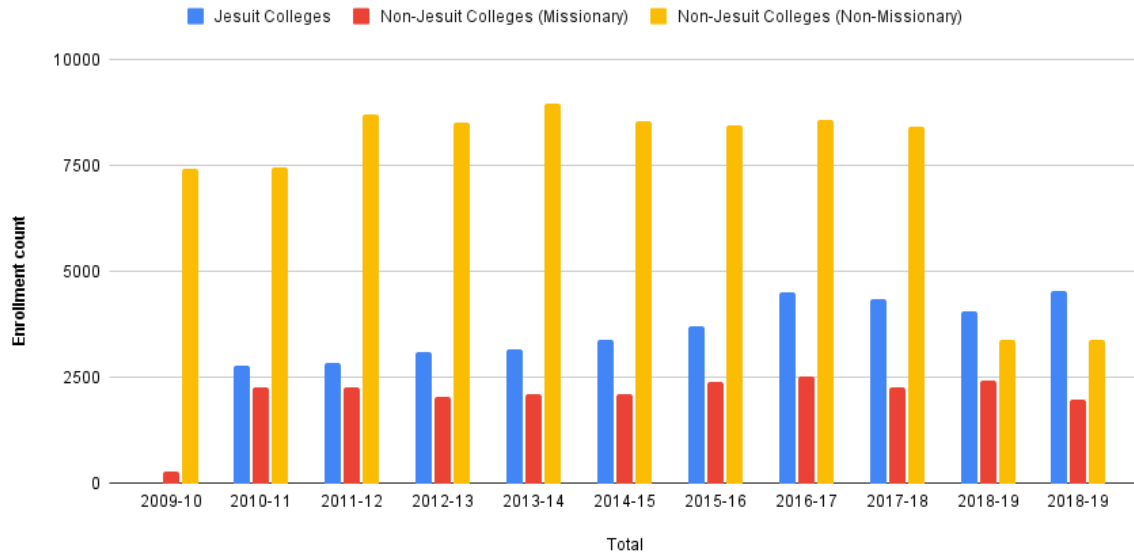


Figure 4.34 - All Colleges Enrollment Trend

Responses gathered about the (Jesuit, Non-Jesuit) profile of institutions during the academic years 2009–2010 to 2018–2019.

Here, we can observe that Non-Jesuit Non-Missionary had the highest enrollment total before the numbers started to decline in the 2018–19 school year. Both Jesuit College and Non-Jesuit Missionary had steady increases throughout time. The enrolment pattern at non-missionary institutions was consistent from the academic years 2009–2010 to 2010–2011, before it rose and continued to do so, but it had a sharp decline in the academic year 2018–2019. Missionary colleges had a significant increase in 2009–2010, and the trend continued throughout. The Jesuit Colleges had a sharp increase in enrolment in 2009–2010, and they also continued a history of sustained, steady expansion.

4.6.3 Major Findings

In compared to the non-Jesuit Colleges in the sample, the Selected Jesuit Colleges consistently maintain a fair fee structure. Concessions are a principle that is ingrained in the administrative structure of Jesuit education. The higher enrolment ratio throughout time in compared to the chosen non-Jesuit Colleges in the sample underscores the Jesuit Colleges' motto to transmit education broadly for the wider segment of society. As a result, the Jesuit Colleges play a significant role in promoting higher education in West Bengal.

The reports are generated from sample of 12 colleges which includes 4 Jesuit Colleges, 4 Non-Jesuit Missionary Colleges and 4 Non-Jesuit Non-Missionary Colleges from all over West Bengal.

Summing up the entire observations from the graphs of the fees structure and enrollment, we can conclude that the Jesuit Colleges are delivering a much higher course counts at very reasonable cost, the enrollment count is also gradually rising with passing years. The Non-Jesuit colleges (Missionary) are having lower student count and low fees, and lastly Non-Missionary colleges are having very high student count with low fees. Here we can clearly see that Jesuit colleges are way more effective than the alternatives.

This solidifies the fact that Jesuit colleges are attaining the balance between Fees cost and enrollment count which are playing instrumental role in Higher Education.

4.7. Analysis of Qualitative Responses collected through questionnaires from different stakeholders of Jesuit Institutions.

In the following section the study performs the analysis on the 3 Institution types, that is, Jesuit Higher Education Institution, Non-Jesuit Higher Institution Missionary and Non-Jesuit Higher Institution Non-Missionary. Data have been collected on these above 3 institutions based on four questionnaires which deals with different perceptions of different demography. The study have considered four different models based on the questionnaires:

- a) Model 1: Perception of Student
- b) Model 2: Perception of Parent
- c) Model 3: Perception of Faculty
- d) Model 4: Perception of Alumni

In each of the part the study has described the variables and encoded the variables according to 1 to 5 Likert scale. Second, crosstab analysis is performed to find a solid relationship between the satisfaction levels in between the focused variables to draw conclusions. Followed by test for normality to check if the variables are following normal distribution.

4.7.1 Description of Sample

Under the Jesuit Higher Education Institution, data have been collected from respective four colleges which are situated in West Bengal. Convenience sample was performed to select the colleges for our research purpose from the population of All the Jesuit Higher Education Institution in India. The study has collected data on the four categorical Perspectives to explore the Factors and their relationships. The four colleges are:

- I) St. Xavier's College (Autonomous), Kolkata (1860)
- II) St. Joseph's College, North point, Darjeeling (1927)
- III) North Bengal St. Xavier's College, Rajganj, Jalpaiguri (2007)
- IV) St. Xavier's College, Burdwan (2014)

Jesuit Colleges are those institution colleges and universities which are administered and run by the Jesuits. Jesuit are priests of the Roman Catholic Church belonging to the Society of Jesus (S.J.) which is the largest religious organization of the Catholic Church. Society of Jesus (S.J.) has been found by St. Ignatius of Loyola, one of the most important figurehead of the Catholic Church along with his fellow companions, St. Francis Xavier and St. Peter Faber. It was formed in the year 1540 with the approval of Pope Paul III. The first Jesuit institution in the world was also established by St. Ignatius of Loyola in the year 1548, called St. Ignatius College in Messina, Sicily, Italy. Today there are myriad Jesuit institutions present at all corners of the world imparting the best quality education to its students. There are 3897 Jesuit institutions in 96 countries educating almost 2928806 students.

4.7.2 Analysis of Models considered in the study:

A) Model 1: Perception of Students

Under this model the study will explore the student's perception on the Education quality of the Jesuit Higher Education Institutions. According to the 95% Confidence Level and Z-score

calculated that the minimum number of respondents require for this study is 374. Thus, the total number of students sampled from Jesuit Higher Education is 380.

i) Items in Questionnaire

In this study the following variables have been considered. The demographic variables are

- a) Name
- b) Gender
- c) Age
- d) Name of Institution
- e) Course and Year of Study
- f) Stream Chosen
- g) Subject

The responses pertaining to different perceptions related to the following dimensions are considered.

- a) Academic Environment
- b) Discipline of the Institution
- c) Personality Development
- d) Soft Skill Development
- e) Quality Education
- f) Syllabus Content
- g) Academic Result

This study focuses on the effect of the above dimensions on employability.

The descriptions related to different dimensions are as follows:

ii) Different Dimensions affecting Employability of students

Employability is one of the core outcomes of any Student who is studying in an Institute. At the end of any course the final motive of any Student or Scholar is to apply their knowledge in real life and earn their living. Thus, naturally if an institute can provide their student a vast

opportunity to apply their knowledge either through corporate or further higher studies, then the institute value automatically increases with higher Employability Rate. This also gives the students a sense of security about their future and confidence in their chosen course. Employability rate also shows the vast reach of an institute and the relevance of their teaching method and ideologies, so a better connection with a large number of corporate firms and other higher education institutions, the institute can ensure that their student will experience an advantage with their job hunting and get better further research opportunities. Thus, we can conclude that Employability Rate is one of the core dimension to judge an institution worth in the student's eyes.

The study collected the response on the satisfaction level of the Employability of the respective Institutes according to the student response. According to our study the goal is to find a relationship between the above said variable and how they are impacting the Employability rate of an institute. For our next section we will get a clear idea about the variable and how they are impacting the Employability.

a) Academic Environment: The academic environment may be defined as one that best prepares students for their future professional life and contributes towards their personal development, psychosomatic and social well-being. A number of diverse factors significantly influence the way students perceive and experience their education. A good healthy academic environment comprises of a well-maintained classroom, necessary subject equipment, a functional library equipped with relevant books and resources and academically stable college/institution system. Academic environment plays a key role in the overall development of the student's mentality toward a high profile and functional academic career, this also ensure that the students are having maximum reach for their benefit which directly reflects in their overall growth as intellectuals of the modern society.

b) Discipline of the Institution: The discipline of any institution can be defined as the overall code of conduct and rule & regulations. An institution may have a strict or lax discipline, both are not good for the overall development of any student. A well-balanced discipline will result in a student's overall academic and non-academic growth. A good, disciplined institution will result in the student also following the institution code of conduct which also carries on to their future and impact their career and it stays on for a long time. Thus, an institution aiming for better discipline also ensures a higher employment chance because a better code of conduct and discipline will be maintained in the corporate as well which is widely desired in the society.

This is the reason Discipline is also one of our variables which is under consideration for the dependence on Employment Status of an institution.

c) Personality Development: The personal development of any student is extremely important for the mental and Personality growth of a student. An institute is very much involved in the personality development of a student through non-academic activities and vast number of social work opportunities. Students with proper well-rounded personality are likely to succeed in their future career as they will create and spread a positive persona around them. Thus, any institution which can set the right programs and events for their students to explore and give them the opportunity to develop their personality with ample time to correct and rectify oneself, this will make sure that the student will perform well in their future endeavors. Thus, the empirical relationship will be tested between Employment and overall Personality Development.

d) Soft Skill Development: Soft Skill is one of the most important aspects of development of any student. Soft skills include the ability to convey message through speech, body gesture, leadership qualities and overall communication skill. Any corporation or Institution will desire students with very good soft skills, because this ensures the smooth communication among the student's peers and helps to coordinate work and study to the respective authorities and peers. Institution which trains their students through soft skill development programs and other special curriculum will be more likely to have better reputation among the hiring companies and helps the student to achieve their personal goals. To solidify the institution focus, we test the relationship between soft skills and Employment of the student.

e) Quality Education: The term Quality Education indicates the overall quality of the service the Education Institute is providing to their students. A good quality education includes well trained and disciplined staffs, highly experienced faculty, well diverse library book collection which are in line with course syllabus, and well functional academics and non-academics credit system, and lot of other factors. A University which can provide a quality education will bound to attract corporate attention which results in hike in employment of the institution. Quality Education also sets a benchmark for the student to perform exactly up to the mark in their career. This also help the student to receive proper education and create a positive impact on their academic life. So, we are considering the independence of Quality education and Employment to draw significant conclusions.

f) Syllabus Content: The syllabus content is the course scope and objective subjected to a specific study a student is perusing. The syllabus content is crucial for corporate employability as well as for further studies because it marks the relevance of the study to the present time and knowledge. Any institute or corporate will look for updated and relevant syllabus with loads of application-based content. The syllabus should also ensure that it does not overload the students with lots of information while keeping the time constrain into consideration. A proper syllabus should be comfortable and have adequate information about the subject for the student to be confident enough to opt for a better placement or higher studies. Thus, we shall explore the relationship between the Syllabus content and its impact on Employability.

g) Academic Result: One of the major outcomes of any academic institute student is the academic result. A very convenient way to quantify the overall academic growth and outcome of a student is through their academic result. A good result is always desired by everyone as it secures their career and instills confidence. But always it is not possible for a student to aim for perfect academic result, and most of the time it is all based on satisfaction level, and it differs from student to student. Their satisfaction level is based on the amount of effort they have put in and is the effort reflecting on their result. A fair grading system is appreciated, and it also gives students the opportunity to explore their strengths and weaknesses which in turn prepare them in their further career development. So, we will try and establish a relationship empirically through our finding between academic results and Employability of the institution.

So, we can see that the above variables may or may not affect the Employability of an institution which itself is depending on the empirical findings. To test that we first coded the variables so that the satisfaction level turns into ordered numeric quantities to perform Cross tab for direct conclusion and chi-square test for independence.

Thus, we code our variables accordingly for further data analysis.

- a) Employability = Empl
- b) Academic Environment = Aca_env
- c) Discipline of institute = Disc_inst
- d) Personality Development = Prsn_dev
- e) Soft Skill Development = Soft_skill
- f) Quality Education = Qlty_Edu

g) Syllabus Content = Syl_cont

h) Academic result = Aca_Reslt

iii) Creation of index: An index is constructed taking into account the different dimensions of Employability of an institution:

$$Empl = f(Aca_env, Disc_inst, Prsn_dev, Soft_skill, \\ Qlty_Edu, Syl_cont, Aca_Reslt)$$

Where E implies a **dependent variable**.

Where, Aca_env, Disc_inst, Prsn_dev, Soft_skill, Qlty_Edu, Syl_cont and Aca_Reslt are independent variables.

iv) Test for Normality

To analyze the contribution and benefit of Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

a) Kolmogorov-Smirnov

b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.7 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Aca_env	.255	379	.000	.786	379	.000
Disc_inst	.293	379	.000	.759	379	.000
Prsn_dev	.371	379	.000	.689	379	.000
Soft_skill	.383	379	.000	.666	379	.000
Qlty_Edu	.303	379	.000	.761	379	.000
Syl_cont	.332	379	.000	.798	379	.000
Aca_Reslt	.283	379	.000	.796	379	.000
Empl	.251	379	.000	.855	379	.000
a. Lilliefors Significance Correction						

From the above test we can conclude that the variables Aca_env, Disc_inst, Prsn_dev, Soft_skill, Qlty_Edu, Syl_cont and Aca_Reslt significantly do not follow Normal Distribution.

v) Pair Wise Test and Observation

In this section, crosstabs are drawn to analyze the relationship between Employability and the independent variables. From there we can form a basis of existence of relationship which is further tested using Chi-Square test and Likelihood Ratio Test. This method is repeated against each independent variables and conclusions are drawn independently of each other.

i) Employability against Academic Environment

Hypothesis:

H_n^1 : There is no association between employability and academic environment

H_a^1 : There is association between employability and academic environment

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Environment (**Aca_env**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Academic environment has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.8 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_env	1.00	60	73	26	2	0	161
	2.00	6	88	62	7	1	164
	3.00	0	14	29	2	1	46
	4.00	1	0	4	1	0	6
	5.00	0	0	2	0	1	3
Total		67	175	123	12	3	380

With regard to the crosstab between employability and academic environment, it is observed that higher number of students have expressed their satisfaction level in both the aspects of academic environment and the availability of employment opportunities.

It is observed that the students who are satisfied with academic environment have opined for the same for employability too. Almost no students who are Unsatisfied or Extremely Unsatisfied with Academic environments. And very few students are extremely unhappy with Employability of the institution. Moreover, most of the students are Satisfied with the Employability and similarly maximum of the students are satisfied with the Academic Environment.

The association between employability and academic environment is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.9 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	150.922 ^a	16	.000
Likelihood Ratio	128.377	16	.000
Linear-by-Linear Association	84.460	1	.000
N of Valid Cases	380		
a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .02.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that a productive and healthy academic environment is expected to boost confidence, academic potentials, and overall growth to avail better employment opportunities.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.10

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.587	.000
	Cramer's V	.294	.000
N of Valid Cases		380	

ii) Employability against Discipline of the Institution

Hypothesis:

H_n^1 : There is no association between employability and Discipline of the Institution

H_a^1 : There is association between employability and Discipline of the Institution

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Discipline of the Institution (**Disc_inst**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Discipline of the Institute has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.11 - Cross Tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	60	87	31	2	2	182
	2.00	7	76	61	6	0	150
	3.00	0	11	31	3	0	45
	4.00	0	0	0	0	0	0
	5.00	0	1	0	1	1	3
Total		67	175	123	12	3	380

In the context of the crosstab between employability and discipline of the institution, it is observed that large number of students have expressed their opinion in terms of higher satisfaction with regard to Discipline of the institution. They are satisfied with the availability of employment opportunities.

Almost no students are Extremely Unsatisfied and absolutely no students are Unsatisfied with Discipline of the institution. And very few students are extremely unhappy with Employability of the institution. Moreover, most of the students are Satisfied with the Employability followed by Neutral. Maximum of the students are Highly satisfied with the Discipline of the Institute, followed by count of Satisfactory response toward Discipline of the Institute.

The association between employability and Discipline of the institution is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.12 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	143.640 ^a	12	0.000
Likelihood Ratio	114.395	12	0.000
Linear-by-Linear Association	75.057	1	0.000
N of Valid Cases	380		
a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .02.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the level of discipline of an institution will be instrumental in attracting good companies. This companies will be providing better job opportunities through an active placement cell. This is further corroborated by the response of the students regarding the active functioning of the placement cell as mentioned in the questionnaire.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.13

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.562	.000
	Cramer's V	.324	.000
N of Valid Cases		380	

iii) **Employability against Personality Development**

Hypothesis:

H_n^1 : There is no association between employability and Personality Development

H_a^1 : There is association between employability and Personality Development

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Personality Development (**Prsn_dev**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Similarly, Personality Development has five response types:

1 = Always

2 = Often

3 = Sometimes

4 = Occasionally

5 = Never

Table 4.14 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Prsn_dev	1.00	61	121	53	1	1	237
	2.00	5	41	38	5	1	90
	3.00	1	11	22	4	1	39
	4.00	0	2	9	1	0	12
	5.00	0	0	1	1	0	2
Total		67	175	123	12	3	380

In the context of the crosstab between employability and personality development, it is observed that large number of students have expressed their opinion in terms of higher satisfaction with regard to Personality development. They are satisfied with the availability of employment opportunities.

Very few students felt their university Never or Occasionally helping them to develop their Personality. And very few students are extremely unhappy with Employability of the institution. Moreover, most of the students are Satisfied with the Employability followed by Neutral. Maximum of the students are Highly satisfied with the Personality development, followed by count of Satisfactory response toward Personality development.

The association between employability and Personality development is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.15 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	85.437 ^a	16	0.000
Likelihood Ratio	81.695	16	0.000
Linear-by-Linear Association	64.347	1	0.000
N of Valid Cases	380		
a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .02.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better personality development we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.16

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.451	.000
	Cramer's V	.226	.000
N of Valid Cases		380	

iv) Employability against Soft Skills

Hypothesis:

H_0^1 : There is no association between employability and Soft Skills

H_a^1 : There is association between employability and Soft Skills

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Soft Skills(**Soft_skill**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Similarly, Soft Skillshas five response types:

1 = Always

2 = Often

3 = Sometimes

4 = Occasionally

5 = Never

Table 4.17 – Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Soft_skill	1.00	59	126	56	2	2	245
	2.00	7	42	41	3	0	93
	3.00	1	6	19	4	1	31
	4.00	0	1	5	3	0	9
	5.00	0	0	2	0	0	2
Total		67	175	123	12	3	380

In the context of the crosstab between employability and soft skill, it is observed that large number of students have expressed their opinion in terms of higher satisfaction regarding Soft Skill. They are satisfied with the availability of employment opportunities.

Almost no students are Extremely Unsatisfied and Unsatisfied with Soft Skill. And very few students are extremely unhappy with Employability of the institution. Moreover, most of the students are Satisfied with the Employability followed by Neutral. Maximum of the students are Highly content with the Soft Skill, followed by count of Satisfactory responses toward Soft Skill.

The association between employability and soft skills is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.18 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	92.284 ^a	16	0.000
Likelihood Ratio	78.017	16	0.000
Linear-by-Linear Association	58.989	1	0.000
N of Valid Cases	380		
a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .02.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better personality development we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.19

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.451	.000
	Cramer's V	.226	.000
N of Valid Cases		380	

v) Employability against Quality Education

Hypothesis:

H_0^1 : There is no association between employability and Quality Education

H_a^1 : There is association between employability and Quality Education

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Quality Education (**Qlty_Edu**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Similarly, Quality Education has five response types:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Table 4.20 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Qlty_Edu	1.00	57	94	35	0	2	188
	2.00	6	74	59	8	1	148
	3.00	4	7	24	3	0	38
	4.00	0	0	5	0	0	5
	5.00	0	0	0	1	0	1
Total		67	175	123	12	3	380

In the context of the crosstab between employability and quality education, it is observed that large number of students have expressed their opinion in terms of higher satisfaction with regard to Quality education. They are satisfied with the availability of employment opportunities.

Very few students are Extremely Unsatisfied and Unsatisfied with Quality Education. And very few students are extremely unhappy with Employability of the institution. Moreover, most of the students are Satisfied with the Employability followed by Neutral. Maximum of the students are Highly content with the Quality education, followed by count of Satisfactory responses toward Quality education.

The association between employability and Quality education is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.21 - Chi Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	118.467 ^a	16	0.000
Likelihood Ratio	105.955	16	0.000
Linear-by-Linear Association	61.271	1	0.000
N of Valid Cases	380		
a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .01.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better quality education we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.22

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.552	.000
	Cramer's V	.276	.000
N of Valid Cases		380	

vi) Employability against Syllabus Content

Hypothesis:

H_0^1 : There is no association between employability and Syllabus Content

H_a^1 : There is association between employability and Syllabus Content

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Syllabus Content (**Syl_cont**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Similarly, Syllabus Content has five response types:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Table 4.23 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Syl_cont	1.00	35	17	11	0	1	64
	2.00	29	139	63	5	0	236
	3.00	1	18	43	6	1	69
	4.00	2	0	6	1	1	10
	5.00	0	1	0	0	0	1
Total		67	175	123	12	3	380

In the context of the crosstab between employability and Syllabus content, it is observed that large number of students have expressed their opinion in terms of higher satisfaction with regard to Syllabus content. They are satisfied with the availability of employment opportunities.

Very few students are Extremely Unsatisfied and Unsatisfied with Syllabus Content. And very few students are extremely unhappy with Employability of the institution. Moreover, most of the students are Satisfied with the Employability followed by Neutral. Maximum of the students are Highly content with the Syllabus Content by a huge margin. Overall the response is positive on both the Syllabus content and Employment State of the Institutes.

The association between employability and Syllabus content is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.24 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	142.298 ^a	16	0.000
Likelihood Ratio	128.240	16	0.000
Linear-by-Linear Association	69.014	1	0.000
N of Valid Cases	380		
a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .01.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Syllabus content we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table 4.25

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.575	.000
	Cramer's V	.288	.000
N of Valid Cases		380	

vii) Employability against Academic Result

Hypothesis:

H_0^1 : There is no association between employability and Academic Result

H_a^1 : There is association between employability and Academic Result

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Result(**Aca_Reslt**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Similarly, Academic Result has five response types:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Table 4.26 - Cross Tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_Reslt	1.00	44	57	18	1	1	121
	2.00	21	102	75	8	1	207
	3.00	1	16	29	2	1	49
	4.00	1	0	1	1	0	3
	5.00	0	0	0	0	0	0
Total		67	175	123	12	3	380

In the context of the crosstab between employability and Academic results, it is observed that large number of students have expressed their opinion in terms of satisfaction with regard to Academic results. They are satisfied with the availability of employment opportunities.

Absolutely no students are Extremely Unsatisfied and only three students are Unsatisfied with Academic Result. And very few students are extremely unhappy with Employability of the institution. Moreover, most of the students are Satisfied with the Employability followed by Neutral. Maximum of the students are Satisfied with the Academic Result by a huge margin, followed by Extremely Satisfied response. Overall, the responses are very positive on both the Academic Result and Employment State of the Institutes.

The association between employability and Academic Result is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.27 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	77.339 ^a	12	0.000
Likelihood Ratio	74.110	12	0.000
Linear-by-Linear Association	51.828	1	0.000
N of Valid Cases	380		
a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .02.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Syllabus content we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.28

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.428	.000
	Cramer's V	.247	.000
N of Valid Cases		380	

viii) CONSOLIDATED CHI-SQUARE RESULT AND CONCLUSIONS

Table - 4.29

Dependent Variable: Employability

Perceptions	Chi-Sq test Statistic	p-value	Strength of Association	Decision
Academic Environment	182.39	0.000	STRONG (0.00)	H_n^1 is rejected
Discipline	167.36	0.000	STRONG (0.00)	H_n^1 is rejected
Personality	107.84	0.000	STRONG (0.00)	H_n^1 is rejected
soft skill	106.15	0.000	STRONG (0.00)	H_n^1 is rejected
Quality education	160.78	0.000	STRONG (0.00)	H_n^1 is rejected
Syllabus Content	174.83	0.000	STRONG (0.00)	H_n^1 is rejected
Academic Result	96.66	0.000	STRONG (0.00)	H_n^1 is rejected

Overall, the student's perceptions are categorized into the factors namely environment of the college, and its discipline, holistic development in terms of personality and soft skills, teaching learning process in terms of the delivery of quality education and syllabus content followed by academic output or results. All these perceptions are capable enough to deliver inputs for employability. This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the students have opined on the presence of an active placement cell. Hence, the institutions should focus adequately on academic environment, market friendly teaching learning process and a holistic development of an individual so as to harness the employment opportunities.

B) Model 2: Perception of Faculty

Under this model we will explore the faculty perception on the Education quality of the Jesuit Higher Education Institutions. The total number of faculty members sampled from Jesuit Higher Education is 74.

i) Nature of Data collected

In this study the following variables have been considered:

- a) Placement Cell
- b) Academic Environment
- c) Public Image

- d) Discipline of the Institution
- e) Syllabus Curriculum
- f) Examination System
- g) Alumni Association

And,

- h) Name
- i) Gender
- j) Age
- k) Name of Institution
- l) Monthly Income
- m) Year of joining
- n) Qualifications

According to our objective we are focusing on the impact of the above said variables on Employability.

ii) Different Dimensions affecting Placement Cell of an Institution:

One of the major goals of any institution is to provide the students with better job and a secure future. And nothing can perform this task well none other than the placement cell of the institution, it is the heart and core of the final year students. For any student who is going through the final years of their graduation or post-graduations, they have to focus on multiple things at once, which makes it difficult for them to look out for a job. Job hunting is very tiring and might be unfruitful if not done properly, thus one must have the patience and connections to lookout for their desired job. After all these comes the question of trust and security, an individual might get a job, but they will be doubtful about their decision as they are new to the job and it might pose a challenge to trust the corporation they are in. The trust issue works both ways, from the corporate point of view they are looking for sincere and trusted employees with the exact necessary skills without any compromise on time, for this reason they bank onto the sources they have for offering their job. One of the major sources of the corporate industries are the placement cell of education institutions.

An active placement cell will act as an easy road for the affiliated students to get placed into their desired job or company. The more connection a placement cell possesses the more well known the institution is. This also helps the upcoming students to build a trust in the institutions reputation and make them confident in their choice of course. And this frees the students of the burden of job hunting and getting placed. Thus, the factor which affects the placement cell of the institute will also directly and indirectly uphold the institution value. This will also cast a fruitful contrast between the student perspective and faculty perspective on the Employability and Placement of the Jesuit Higher Education Institutions. For our next section we will get a clear idea about the variable and how they are impacting the Overall growth of institution.

a) Academic Environment: The academic environment for any faculty member is very crucial for their decision making and personal growth factor. A good academic environment boosts the morale and give a sense of pride for the staffs and teachers of the institution. A variety of factors have a substantial impact on how faculty members evaluate their working environment. A well-maintained classroom, appropriate subject equipment, a working library stocked with relevant books and materials, and an academically stable college/institution system constitute a good healthy academic environment. The academic environment is important in the overall development of the faculty mentality toward a high profile and functional teaching career. It also ensures that the faculty have maximum reach for their benefit, which directly reflects in their overall growth and the way they represent their institution.

b) Public Image: Public image is the core of any institution educational or non-educational. A good public image is always desired of any institution and more so of a higher education institution. A high reputed institution will allow their faculty members to take pride and joy in their work while giving them the social status which in turn impact the way they represent their institution, a positive feedback loop. Well known institution has better reach in terms of corporate and other reputed institutions, this factor helps the placement cell to attract more varied and authenticate companies. It benefits the students to find and land their preferred job in their preferred company. Thus, we are considering Public Image as one of the Dimensions affecting Placement Cell of an Institution.

c) Discipline of the Institution: The discipline of each institution can be defined as a general code of conduct and rules and regulations. Educational institutions can have strict or loose discipline, but neither is suitable for the overall development of the student. Balanced discipline leads to overall academic and non-academic growth for students. In a well-disciplined

institution, students will also follow the institution's code of conduct. It will affect the future, affect your career, and stay there for a long time. In this way, institutions aiming for better discipline also guarantee higher employment opportunities, as better codes of conduct and better discipline are maintained in companies that are widely desired in society. For this reason, discipline is also one of the variables that considers the institution's dependence on employment status.

d) Syllabus Curriculum: The syllabus curriculum is the scope and objectives of a given study that a student is pursuing. Any institute or corporation will look for a curriculum that is up to date and relevant, with a lot of application-based content. The syllabus should also guarantee that pupils are not overburdened with knowledge while keeping time constraints in mind. The syllabus curriculum is critical for corporate employability as well as subsequent studies since it demonstrates the study's relevance to current time and knowledge. A decent syllabus should be pleasant and contain enough knowledge on the subject for the student to feel secure enough to pursue a better placement or higher education. As a result, we will investigate the link between the Syllabus curriculum and its impact on Placement.

e) Examination System: Examination is one of the trademarks of education, every course and institute must test the student's knowledge on the subject. And a well-regulated examination system will result in the students to have a fair chance of representing their knowledge and capabilities. The faculty members are directly responsible for deriving and executing a pleasant Examination system for the students. This directly effects the result of a student, and in the previous model we found that academic result of a student does affects the Employability of a student in a Jesuit higher education institution. Thus, we will explore more on the Examination system and the Placement Cell relationship with appropriate test and conclude the findings.

f) Alumni Association: An alumni organization, often known as an alumni association, is a group of graduates or, more broadly, alumni (alumni). It is sometimes referred to as a "alumni meeting." In the India, graduates from universities, colleges, schools, and especially Jesuit Higher Education Institution frequently create clubs with alumni from the same institution. These groups frequently host social meetings, issue bulletins or magazines, and raise finances for the organization. Many provide a variety of incentives and services to assist alumni in remaining connected with their institution and other alumni. This ensures the abundance of opportunities for students and faculty members alike for overall growth of the individual along with the institute.

As we can see, the placement cell of an institution may or may not be affected by the following variables, depending on the evidence. In order to test this, we first coded the variables such that the satisfaction level is transformed into an ordered numeric number. This allowed us to use the Cross tab for direct conclusion and the chi-square test for independence.

Thus, we code our variables accordingly for performing further calculations in SPSS:

- a) Placement Cell = Plcmt_cell
- b) Academic Environment = Aca_env
- c) Public Image = Pub_img
- d) Discipline of the Institution = Disc_Inst
- e) Syllabus Curriculum = Syl_curr
- f) Alumni Association = Almuni_assoc
- g) Examination System = Exam_sys

iii) Creation of index: An index was developed considering the different dimensions of Placement Cell of an institution:

$$Plcmt_cell = f(Aca_env, Pub_img, Disc_inst, Syl_curr, Alumni_assoc, Exam_sys)$$

Where Plcmt_cell is a **dependent variable**.

Where Aca_env, Pub_img, Disc_inst, Syl_curr, Alumni_assoc and Exam_sys are **independent variables**.

iv) Test for Normality

To analyze the contribution and benefit of Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

- a) Kolmogorov-Smirnov
- b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.30 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Aca_env	.424	74	.000	.629	74	.000
Pub_img	.447	74	.000	.590	74	.000
Disc_Inst	.451	74	.000	.582	74	.000
Syl_curr	.262	74	.000	.779	74	.000
Alumni_assoc	.300	74	.000	.774	74	.000
Exam_sys	.294	74	.000	.760	74	.000
Plcmt_cell	.261	74	.000	.845	74	.000

a. Lilliefors Significance Correction

From the above test we can conclude that the variables Aca_env, Pub_img, Disc_inst, Syl_curr, Alumni_assoc and Exam_sys and Plcmt_cell significantly **do not follow Normal Distribution.**

v) Pair Wise Test and Observation

In this section, crosstabs are drawn to analyze the relationship between Placement Cell and the independent variables. From there we can form a basis of existence of relationship which is further tested using Chi-Square test and Likelihood Ratio Test. This method is repeated against each independent variables and conclusions are drawn independently of each other.

i) Placement Cell against Academic Environment

Hypothesis:

H_n^1 : There is no association between Placement Cell and Academic Environment

H_a^1 : There is association between Placement Cell and Academic Environment

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Academic Result (**Aca_Env**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Academic Environment (Question 1a of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.31 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_env	1.00	13	27	10	1	0	51
	2.00	0	9	10	1	0	20
	3.00	0	0	3	0	0	3
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		13	36	23	2	0	74

In the context of the crosstab between placement cell and Academic environment, it is observed that Faculty members who are having Excellent opinions about the academic environment of the institution are also having Very Good opinions about their Placement.

Absolutely no faculty members responded with Average or Poor in regards with Academic Result. And no faculty members are opting for poor response with Placement cell of the institution. Moreover, most of the faculty members have opined for an Excellent rating for the Academic environment of Jesuit Higher Education Institutions. Similarly, most of the faculty members have rated the placement cell with highest Very good rating followed by Good. As a whole, the response was very positive and it shows that there might be a connection between the Academic Environment and Placement Cell of the institute.

The association between Placement Cell and Academic Environment is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.30.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.32 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.193 ^a	6	0.009
Likelihood Ratio	20.736	6	0.002
Linear-by-Linear Association	13.211	1	0.000
N of Valid Cases	74		
a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .08.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Academic environment we get better job prospect for a faculty. The placement cell is monitored and maintained very rigorously by the faculty and institute, and this brings forth a plethora of opportunities for the students to go for research and job fields. The increasing scope of promotion keeps the teachers and the faculty on their toes and gives them opportunities for a better position in the institution. This also keeps the friendly competitive nature of the faculty members to strive for betterment.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.33

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.482	.009
	Cramer's V	.341	.009
N of Valid Cases		74	

ii) Placement Cell against Public Image

Hypothesis:

H_n^1 : There is no association between Placement Cell and Public Image

H_a^1 : There is association between Placement Cell and Public Image

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Public Image(**Pub_img**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Public Image (Question 1b of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.34- Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Pub_img	1.00	12	29	11	2	0	54
	2.00	1	7	10	0	0	18
	3.00	0	0	2	0	0	2
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		13	36	23	2	0	74

In the context of the crosstab between placement cell and Public image, it is observed that Faculty members who are having Excellent opinions about the public image of the institution are also having Very Good opinions about their Placement.

Absolutely no faculty members responded with Average or Poor in regards with Public Image. And no faculty members are opting for poor response with Placement cell of the institution. Moreover, most of the faculty members have opined for an Excellent rating for the Public Image of Jesuit Higher Education Institutions. Similarly, most of the faculty members have rated the placement cell with highest Very good rating followed by Good. As a whole, the response was very positive, and it shows that there might be a connection between the Public Image and Placement Cell of the institute.

The association between Placement Cell and Public Image is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.30.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.35- Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.364 ^a	6	0.038
Likelihood Ratio	14.192	6	0.028
Linear-by-Linear Association	7.086	1	0.008
N of Valid Cases	74		
a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .05.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better public image we get better job prospect for a faculty. The placement cell is monitored and maintained very rigorously by the faculty and institute, and this brings forth a plethora of opportunities for the students to go for research and job fields. The increasing scope of promotion keeps the teachers and the faculty on their toes and gives them opportunities for a better position in the institution. This also keeps the friendly competitive nature of the faculty members to strive for betterment.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.36

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.425	.038
	Cramer's V	.300	.038
N of Valid Cases		74	

iii) Placement Cell against Discipline of the Institution

Hypothesis:

H_n^1 : There is no association between Placement Cell and Discipline of the Institution

H_a^1 : There is association between Placement Cell and Discipline of the Institution

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Discipline of the Institution (**Disc_inst**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Discipline of the Institution (Question 1c of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.37- Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	11	29	13	1	0	54
	2.00	2	7	9	1	0	19
	3.00	0	0	1	0	0	1
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		13	36	23	2	0	74

In the context of the crosstab between placement cell and Discipline of institute, it is observed that Faculty members who are having Excellent opinions about the discipline of institute of the institution are also having Very Good opinions about their Placement.

Absolutely no faculty members responded with Average or Poor in regards with Discipline of the Institution. And no faculty members are opting for poor response with Placement cell of the institution. Moreover, most of the faculty members have opined for an Excellent rating for the Discipline of the Institution of Jesuit Higher Education Institutions. Similarly, most of the faculty members have rated the placement cell with highest Very good rating followed by Good. The response was very positive, but the data does not seem very favorable with the association, it shows that there might not be a connection between the Discipline of the Institution and Placement Cell of the institute.

The association between Placement Cell and Discipline of the Institution is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.30.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.38 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.903 ^a	6	0.330
Likelihood Ratio	6.906	6	0.330
Linear-by-Linear Association	5.116	1	0.024
N of Valid Cases	74		

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .03.

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. This shows that the faculty does not think that the discipline of the institute has any impact on the placement.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.39

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.305	.330
	Cramer's V	.216	.330
N of Valid Cases		74	

iv) Placement Cell against Syllabus Curriculum

Hypothesis:

H_n^1 : There is no association between Placement Cell and Syllabus Curriculum

H_a^1 : There is association between Placement Cell and Syllabus Curriculum

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Syllabus Curriculum (**Syl_curr**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Syllabus Curriculum (Question 1b of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.40 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Syl_curr	1.00	10	17	3	0	0	30
	2.00	2	17	15	1	0	35
	3.00	1	2	5	1	0	9
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		13	36	23	2	0	74

In the context of the crosstab between placement cell and Syllabus curriculum, it is observed that Faculty members who are having Excellent opinions about the syllabus curriculum of the institution are also having Very Good opinions about their Placement.

Absolutely no faculty members responded with Average or Poor in regards with Syllabus Curriculum. And no faculty members are opting for poor response with Placement cell of the institution. Moreover, most of the faculty members have opined for an Very good rating for the Syllabus Curriculum of Jesuit Higher Education Institutions. Similarly, most of the faculty members have rated the placement cell with highest Very good rating followed by Good. As a whole, the response was very positive, and it shows that there might be a connection between the Syllabus Curriculum and Placement Cell of the institute.

The association between Placement Cell and Curriculum Syllabus is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.30.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.41 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	19.700 ^a	6	0.003
Likelihood Ratio	20.981	6	0.002
Linear-by-Linear Association	15.392	1	0.000
N of Valid Cases	74		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .24.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Syllabus curriculum we get better job prospect for a faculty. The placement cell is monitored and maintained very rigorously by the faculty and institute and this brings forth a plethora of opportunities for the students to go for research and job fields. The increasing scope of promotion keeps the teachers and the faculty on their toes and also gives them opportunities for a better position in the institution. This also keeps the friendly competitive nature of the faculty members to strive for betterment.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table 4.42

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.516	.003
	Cramer's V	.365	.003
N of Valid Cases		74	

v) Placement Cell against Alumni Association

Hypothesis:

H_n^1 : There is no association between Placement Cell and Alumni Association

H_a^1 : There is association between Placement Cell and Alumni Association

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plemt_cell**) and Alumni Association (**Almuni_assoc**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Alumni Association (Question 11 of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.43 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Almuni_assoc	1.00	11	18	7	1	0	37
	2.00	1	16	7	0	0	24
	3.00	1	2	6	1	0	10
	4.00	0	0	3	0	0	3
	5.00	0	0	0	0	0	0
Total		13	36	23	2	0	74

In the context of the crosstab between placement cell and Alumni association, it is observed that Faculty members who are having Excellent opinions about the alumni association of the institution are also having Very Good opinions about their Placement.

Absolutely no faculty members responded with Poor and almost very few Average responses in regards with Alumni Association. And no faculty members are opting for poor response with Placement cell of the institution. Moreover, most of the faculty members have opined for an Excellent rating for the Alumni Association of Jesuit Higher Education Institutions. Similarly, most of the faculty members have rated the placement cell with highest Very good rating followed by Good. As a whole, the response was very positive, and it shows that there might be a connection between the Alumni Association and Placement Cell of the institute.

The association between Placement Cell and Syllabus Curriculum is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 5.20.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.44- Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.934 ^a	9	0.006
Likelihood Ratio	23.777	9	0.005
Linear-by-Linear Association	11.981	1	0.001
N of Valid Cases	74		

a. 11 cells (68.8%) have expected count less than 5. The minimum expected count is .08.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Alumni association we get better job prospect for a faculty. The placement cell is monitored and maintained very rigorously by the faculty and institute and this brings forth a plethora of opportunities for the students to go for research and job fields. The increasing scope of promotion keeps the teachers and the faculty on their toes and also gives them opportunities for a better position in the institution. This also keeps the friendly competitive nature of the faculty members to strive for betterment.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.45

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.557	.006
	Cramer's V	.321	.006
N of Valid Cases		74	

vi) Placement Cell against Examination System

Hypothesis:

H_0^1 : There is no association between Placement Cell and Examination System

H_a^1 : There is association between Placement Cell and Examination System

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Examination System (**Exam_sys**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

1 = Excellent

2 = Very Good

3 = Good

4 = Average

5 = Poor

Similarly, Examination System (Question 11 of Faculty Questionnaire) has five response types:

1 = Excellent

2 = Very Good

3 = Good

4 = Average

5 = Poor

Table 4.46 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Exam_sys	1.00	10	21	3	0	0	34
	2.00	2	15	15	1	0	33
	3.00	1	0	5	1	0	7
	4.00	0	0	3	0	0	0
	5.00	0	0	0	0	0	0
Total		13	36	23	2	0	74

In the context of the crosstab between placement cell and Examination system, it is observed that Faculty members who are having Excellent opinions about the examination system of the institution are also having Very Good opinions about their Placement.

Absolutely no faculty members responded with Poor and almost very few Average responses in regards with Examination System. And no faculty members are opting for poor response with Placement cell of the institution. Moreover, most of the faculty members have opined for an Excellent and very good rating equally alike for the Examination System of Jesuit Higher Education Institutions. Similarly, most of the faculty members have rated the placement cell with highest Very good rating followed by Good. As a whole, the response was very positive, and it shows that there might be a connection between the Examination System and Placement Cell of the institute.

The association between Placement Cell and Examination system is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 5.20.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.47 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.608 ^a	6	0.000
Likelihood Ratio	29.353	6	0.000
Linear-by-Linear Association	18.584	1	0.000
N of Valid Cases	74		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .19.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Examination system we get better job prospect for a faculty. The placement cell is monitored and maintained very rigorously by the faculty and institute and this brings forth a plethora of opportunities for the students to go for research and job fields. The increasing scope of promotion keeps the teachers and the faculty on their toes and also gives them opportunities for a better position in the institution. This also keeps the friendly competitive nature of the faculty members to strive for betterment.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table 4.48

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.588	.000
	Cramer's V	.416	.000
N of Valid Cases		74	

vii) Consolidated Chi-Square Result and Conclusions

Table - 4.49

Dependent Variable: Employability

Perceptions	Chi-Square Test Statistic	p-value	Strength of Association	Decision
Academic Environment	17.19	0.009	STRONG (0.00)	H ₀ is rejected
Public Image	13.36	0.038	STRONG (0.03)	H ₀ is rejected
Discipline of Institute	6.9	0.330	WEAK (0.33)	H₀ is accepted
Syllabus Curriculum	19.7	0.003	STRONG (0.00)	H ₀ is rejected
Alumni Association	22.93	0.006	STRONG (0.00)	H ₀ is rejected
Examination System	25.6	0.000	STRONG (0.00)	H ₀ is rejected

Overall, the faculty perceptions are categorized into the factors namely environment of the college, and its discipline, public image, teaching learning process in terms of the syllabus content and examination system followed by Alumni association. All these perceptions are capable enough to deliver inputs for placement except the discipline of the institute. This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the faculty have opined on the presence of an active placement cell. Hence, the institutions should focus adequately on academic environment, market friendly teaching learning process and connection with alumni association, so as to harness the employment opportunities.

C) Model 3: Perception of Parents

Under this model we will explore the parent's perception on the Education quality of the Jesuit Higher Education Institutions. The total number of parent response sampled is 211. The questionnaire for this module is attached at the end of appendix.

i) Nature of Data collected

In this study the following variables have been considered:

- a) Discipline of the Institution
- b) Academic Environment

- c) Personality Development
- d) Co-curricular Activities

And,

- a) Name
- b) Gender
- c) Age
- d) Name of Institution
- e) Course and Year of Study
- f) Stream Chosen
- g) Subject
- h) Monthly income

According to our objective we are focusing on the impact of the above said variables on Employability.

ii) Different Dimensions affecting Employability of students perceived by parents:

One of the primary goals for every student attending an Institute is employability. Any student's or scholar's ultimate goal is to use their education to make a living after completing a course. As a result, an institute's worth will logically rise with a greater Employability Rate if it can give its students numerous opportunities to use their knowledge in the workplace or through future academic study. Additionally, this offers the students confidence in their chosen course and a sense of certainty about the future. The employability rate also demonstrates an institution's broad appeal and the applicability of its pedagogy and ideologies, so by establishing stronger ties with numerous corporations and other higher education institutions, an institution can guarantee that its students will have an advantage in the job market and will have better opportunities for further study. Thus, Employability Rate is a key factor in determining a school's value in parent's views.

According on parent feedback, we have gathered opinions on how satisfied the parents of the pupils are satisfied with the employability of the individual institutes. Our study aims to establish a connection between the aforementioned variables and how they affect an institute's employability rate. In the part that follows, we will have a clearer understanding of the variables and how they affect employability.

i) Discipline of the Institution: Any institution's discipline may be summed up as its general code of conduct and set of rules and regulations. Regardless of whether a school has tight or lenient discipline, neither is helpful for a student's overall growth. A pupil will advance both academically and non-academically overall with a discipline that is well-balanced. A good, disciplined school will encourage its students to uphold the school's code of conduct, which has long-lasting effects on the student's future and profession. Because a stronger code of conduct and discipline will be upheld in the corporate setting as well, which is something the society as a whole strongly desires, an institution that strives for greater discipline also assures a higher employment possibility. This is the reason discipline is also one of our factors that is taken into account for the institution's dependency on its employment status.

ii) Academic Environment: One definition of the academic environment is one that best prepares students for their future professional lives and supports their social, psychological, and physical growth. The way that students view and experience their education is significantly influenced by a variety of different elements. A well-kept classroom, appropriate subject equipment, a working library filled with useful books and materials, and an academically sound college/institution system make up a good, healthy learning environment. The academic environment is crucial in helping students build their attitudes toward successful academic careers. It also ensures that students are getting the most out of their education, which has a direct impact on their total development as intellectuals in contemporary society.

iii) Personality Development: Any student's personal growth plays a crucial role in their mental and personal development. An institution plays a significant role in the personality development of a student through a variety of extracurricular activities and social work possibilities. Students who have a healthy, balanced personality are more likely to thrive in their future careers because they will cultivate and promote a positive character. In order to ensure that a student does well in their future undertakings, any institution that can arrange the appropriate programmes and activities for their students to explore and provide them the chance to develop their personalities with plenty of time to fix and mend oneself. We will thus investigate the empirical link between employment and total personality development.

iv) Co-curricular Activities: One of the most important aspects of any institution is the co-curricular activities the university can provide. Co-curricular activities are the non-academic or academic activities which are performed outside of normal studies. Most universities now days have a separate set of credit system which needs to be fulfilled by a student to obtain their

graduation certificate, this is done to impose a rule that all students must invest their time in activities which will shape their overall growth as a functional member of the society. Activities such as article writing, organizing fest or college/alumni events, organizing donation camps, working in an NGO or social work, participating in student competitions and such are some of the most generic ways to develop a healthy co-curricular activity by a university. This helps the student to train and get themselves accustomed to real life problems which are out of the book knowledge. Thus, an institution which can provide promising co-curricular activities will definitely result in practical pupil who are ready to take up any sort of corporate challenges, and as a result this will attract corporate attention. This may improve the employability power of an institution.

As a result, it is clear that the aforementioned factors may or may not have an impact on an institution's employability, which depends on empirical data. In order to verify this, we first coded the variables to convert the satisfaction level into ordered numeric amounts so that we could do a cross tab for a direct conclusion and a chi-square test for independence.

Thus, we code our variables accordingly for performing further calculations in SPSS:

- a) Employability = Empl
- b) Discipline of the Institution = Disc_inst
- c) Academic Environment = Aca_env
- d) Personality Development = Prsn_dev
- e) Co-curricular Activities = Co_cur_act

iii) Creation of index: An index was developed taking into account the different dimensions of Employability of an institution:

$$Empl = f(Disc_inst, Aca_env, Prsn_dev, Co_cur_act)$$

Where Empl is a **dependent variable**.

Where Disc_inst, Aca_env, Prsn_dev, and Co_cur_act are the **independent variables**.

iv) Test for Normality

To analyze the contribution and benefit of Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check

if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

- a) Kolmogorov-Smirnov
- b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.50 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Disc_inst	.303	212	.000	.732	212	.000
Aca_env	.294	212	.000	.762	212	.000
Prsn_dev	.383	212	.000	.673	212	.000
Co_cur_act	.299	212	.000	.786	212	.000
Empl	.270	212	.000	.844	212	.000

a. Lilliefors Significance Correction

From the above test we can conclude that the variables Disc_inst, Aca_env, Prsn_dev, and Co_cur_act and Empl significantly **do not follow Normal Distribution.**

v) Pair Wise Test and Observation

Crosstabs are created in this section to examine the interaction between Employability and the independent variables. From there, we may establish a premise for a relationship's existence, which is then verified using the "Chi-Square test" and the "Likelihood Ratio Test." This approach is used repeatedly to several independent variables, and results are reached independently of one another.

i) Employability against Discipline of Institution

Hypothesis:

H_n^1 : There is no association between employability and Discipline of institution

H_a^1 : There is association between employability and Discipline of institution

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Discipline of institution (**Disc_inst**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Discipline of institution (Question 8a of the Parent Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.51 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	35	48	18	1	1	103
	2.00	1	55	37	1	1	95
	3.00	0	2	8	3	0	13
	4.00	0	0	0	0	0	0
	5.00	0	0	1	0	0	1
Total		36	105	64	5	2	212

In the context of the crosstab between employability and discipline of institution, it is observed that Parents who are satisfied with the Discipline of the institute are also satisfied with their employment.

It is observed that the number of Parents responded with highly satisfied with the Discipline of institution are holding the most count followed by Satisfied response. Similarly, the number of the Parents who have opined for satisfactory response for employability are dominating the count by a large margin. 55 Parents have opted for Satisfied Employment and Discipline of the institution. Absolutely no parents have responded with Unsatisfied and only one student have opted for Highly Unsatisfied response regarding the Discipline of Institution. Very few parents are Unsatisfied and Highly Unsatisfied with the employment offered by the Jesuit higher institutions. Overall, the total response is positive in nature where we can see that Parents are satisfied with both the Employment and Discipline of the institution.

The association between employability and Discipline of institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.50.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.52 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	78.307 ^a	12	0.000
Likelihood Ratio	73.177	12	0.000
Linear-by-Linear Association	40.601	1	0.000
N of Valid Cases	212		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .01.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better discipline of institution we get better job prospect for students. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.53

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.605	.000
	Cramer's V	.349	.000
N of Valid Cases		211	

ii) Employability against Academic Environment

Hypothesis:

H_n^1 : There is no association between employability and Academic Environment

H_a^1 : There is association between employability and Academic Environment

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Environment (**Aca_env**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Academic Environment (Question 8b of the Parent Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.54 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_env	1.00	35	49	12	1	1	98
	2.00	1	55	37	2	0	95
	3.00	0	1	15	1	1	18
	4.00	0	0	0	1	0	1
	5.00	0	0	0	0	0	0
Total		36	105	64	5	2	212

In the context of the crosstab between employability and academic environment, it is observed that Parents who are satisfied with the academic environment are also satisfied with their employment.

It is observed that the number of Parents responded with highly satisfied with the Academic Environment of the institution are holding the most count followed by Satisfied response. Similarly, the number of the Parents who have opined for satisfactory response for employability are dominating the count by a large margin. 55 Parents have opted for Satisfied Employment and Academic Environment of the institute. Absolutely no parents have responded with Highly Unsatisfied and only one student have opted for Unsatisfied response regarding the Academic Environment of the institute. Very few parents are Unsatisfied and Highly Unsatisfied with the employment offered by the Jesuit higher institutions. Overall, the total response is positive in nature where we can see that Parents are satisfied with both the Employment and Academic Environment of the institute.

The association between employability and Academic Environment of the institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.50.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.55 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	123.495 ^a	12	0.000
Likelihood Ratio	98.639	12	0.000
Linear-by-Linear Association	60.720	1	0.000
N of Valid Cases	212		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .01.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better academic environment we get better job prospect for students. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.56

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.761	.000
	Cramer's V	.439	.000
N of Valid Cases		211	

iii) Employability against Personal Development

Hypothesis:

H_0^1 : There is no association between employability and Personal Development

H_a^1 : There is association between employability and Personal Development

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Personal Development (**Prsn_dev**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Personal Development (Question 8g of the Parent Questionnaire) has five response types:

- 1 = Always
- 2 = Often
- 3 = Sometimes
- 4 = Occasionally
- 5 = Never

Table 4.57 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Prsn_dev	1.00	35	71	27	1	1	135
	2.00	1	30	26	2	0	59
	3.00	0	4	8	2	0	14
	4.00	0	0	3	0	1	4
	5.00	0	0	0	0	0	0
Total		36	105	64	5	2	212

In the context of the crosstab between employability and personality development, it is observed that Parents who are satisfied with the personality development are also satisfied with their employment.

It is observed that the number of Parents responded with highly satisfied with the Personal Development opportunity offered by the institution are holding the most count followed by Satisfied response. Similarly, the number of the Parents who have opined for satisfactory response for employability are dominating the count by a large margin. 71 Parents have opted for Satisfied Employment and Highly Satisfied Personal Development opportunity offered by the institute. Absolutely no parents have responded with Unsatisfied and only one student have opted for Highly Unsatisfied response regarding the Personal Development opportunity offered by the institute. Very few parents are Unsatisfied and Highly Unsatisfied with the employment offered by the Jesuit higher institutions. Overall, the total response is positive in nature where we can see that Parents are satisfied with both the Employment and Personal Development opportunity offered by the institute.

The association between employability and Personal Development opportunity offered by the institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.50.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.58 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	71.060 ^a	12	0.000
Likelihood Ratio	56.227	12	0.000
Linear-by-Linear Association	39.781	1	0.000
N of Valid Cases	212		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .04.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better academic environment we get better job prospect for students. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.59

		Value	Approx. Sig.
Nominal by Nominal	Phi	.761	.000
	Cramer's V	.439	.000
N of Valid Cases		211	

iv) Employability against Co-curricular activities

Hypothesis:

H_n^1 : There is no association between employability and Co-curricular activities

H_a^1 : There is association between employability and Co-curricular activities

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Co-curricular activities (**Co_cur_act**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Co-curricular activities (Question 8e of the Parent Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.60 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Co_cur_act	1.00	30	28	8	0	1	67
	2.00	6	67	43	3	0	119
	3.00	0	9	13	2	1	25
	4.00	0	1	0	0	0	1
	5.00	0	0	0	0	0	0
Total		36	105	64	5	2	212

In the context of the crosstab between employability and personality development, it is observed that Parents who are satisfied with the personality development are also satisfied with their employment.

It is observed that the number of Parents responded with highly satisfied with the Co-curricular activity opportunities offered by the institution are holding the most count followed by Satisfied response. Similarly, the number of the Parents who have opined for satisfactory response for employability are dominating the count by a large margin. 67 Parents have opted for Satisfied Employment and Co-curricular opportunity offered by the institute. Absolutely no parents have responded with Unsatisfied and only one student have opted for Highly Unsatisfied response regarding the Co-curricular activity opportunities offered by the institute. Very few parents are Unsatisfied and Highly Unsatisfied with the employment offered by the Jesuit higher institutions. Overall, the total response is positive in nature where we can see that Parents are satisfied with both the Employment and Co-curricular activities opportunities offered by the institute.

The association between employability and Co-curricular activities opportunities offered by the institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.50.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.61 - Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	70.075 ^a	12	0.000
Likelihood Ratio	70.782	12	0.000
Linear-by-Linear Association	41.417	1	0.000
N of Valid Cases	212		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .01.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better co-curricular activities we get better job prospect for students. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.62

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.569	.000
	Cramer's V	.329	.000
N of Valid Cases		211	

v) Consolidated Chi-Square Results and Conclusion

Table - 4.63

Dependent Variable: Employability

Perceptions	Chi-Square Test Statistic	p-value	Strength of Association	Decision
Discipline of institute	77.11	0.000	STRONG (0.00)	H _n is rejected
Academic Environment	122.06	0.000	STRONG (0.00)	H _n is rejected
Personal Development	70.25	0.000	STRONG (0.00)	H _n is rejected
Co-curricular Activities	68.31	0.000	STRONG (0.00)	H _n is rejected

Overall the parent perceptions are categorized into the factors namely environment of the college, and its discipline, personal development of the student and the co-curricular activities. All these perceptions are capable enough to deliver inputs for placement. This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the parents have opined on the presence of an active placement cell. Hence, the institutions should focus adequately on academic environment and its discipline, and personal development of the student academically and through co-curricular activities so as to harness the employment opportunities.

D) Model 3: Perception of Alumni

Under this model we will explore the alumni's perception on the Education quality of the Jesuit Higher Education Institutions. The total number of alumni's response sampled is 78. The questionnaire for this module is attached at the end of appendix.

i) Nature of Data collected

In this study the following variables have been considered:

- a) Discipline of the Institution
- b) Quality Education
- c) Syllabus Content
- d) Academic Result
- e) Examination System

And,

- a) Name
- b) Gender
- c) Age
- d) Name of Institution
- e) Occupation
- f) Monthly income
- g) Name of the course studied

According to our objective we are focusing on the impact of the above said variables on Employability.

ii) Different Dimensions affecting Employability of students perceived by Alumni:

Employability is one of the main objectives for every student attending an Institute. The ultimate objective of every scholar or student is to utilize their knowledge to support themselves once they have finished a course. Therefore, if an institution can provide its students with multiple possibilities to use their knowledge in the industry or through subsequent academic study, its value will naturally increase with a higher Employability Rate. Additionally, this gives the pupils assurance about the future and confidence in the course they have selected. By forging closer ties with numerous corporations and other higher education institutions, an institution can ensure that its students will have an advantage in the job market and will have better opportunities for further study.

The employability rate also shows how widely appealing and applicable an institution's pedagogy and ideologies are. Employability Rate is therefore a crucial element in judging a school's worth in the eyes of Alumni. We have gathered comments about how happy Alumni are with the employability of the various institutions based on parent input. The purpose of our research is to establish a link between the aforementioned factors and their impact on an institute's employability rate. We will have a better knowledge of the factors and how they impact employability in the section that follows.

a) Discipline of the Institution: An institution's overall code of conduct and collection of rules and regulations may be summed up as its discipline. Whether a school has strict or lax discipline, neither is beneficial for a student's overall development. With well-balanced

discipline, a student will improve both academically and non-academically overall. Students who attend a decent, orderly school are encouraged to adhere to the school's code of conduct, which has a lasting impact on the student's future and career. An institution that aims for more discipline also ensures a higher employment potential since a stronger code of conduct and discipline will be enforced in the corporate environment, something that the society as a whole highly demands. It is because of this, one of the elements that we consider when determining how dependent an institution is on its employment status is discipline.

b) Quality Education: The term "Quality Education" refers to the general caliber of support provided to customers by the Education Institute. A high-quality education is influenced by a variety of factors, including well-trained and disciplined staff, highly experienced teachers, a comprehensive library book collection that is in line with course syllabuses, a well-functioning academic and non-academic credit system, and many other factors. Companies will surely be interested in a university that can provide a high-quality education, which increases employment at the institution. Quality education also establishes expectations for what a student must accomplish in the workplace. The student's education is aided, and their academic career is positively impacted. In order to make meaningful judgments, we are taking into account the independence of Quality education and Employment.

c) Syllabus Content: The objectives of each course a student is enrolled in are described in the syllabus curriculum. Any organisation or institution will desire a curriculum that is up to date, relevant, and full of information with practical applications. The Content should take into consideration time constraints while also making sure that pupils are not subjected to information overload. The syllabus Content is crucial because it illustrates how the study links to knowledge and time in the present, which is important for both future research and corporate employability. A good syllabus should be interesting and equip the student with the knowledge they need to obtain a better career or further their schooling. Therefore, we will investigate the connection between the Syllabus curriculum and its impact on placement.

d) Academic Result: The academic result is one of the most important results for every academic institute student. The academic result of a student is a highly practical approach to measure their overall academic development and success. Everyone strives for success because it builds confidence and ensures their job. However, it is not always feasible for students to aspire for the best academic results. Most of the time, everything depends on the level of satisfaction, which varies from student to student. The amount of labour they put in and the impact it had on the outcome determine how much they enjoyed themselves. In addition to

being respected, a fair grading system enables students to assess their strengths and weaknesses in order to better prepare them for their future professional growth. We will thus use our data to try to establish an empirical link between academic success and the institution's employability.

e) Examination System: Examination is one of the defining features of education; every course and institution is required to assess students' subject-matter knowledge. Furthermore, a well-managed examination system will provide students a fair opportunity to demonstrate their knowledge and skills. A fun examination procedure for the students is directly derived from and carried out by the teaching members. This has an immediate impact on a student's performance, and according to the prior model, academic performance has an impact on a student's employability at a Jesuit higher education institution. In order to end the research, we will further study the Examination system and the interaction between the Placement Cell and the suitable test.

As a result, it is clear that the aforementioned factors may or may not have an impact on an institution's employability, which depends on empirical data. In order to verify this, we first coded the variables to convert the satisfaction level into ordered numeric amounts so that we could do a cross tab for a direct conclusion and a chi-square test for independence.

Thus, we code our variables accordingly for performing further calculations in SPSS:

- a) Discipline of the Institution = Disc_inst
- b) Quality Education = Qlty_edu
- c) Syllabus Content = Syl_cont
- d) Academic Result = Aca_Reslt
- e) Examination System = Exam_sys
- f) Employability = Empl

iii) Creation of index: An index was developed taking into account the different dimensions of Employability of an institution:

$$Empl = f(Disc_inst, Qlty_edu, Syl_cont, Aca_Reslt, Exam_sys)$$

Where Empl is a **dependent variable**.

Where Disc_inst, Qlty_edu, Syl_cont, Aca_Reslt and Exam_sys are **independent variables**.

iv) Test for Normality

To analyze the contribution and benefit of Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

- a) Kolmogorov-Smirnov
- b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.64 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Disc_inst	.436	77	.000	.583	77	.000
Qlty_Edu	.333	77	.000	.754	77	.000
Syl_cont	.253	77	.000	.795	77	.000
Aca_Reslt	.324	77	.000	.748	77	.000
exam_sys	.319	77	.000	.746	77	.000
Empl	.199	77	.000	.857	77	.000

a. Lilliefors Significance Correction

From the above test we can conclude that the variables Empl, Disc_inst, Qlty_edu, Syl_cont, Aca_Reslt and Exam_sys significantly **do not follow Normal Distribution**.

v) Pair Wise Test and Observation

In this part, crosstabs are made to look at how employability and the independent factors interact. The presence of a relationship can therefore be predicated, which is subsequently confirmed using the Chi-Square test and the Likelihood Ratio Test. This process can be repeated with each independent variable to enable independent conclusion-making.

i) Employability against Discipline of Institute

Hypothesis:

H_n^1 : There is no association between employability and Discipline of Institute

H_a^1 : There is association between employability and Discipline of Institute

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Discipline of Institute (**Disc_inst**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Discipline of Institute (Question 3a of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.65 - Cross tab Analysis

Cross tab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	21	18	12	1	1	53
	2.00	0	10	13	1	0	24
	3.00	0	0	0	0	0	0
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		21	28	25	2	1	77

In the context of the crosstab between employability and discipline of institute, it is observed that alumni including student, parents and few staff members who are satisfied with the discipline of institute activities are also satisfied with their employment.

The majority of alumni who stated that they were "Highly Satisfied" with the institute's discipline were followed by alumni who said they were "Satisfied." Similar to this, a disproportionately great number of alumni have expressed satisfaction with their ability to find employment. 21 alumni members have chosen to follow the institute's discipline and find contented employment. Absolutely no alumni have reacted regarding the Institute's discipline with a dissatisfied, highly dissatisfied, or neutral opinion. Very few alumni are dissatisfied or extremely dissatisfied with the jobs that Jesuit higher education institutions offer. Overall, the feedback is favorable, and it is clear that alumni are happy with the institute's employment policies and discipline.

The association between employability and Discipline of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.1.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.66 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.619 ^a	4	0.004
Likelihood Ratio	21.660	4	0.000
Linear-by-Linear Association	10.028	1	0.002
N of Valid Cases	77		
a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .31.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better discipline of institute activities we are having better placement and employment. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement

availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.67

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.450	.004
	Cramer's V	.450	.004
N of Valid Cases		77	

ii) Employability against Quality Education

Hypothesis:

H_n^1 : There is no association between employability and Quality Education

H_a^1 : There is association between employability and Quality Education

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Quality Education (**Qlty_edu**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Quality Education (Question 4 of the Alumni Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Satisfied
- 4 = Average
- 5 = Poor

Table 4.68 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Qlty_edu	1.00	18	13	10	0	1	42
	2.00	2	9	8	0	0	19
	3.00	1	6	5	2	0	14
	4.00	0	0	2	0	0	2
	5.00	0	0	0	0	0	0
Total		21	28	25	2	1	77

In the context of the crosstab between employability and quality education, it is observed that alumni including student, parents and few staff members who are satisfied with the quality education activities are also satisfied with their employment.

The majority of alumni who stated that they were "Highly Satisfied" with the institute's Education Quality were followed by alumni who said they were "Satisfied." Similar to this, a disproportionately great number of alumni have expressed satisfaction with their ability to find employment. 18 alumni members have chosen to follow the institute's education quality and find contented employment. Absolutely no alumni have reacted regarding the Institute's education standards with a highly dissatisfied and very few opined for Dissatisfied opinion. Very few alumni are dissatisfied or extremely dissatisfied with the jobs that Jesuit higher education institutions offer. Overall, the feedback is favorable, and it is clear that alumni are happy with the institute's employment policies and Quality Education.

The association between employability and Education Quality of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.1.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.69 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24.382 ^a	12	0.018
Likelihood Ratio	23.765	12	0.022
Linear-by-Linear Association	9.135	1	0.003
N of Valid Cases	77		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .03.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better quality education activities we are having better placement and employment. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.70

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.563	.018
	Cramer's V	.325	.018
N of Valid Cases		77	

iii) Employability against Syllabus Content

Hypothesis:

H_n^1 : There is no association between employability and Syllabus Content

H_a^1 : There is association between employability and Syllabus Content

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Syllabus Content (**Syl_cont**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Syllabus Content (Question 5 of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.71 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Syl_cont	1.00	16	8	5	0	1	30
	2.00	4	18	13	1	0	36
	3.00	0	2	5	1	0	8
	4.00	1	0	2	0	0	3
	5.00	0	0	0	0	0	0
Total		21	28	25	2	1	77

In the context of the crosstab between employability and syllabus content, it is observed that alumni including student, parents and few staff members who are satisfied with the syllabus content activities are also satisfied with their employment.

The majority of alumni who stated that they were "Satisfied" with the institute's syllabus content were followed by alumni who said they were "Highly Satisfied." Similar to this, a disproportionately great number of alumni have expressed satisfaction with their ability to find employment. 18 alumni members have chosen to follow the institute's syllabus content and find contented employment. Absolutely no alumni have reacted regarding the Institute's syllabus quality with a highly dissatisfied and very few opined for Dissatisfied opinion. Very few alumni are dissatisfied or extremely dissatisfied with the jobs that Jesuit higher education institutions offer. Overall, the feedback is favorable, and it is clear that alumni are happy with the institute's employment policies and syllabus content.

The association between employability and syllabus content of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 5.54.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.72 - Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	28.338 ^a	12	0.005
Likelihood Ratio	30.369	12	0.002
Linear-by-Linear Association	9.859	1	0.002
N of Valid Cases	77		
a. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .04.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better syllabus content activities we are having better placement and employment. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.73

Symmetric Measures		
	Value	Approx. Sig.
Nominal by Nominal	Phi	.607
	Cramer's V	.350
N of Valid Cases	77	

iv) Employability against Academic Result

Hypothesis:

H_n^1 : There is no association between employability and Academic Result

H_a^1 : There is association between employability and Academic Result

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Result (**Aca_reslt**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Academic Result (Question 7 of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.74 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_reslt	1.00	17	12	9	1	1	40
	2.00	3	14	9	0	0	26
	3.00	1	2	7	1	0	11
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		21	28	25	2	1	77

In the context of the crosstab between employability and academic results, it is observed that alumni including student, parents and few staff members who are satisfied with the academic results activities are also satisfied with their employment.

The majority of alumni who stated that they were "Highly Satisfied" with the institute's academic results were followed by alumni who said they were "Satisfied." Similar to this, a disproportionately great number of alumni have expressed satisfaction with their ability to find employment. 17 alumni members have chosen to follow the institute's academic results and find contented employment. Absolutely no alumni have reacted regarding the Institute's syllabus quality with a highly dissatisfied or Dissatisfied opinion. Very few alumni are dissatisfied or extremely dissatisfied with the jobs that Jesuit higher education institutions offer. Overall, the feedback is favorable, and it is clear that alumni are happy with the institute's employment policies and academic results.

The association between employability and academic results of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 5.54.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.75 - Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.665 ^a	8	0.017
Likelihood Ratio	19.039	8	0.015
Linear-by-Linear Association	7.079	1	0.008
N of Valid Cases	77		

a. 9 cells (60.0%) have expected count less than 5. The minimum expected count is .14.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better academic results activities we are having better placement and employment. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.76

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.492	.017
	Cramer's V	.348	.017
N of Valid Cases		77	

v) Employability against Exam System

Hypothesis:

H_n^1 : There is no association between employability and Examination System

H_a^1 : There is association between employability and Examination System

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Examination System (**Exam_sys**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Examination System (Question 10 of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.77 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Exam_sys	1.00	16	13	10	1	0	40
	2.00	5	13	11	0	1	30
	3.00	0	2	3	1	0	6
	4.00	0	0	1	0	0	1
	5.00	0	0	0	0	0	0
Total		21	28	25	2	1	77

In the context of the crosstab between employability and academic results, it is observed that alumni including student, parents and few staff members who are satisfied with the academic results activities are also satisfied with their employment.

The majority of alumni who stated that they were "Highly Satisfied" with the institute's Examination System were followed by alumni who said they were "Satisfied." Similar to this, a disproportionately great number of alumni have expressed satisfaction with their ability to find employment. 16 alumni members have chosen to follow the institute's academic results and find contented employment. Absolutely no alumni have reacted regarding the Institute's Examination System with a highly dissatisfied and very few alumni members opined for Dissatisfied response. Very few alumni are dissatisfied or extremely dissatisfied with the jobs that Jesuit higher education institutions offer. Overall, the feedback is favorable, and it is clear that alumni are happy with the institute's employment policies and Examination System.

The association between employability and Examination System of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 5.54.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.78 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.234 ^a	12	.181
Likelihood Ratio	16.437	12	.172
Linear-by-Linear Association	8.174	1	.004
N of Valid Cases	77		
a. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .01.			

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. This infers that according to the alumni, the examination system has no effect on employability of students.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.79

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.459	.181
	Cramer's V	.265	.181
N of Valid Cases		77	

vi) Consolidated Chi-Square Results and Conclusion

Table 4.80

Dependent Variable: Employability

Perceptions	Chi-Square Test Statistic	p-value	Strength of Association	Decision
Discipline of institute	15.61	0.004	STRONG (0.00)	H ₀ is rejected
Quality Education	24.38	0.018	STRONG (0.01)	H ₀ is rejected
Syllabus content	22.33	0.005	STRONG (0.00)	H ₀ is rejected
Academic Result	18.66	0.017	STRONG (0.00)	H ₀ is rejected
Examination System	16.23	0.181	WEAK (0.18)	H₀ is accepted

Overall, the alumni perceptions are categorized into the factors namely discipline of the college, teaching learning process in terms of the delivery of quality education and syllabus content followed by academic output or results with examination system. All these perceptions are capable enough to deliver inputs for employability, except the examination shows a no effect on the employability according to the alumni.

This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the alumni have opined on the presence of an active placement cell. Hence, the institutions should focus adequately on discipline of the college, market friendly teaching learning process and better focus on academic result so as to harness the employment opportunities.

4.8 Analysis of Qualitative Responses with regard to Non-Jesuit Higher Education Institutions

Under the Non-Jesuit Higher Education Institution, we have collected the data from 8 colleges which are situated in West Bengal. Four colleges selected from Non-Jesuit Missionary College and four colleges from Non-Jesuit Non-Missionary Institutions. Convenience sample was performed to select the colleges for our research purpose from the population of All the Non-Jesuit Higher Education Institution in India. We have collected data on the categorical Perspectives to explore the Factors and their relationships. The eight colleges are:

- I) Scottish Church College, Kolkata
- II) St. Paul's Cathedral Mission College, Kolkata
- III) Loreto College, Kolkata
- IV) Ramakrishna Mission Vidyamandira, Howrah
- V) City College of Commerce and Business Administration, Kolkata
- VI) Rishi Bankim Chandra College, Naihati, West Bengal
- VII) Prafulla Chandra College, Kolkata
- VIII) Bhairab Ganguly College, Belgharia, West Bengal

Non-Jesuit Missionary Colleges are educational schools that aren't governed by Non-Jesuit s and are instead affiliated with the Roman Catholic Church, the Protestant Church, or another religion. These organisations are part of a religious movement that seeks to further its religious beliefs or engage in ministries of service in the fields of education, literacy, social justice, healthcare, and economic development. Some of them have branches in numerous countries. During the colonial era, locals were frequently Westernized through the usage of the mission school.

Government-aided colleges are those that receive financial help from the government in the form of aid. Some illustrious institutions benefit from such unique advantages. These colleges are under the control of the government. It should be noted that a government-aided college differs from a government college in that it is owned and run by a private management but receives funding from the government, as opposed to a government college where the

government controls the curriculum, study materials, fee structure, syllabus, examinations, etc. In the state of West Bengal, there are several government-run and government-aided colleges.

A) Model 1: Perception of Students

With this approach, we will investigate how students see the Non-Jesuit higher education institutions' educational standards. The minimum number of respondents needed for this survey is 374, as determined by the Z-score and 95 percent Confidence Level. 380 students from Non-Jesuit Higher Education were therefore sampled in total.

i) Nature of Data collected

In this study the following variables have been considered:

- a) Academic Environment
- b) Discipline of the Institution
- c) Personality Development
- d) Soft Skill Development
- e) Quality Education
- f) Syllabus Content
- g) Academic Result

And,

- a) Name
- b) Gender
- c) Age
- d) Name of Institution
- e) Course and Year of Study
- f) Stream Chosen
- g) Subject

According to our objective we are focusing on the impact of the above said variables on Employability.

ii) Different Dimensions affecting Employability of students

One of the primary goals for every student attending an Institute is employability. Any student's or scholar's ultimate goal is to use their education to make a living after completing a course. As a result, an institute's worth will logically rise with a greater Employability Rate if it can

give its students numerous opportunities to use their knowledge in the workplace or through future academic study. Additionally, this gives the pupils assurance about the future and confidence in the course they have selected. The employability rate also demonstrates an institution's broad appeal and the applicability of its pedagogy and ideologies, so by establishing stronger ties with numerous corporations and other higher education institutions, an institution can guarantee that its students will have an advantage in the job market and will have better opportunities for further study. As a result, we may draw the conclusion that Employability Rate is a key factor in determining a school's value to students.

According on student feedback, we have gathered opinions on how satisfied students are with the employability of the individual institutes. Our study aims to establish a connection between the aforementioned variables and how they affect an institute's employability rate. In the part that follows, we will have a clearer understanding of the variables and how they affect employability.

a) Academic Environment: One definition of the academic environment is one that best prepares students for their future professional lives and supports their social, psychological, and physical growth. The way that students view and experience their education is significantly influenced by a variety of different elements. A well-kept classroom, appropriate subject equipment, a working library filled with useful books and materials, and an academically sound college/institution system make up a good, healthy learning environment. The academic environment is crucial in helping students build their attitudes toward successful academic careers. It also ensures that students are getting the most out of their education, which has a direct impact on their total development as intellectuals in contemporary society.

b) Discipline of the Institution: Any institution's discipline may be summed up as its general code of conduct and set of rules and regulations. Regardless of whether a school has tight or lenient discipline, neither is helpful for a student's overall growth. A pupil will advance both academically and non-academically overall with a discipline that is well-balanced. A good, disciplined school will encourage its students to uphold the school's code of conduct, which has long-lasting effects on the student's future and profession. Because a stronger code of conduct and discipline will be upheld in the corporate setting as well, which is something the society as a whole strongly desires, an institution that strives for greater discipline also assures a higher employment possibility. This is why one of our factors, discipline, is also taken into account when determining how an institution's dependency on its employment status.

c) Personality Development: Any student's personal growth plays a crucial role in their mental and personal development. An institution plays a significant role in the personality development of a student through a variety of extracurricular activities and social work possibilities. Students who have a healthy, balanced personality are more likely to thrive in their future careers because they will cultivate and promote a positive character. In order to ensure that a student does well in their future undertakings, any institution that can arrange the appropriate programs and activities for their students to explore and provide them the chance to develop their personalities with plenty of time to fix and mend oneself. We will thus investigate the empirical link between employment and total personality development.

d) Soft Skill Development: One of the most crucial areas for every student's growth is their soft skills. The capacity to communicate effectively through voice, body language, leadership abilities, and general communication competence are examples of soft skills. Any organization or institution will want students with excellent soft skills since they guarantee effective peer communication and aid in coordinating work and study with the appropriate authorities and peers. The reputation of the institution will likely be stronger among hiring employers and the student will likely be able to reach their own goals if the institution teaches its students through soft skill development programs and other specialized curricula. We investigate the link between the student's employment and soft skills in order to reinforce the institution's focus.

e) Quality Education: The phrase "Quality Education" refers to the general level of service that the Education Institute offers its clients. Well-trained and disciplined personnel, highly experienced teachers, a well-rounded library book collection that is in line with course syllabuses, a well-functioning academic and non-academic credit system, as well as many other variables, all contribute to a high-quality education. A university that can deliver a high-quality education will undoubtedly catch the interest of corporations, which boosts employment at the school. Additionally, a standard is set by quality education for how well a student must achieve in their employment. This aids in the student's education and has a favourable effect on their academic career. In order to make meaningful judgments, we are taking into account the independence of Quality education and Employment.

f) Syllabus Content: The course objectives and scope are subjected to a certain topic that the student is reading about in the syllabus material. The syllabus material determines how relevant the study is to the time and knowledge of today, which is important for both future academic work and corporate employability. Any institution or business will seek for a syllabus that is

current, pertinent, and packed with knowledge that has an application focus. While taking the time limit into account, the syllabus should also make sure not to overwhelm the pupils with material. In order for the student to feel secure enough to choose a better placement or further education, a decent syllabus should be comfortable and provide sufficient knowledge about the subject. Consequently, we will examine the connection between the syllabus's content and its impact on Employability.

g) Academic Result: The academic result is one of the most important results for every academic institute student. The academic result of a student is a highly practical approach to measure their overall academic development and success. Everyone strives for success because it builds confidence and ensures their job. However, it is not always feasible for students to aspire for the best academic results. Most of the time, everything depends on the level of satisfaction, which varies from student to student. Their degree of pleasure depends on how much work they put in and how that effort affected the outcome. A fair grading system is valued, and it also allows students to examine their strengths and flaws, preparing them for their future professional development. We shall thus attempt to establish an empirical association between academic outcomes and the institution's employability using our findings.

As a result, it is clear that the aforementioned factors may or may not have an impact on an institution's employability, which depends on empirical data. In order to verify this, we first coded the variables to convert the satisfaction level into ordered numeric amounts so that we could do a cross tab for a direct conclusion and a chi-square test for independence.

Thus, we code our variables accordingly for performing further calculations in SPSS:

- a) Employability = Empl
- b) Academic Environment = Aca_env
- c) Discipline of institute = Disc_inst
- d) Personality Development = Prsn_dev
- e) Soft Skill Development = Soft_skill
- f) Quality Education = Qlty_Edu
- g) Syllabus Content = Syl_cont
- h) Academic result = Aca_Reslt

iii) Creation of index: An index was developed taking into account the different dimensions of Employability of an institution:

$$Empl = f(Aca_env, Disc_inst, Prsn_dev, Soft_skill, Qlty_Edu, Syl_cont, Aca_Reslt)$$

Where Empl is a **dependent variable**.

Where Aca_env, Disc_inst, Prsn_dev, Soft_skill, Qlty_Edu, Syl_cont and Aca_Reslt are **independent variables**.

iv) Test for Normality

To analyze the contribution and benefit of Non-Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

- a) Kolmogorov-Smirnov
- b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.81 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Aca_env	0.331	380	0.000	0.732	380	0.000
Disc_inst	0.324	380	0.000	0.736	380	0.000
Prsn_dev	0.342	380	0.000	0.732	380	0.000
Soft_skill	0.361	380	0.000	0.691	380	0.000
Qlty_Edu	0.379	380	0.000	0.693	380	0.000
Syl_cont	0.286	380	0.000	0.836	380	0.000
Aca_Reslt	0.258	380	0.000	0.786	380	0.000
Empl	0.223	380	0.000	0.863	380	0.000

a. Lilliefors Significance Correction

From the above test we can conclude that the variables Aca_env, Disc_inst, Prsn_dev, Soft_skill, Qlty_Edu, Syl_cont and Aca_Reslt significantly **do not follow Normal Distribution**.

v) Pair Wise Test and Observation

In this section, crosstabs are drawn to analyze the relationship between Employability and the independent variables. From there we can form a basis of existence of relationship which is further tested using Chi-Square test and Likelihood Ratio Test. This method is repeated against each independent variables and conclusions are drawn independently of each other.

A) Employability against Academic Environment

Hypothesis:

H_n^1 : There is no association between employability and academic environment

H_a^1 : There is association between employability and academic environment

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Environment (**Aca_env**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Academic environment has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.82 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_env	1.00	68	75	52	2	6	203
	2.00	6	76	59	5	0	146
	3.00	0	3	20	6	0	29
	4.00	0	0	1	0	0	1
	5.00	0	0	1	0	0	1
Total		74	154	133	13	6	380

In the crosstab between employability and academic environment, it can be seen that more students have stated their degree of satisfaction with both the academic environment and the accessibility of job prospects.

It has been noted that students who are happy with their academic environment have expressed similar opinions about their employability. There are very few students that are unhappy or extremely unhappy with their academic situations. And relatively few students are severely dissatisfied with the institution's employability. Additionally, the majority of students are content with their capacity to find employment, and a comparable majority of students are very satisfied with their academic environment.

The association between employability and academic environment is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.81.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.83 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	109.397 ^a	16	0.000
Likelihood Ratio	111.064	16	0.000
Linear-by-Linear Association	46.179	1	0.000
N of Valid Cases	380		

a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .02.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that a productive and healthy academic environment is expected to boost confidence, academic potentials, and overall growth to avail better employment opportunities.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.84

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.537	.000
	Cramer's V	.268	.000
N of Valid Cases		380	

B) Employability against Discipline of the Institution

Hypothesis:

H_n^1 : There is no association between employability and Discipline of the Institution

H_a^1 : There is association between employability and Discipline of the Institution

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Discipline of the Institution (**Disc_inst**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Discipline of the Institute has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.85 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	73	73	49	3	0	198
	2.00	1	72	72	4	3	152
	3.00	0	9	11	5	3	28
	4.00	0	0	0	1	0	1
	5.00	0	0	1	0	0	1
Total		74	154	133	13	6	380

In the context of the crosstab between employability and discipline of the institution, it is observed that large number of students have expressed their opinion in terms of higher satisfaction with regard to Discipline of the institution. They are satisfied with the availability of employment opportunities.

Almost no pupils say they are very unhappy or unsatisfied with the school's disciplinary procedures. And only a small number of students are very unhappy with the institution's employability. Additionally, Satisfied, followed by Neutral, is how most students rank their employability. Among the students who selected High contentment for Employment, 73 students agreed with High satisfaction for the Institute's Discipline. Most students give the discipline at the institute a Highly Satisfied rating, which is followed by a total of Satisfactory replies.

The association between employability and Discipline of the institution is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.81.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.86 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	147.084 ^a	16	.000
Likelihood Ratio	134.263	16	.000
Linear-by-Linear Association	79.000	1	.000
N of Valid Cases	380		
a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .02.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the level of discipline of an institution will be instrumental in attracting good companies. This companies will be providing better job opportunities through an active placement cell. This is further corroborated by the response of the students regarding the active functioning of the placement cell as mentioned in the questionnaire.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-Value at 5% level.

Table - 4.87

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.622	.000
	Cramer's V	.311	.000
N of Valid Cases		380	

C) Employability against Personality Development

Hypothesis:

H_n^1 : There is no association between employability and Personality Development

H_a^1 : There is association between employability and Personality Development

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Personality Development (**Prsn_dev**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Personality Development has five response types:

- 1 = Always
- 2 = Often
- 3 = Sometimes
- 4 = Occasionally
- 5 = Never

Table 4.88 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Prsn_dev	1.00	71	104	41	3	0	219
	2.00	1	29	51	2	0	83
	3.00	2	17	24	6	3	52
	4.00	0	2	16	1	3	22
	5.00	0	2	1	1	0	4
Total		74	154	133	13	6	380

In the context of the crosstab between employability and personality development, it is observed that large number of students have expressed their opinion in terms of higher satisfaction with regard to Personality development. They are satisfied with the availability of employment opportunities.

Only a small percentage of students believed that their university never helped them to develop their personalities. And relatively few students are severely dissatisfied with the institution's employability. Additionally, the majority of students rate their employability as Satisfied, followed by Neutral. According to 104 students, the institution offers a satisfactory degree of employment opportunities, and they believe this to be important for their high personal growth. Most students have expressed high levels of satisfaction with their personal growth, which is followed by a tally of satisfactory responses.

The association between employability and Personality development is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.81.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.89 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	147.587 ^a	16	.000
Likelihood Ratio	147.319	16	.000
Linear-by-Linear Association	93.968	1	.000
N of Valid Cases	380		

a. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .06.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better personality development we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.90

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.623	.000
	Cramer's V	.312	.000
N of Valid Cases		380	

D) Employability against Soft Skills

Hypothesis:

H_n^1 : There is no association between employability and Soft Skills

H_a^1 : There is association between employability and Soft Skills

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Soft Skills (**Soft_skill**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Soft Skills has five response types:

- 1 = Always
- 2 = Often
- 3 = Sometimes
- 4 = Occasionally
- 5 = Never

Table 4.91 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Soft_skill	1.00	69	103	57	3	0	232
	2.00	4	38	53	3	6	104
	3.00	1	11	19	2	0	33
	4.00	0	0	4	4	0	8
	5.00	0	2	0	1	0	3
Total		74	154	133	13	6	380

In the context of the crosstab between employability and soft skill, it is observed that large number of students have expressed their opinion in terms of higher satisfaction regarding Soft Skill. They are satisfied with the availability of employment opportunities.

Almost no pupils report having Soft Skill that they are Extremely and Unsatisfied with. And relatively few students are severely dissatisfied with the institution's employability. Additionally, the majority of students rate their employability as Satisfied, followed by Neutral. The university's possibilities for 103 students to enhance their soft skills have made them extremely pleased, and they are also satisfied with their jobs. The majority of students rate their soft skills as Highly Satisfactory, which is followed by the number of Satisfactory replies.

The association between employability and soft skills is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 5.71.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.92 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	91.613 ^a	16	.112
Likelihood Ratio	108.592	16	.000
Linear-by-Linear Association	60.177	1	.000
N of Valid Cases	380		

a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .05.

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. This shows that soft skill development is an independent variable from the Employability offered by the institute. Students from Non-Jesuit institute do not believe that soft skill development is related to the Employability offered by the institution.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-Value at 5% level.

Table - 4.93

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.601	.000
	Cramer's V	.300	.000
N of Valid Cases		380	

E) Employability against Quality Education

Hypothesis:

H_0^1 : There is no association between employability and Quality Education

H_a^1 : There is association between employability and Quality Education

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Quality Education (**Qlty_Edu**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Similarly, Quality Education has five response types:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Table 4.94 - Cross tab Analysis

Cross tab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Qlty_Edu	1.00	69	103	56	5	0	233
	2.00	5	46	60	2	6	119
	3.00	0	5	16	6	0	27
	4.00	0	0	1	0	0	1
	5.00	0	0	0	0	0	0
Total		74	154	133	13	6	380

In the context of the crosstab between employability and quality education, it is observed that large number of students have expressed their opinion in terms of higher satisfaction with regard to Quality education. They are satisfied with the availability of employment opportunities.

Very few students are dissatisfied with quality education, and none are really dissatisfied. And relatively few students are totally dissatisfied with the institution's employability. Additionally, the majority of students rate their employability as Satisfied, followed by Neutral. 103 students stated that they were happy with the career opportunities provided by the university and that their institution provided higher quality education. Most students are Extremely satisfied with their quality education, which is followed by the number of Satisfactory replies.

The association between employability and Quality education is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.95 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	101.610 ^a	12	.000
Likelihood Ratio	97.771	12	.000
Linear-by-Linear Association	67.090	1	.000
N of Valid Cases	380		

a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .02.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better quality education we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically, the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.96

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.517	.000
	Cramer's V	.299	.000
N of Valid Cases		380	

F) Employability against Syllabus Content

Hypothesis:

H_n^1 : There is no association between employability and Syllabus Content

H_a^1 : There is association between employability and Syllabus Content

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Syllabus Content (**Syl_cont**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Syllabus Content has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.97 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Syl_cont	1.00	48	26	11	1	0	86
	2.00	20	103	66	6	6	201
	3.00	6	18	51	4	0	79
	4.00	0	7	4	1	0	12
	5.00	0	0	1	1	0	2
Total		74	154	133	13	6	380

In the context of the crosstab between employability and Syllabus content, it is observed that large number of students have expressed their opinion in terms of satisfaction with regard to Syllabus content. They are satisfied with the availability of employment opportunities.

Only a small percentage of students' express extreme dissatisfaction with the content of the syllabus. And relatively few students are severely dissatisfied with the institution's employability. Additionally, the majority of students rate their employability as Satisfied, followed by Neutral. By a wide percentage, the majority of students are extremely satisfied with the syllabus material. 103 students stated that they were satisfied with the career opportunities provided by the university and that their institution provided with good syllabus content. Both the Syllabus Content and the Employment State of the Institutes have received excellent feedback overall.

The association between employability and Syllabus content is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.7.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.98 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	145.100 ^a	16	.000
Likelihood Ratio	126.719	16	.000
Linear-by-Linear Association	65.148	1	.000
N of Valid Cases	380		

a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .03.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Syllabus content we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table 4.99

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.618	.000
	Cramer's V	.309	.000
N of Valid Cases		380	

G) Employability against Academic Result

Hypothesis:

H_n^1 : There is no association between employability and Academic Result

H_a^1 : There is association between employability and Academic Result

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Result (**Aca_Result**). According to the questionnaire, Employability has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Academic Result has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.100 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_Reslt	1.00	61	58	23	2	0	144
	2.00	12	89	83	6	1	191
	3.00	1	4	25	5	5	40
	4.00	0	3	1	0	0	4
	5.00	0	0	1	0	0	1
Total		74	154	133	13	6	380

In the context of the crosstab between employability and Academic results, it is observed that large number of students have expressed their opinion in terms of satisfaction with regard to Academic results. They are satisfied with the availability of employment opportunities.

Only four pupils are dissatisfied with their academic results, and very few students are really dissatisfied. And relatively few students are severely dissatisfied with the institution's employability. Additionally, the majority of students rate their employability as Satisfied, followed by Neutral. A total of 89 students have expressed their opinions about acceptable academic performance and the institute's employment response. By a wide margin, the majority of students are satisfied with their academic performance, with an Extremely Satisfied answer coming in second. Overall, the replies are quite favourable about the institutes' academic performance and employment situation.

The association between employability and Academic Result is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 5.71.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.101 - Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	149.476 ^a	16	.000
Likelihood Ratio	137.251	16	.000
Linear-by-Linear Association	91.485	1	.000
N of Valid Cases	380		

a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .02.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Syllabus content we get better job prospect for a student. This companies will be providing better job opportunities through an active placement cell.

Statistically, the strength of the association is also robust as confirmed by the statistical significance of Phi-Value at 5% level.

Table - 4.102

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.627	.000
	Cramer's V	.314	.000
N of Valid Cases		380	

VI) Consolidated Chi-Square Result and Conclusion

Table 4.103

Dependent Variable: Employability

Perceptions	Chi-Sq test Statistic	p-value	Strength of Association	Decision
Academic Environment	109.397	0.000	STRONG	H _n ¹ is rejected
Discipline	147.084	0.000	STRONG	H _n ¹ is rejected
Personality	147.587	0.000	STRONG	H _n ¹ is rejected
soft skill	91.613	0.121	WEAK	H_n¹ is accepted
Quality education	101.610	0.000	STRONG	H _n ¹ is rejected
Syllabus Content	145.100	0.000	STRONG	H _n ¹ is rejected
Academic Result	149.476	0.000	STRONG	H _n ¹ is rejected

Overall, the perceptions of students attending non-Jesuit colleges can be divided into four categories: the college's culture and rules, the students' overall growth in terms of personality and soft skills, the teaching and learning process, which includes the delivery of high-quality instruction, and the course material, which is then measured in terms of the students' academic output or results.

With the exception of soft skills, all of these perspectives are able to provide employability-related inputs. This will be essential for obtaining various employment prospects. The students have expressed opinions about the existence of an active placement cell at all of the non-Jesuit colleges included in the sample.

Therefore, in order to maximise job chances, universities should place sufficient emphasis on academic atmosphere and market-friendly teaching learning process.

B) Model 2: Perception of Faculty

Under this model we will explore the faculty perception on the Education quality of the Non-Jesuit Higher Education Institutions. The total number of faculty members sampled from Non-Jesuit Higher Education is 20.

i) Nature of Data collected

In this study the following variables have been considered:

- h) Placement Cell
- i) Academic Environment
- j) Public Image
- k) Discipline of the Institution
- l) Syllabus Curriculum
- m) Examination System
- n) Alumni Association

And,

- h) Name
- i) Gender
- j) Age
- k) Name of Institution
- l) Monthly Income
- m) Year of joining
- n) Qualifications

According to our objective we are focusing on the impact of the above said variables on Employability.

ii) Different Dimensions affecting Placement Cell of an Institution:

Any institution's main objective is to give its pupils better jobs and a stable future. The placement cell at the university, which serves as the main hub for final-year students, is the only entity that can effectively carry out this role. Any student who is in their last years of graduation or post-graduate must prioritize several tasks at once, which makes it challenging for them to search for a job. Job searching takes a lot of patience and can be fruitless if not done properly, thus one has to have these qualities in order to find their ideal position. The issue of security and trust is raised after all of these. A person could accept a job, but since they lack experience in the position, they might second-guess their choice and struggle to have trust in their employer. The issue of trust has an effect on both parties; from a business standpoint, they rely on their sources to find dependable individuals who have the specific talents required

without sacrificing timeliness. The placement offices of educational institutions are one of the main sources of the corporate industries.

The linked pupils will find it simple to obtain hired by the preferred firm or position thanks to an active placement cell. The reputation of an institution increases with the number of connections a placement cell has. This aids future students in developing confidence in their course choice and faith in the institution's reputation. Additionally, this relieves the students of the pressure of job searching and placement. As a result, every aspect that has an impact on the institute's placement cell will support the institution's worth both directly and indirectly. This will also provide a useful opportunity to compare and contrast the perspectives of students and faculty about the employability and placement of Non-Jesuit higher education institutions. In the part that follows, we will have a clearer understanding of the variables and how they affect the institution's overall growth.

a) Academic Environment: Any faculty member's decision-making and personal development are greatly influenced by their academic environment. A positive learning environment raises the spirits and instils a feeling of pride in the faculty, staff, and students of the institution. The way that faculty members assess their workplace environment is significantly influenced by a number of different elements. A good, healthy academic environment consists of a well-kept classroom, proper topic equipment, a functional library supplied with pertinent books and resources, and an intellectually sound college/institution system. The academic setting has a significant role in how faculty members establish their attitudes toward successful and high-profile teaching careers. It also makes sure that the professors may benefit from maximum exposure, which has a direct impact on their overall development and how they represent their university.

b) Public Image: Public perception is the foundation of every organisation, educational or not. Any institution wants to have a positive public perception, but higher education institutions especially so. A well regarded school will allow its faculty members to take pleasure and delight in their profession while also providing them with the social standing that has a positive feedback loop on how they represent their university. A well-known university has more access to corporations and other reputable institutions; this element aids the placement cell in luring a wider range of reliable businesses. Finding and being hired at the student's selected employment at the preferred firm is advantageous. As a result, one of the dimensions influencing an institution's placement cell is public image.

c) Discipline of the Institution: Each institution's discipline may be described as its broad code of conduct and set of rules and regulations. Both rigorous and lax discipline in educational settings are unsuitable for a student's overall growth. Overall academic and non-academic progress for pupils is a result of discipline that is balanced. Students that attend a well-run institution will also abide by its code of behaviour. It will have long-lasting effects on the present and your career. Better standards of behaviour and better discipline are upheld in businesses that are highly sought by society, therefore organisations that strive for better discipline also provide greater job prospects. Due to this, discipline is also taken into account when determining how dependent an institution is on a student's work situation.

d) Syllabus Curriculum: The syllabus curriculum outlines the goals of each course a student is taking. Any institution or business will want a curriculum that is current, pertinent, and heavy on application-based material. The curriculum should ensure that students are not overloaded with information while simultaneously taking into account time limits. The syllabus curriculum is essential for future research as well as corporate employability since it shows how the study relates to knowledge and time in the present. A good syllabus should be enjoyable and contain enough information about the subject to provide the student the confidence they need to pursue a better job or higher education. We shall thus look into the relationship between the Syllabus curriculum and its effects on placement.

e) Examination System: Exams are one of the defining characteristics of education; they are required in every course and institution. Additionally, a well-managed examination system will provide pupils an equal opportunity to demonstrate their skills and knowledge. The creation and implementation of an enjoyable examination system for the students falls squarely under the purview of the teaching members. This has a direct impact on a student's performance, and in the prior model, we discovered that a student's academic performance did have an impact on their employability at a Non-Jesuit higher education institution. We shall thus go deeper into the examination procedure and the link between the placement cell and the relevant test before drawing conclusions.

f) Alumni Association: A group of graduates or, more broadly, alumni make up an alumni organisation, also referred to as an alumni association (alumni). Occasionally, people will refer to it as a "alumni meeting." In India, alumni from colleges, universities, and particularly Non-Jesuit Higher Education Institution usually form clubs with other graduates of the same institution. These organisations usually arrange social gatherings, publish newsletters or

magazines, and organise fund-raising events. To help graduates stay in touch with their university and other alumni, many provide a range of incentives and services. This guarantees a wealth of chances for both students and academic members to advance both personally and professionally.

As we can see, based on the data, the following factors may or may not have an impact on an institution's placement cell. We initially wrote the variables such that the satisfaction level is converted into an ordered numeric number in order to verify this. This made it possible for us to do the chi-square test for independence and the Cross tab for direct conclusion.

Thus, we code our variables accordingly for performing further calculations in SPSS:

- h) Placement Cell = Plcmt_cell
- i) Academic Environment = Aca_env
- j) Public Image = Pub_img
- k) Discipline of the Institution = Disc_Inst
- l) Syllabus Curriculum = Syl_curr
- m) Alumni Association = Almuni_assoc
- n) Examination System = Exam_sys

iii) Creation of index: An index was developed considering the different dimensions of Placement Cell of an institution:

$$Plcmt_cell = f(Aca_env, Pub_img, Disc_inst, Syl_curr, Alumni_assoc, Exam_sys)$$

Where Plcmt_cell is a **dependent variable**.

Where Aca_env, Pub_img, Disc_inst, Syl_curr, Alumni_assoc and Exam_sys are **independent variables**.

iv) Test for Normality

To analyze the contribution and benefit of Non-Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

- a) Kolmogorov-Smirnov
- b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.104 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Aca_env	0.291	20	0.000	0.774	20	0.000
Pub_img	0.384	20	0.000	0.672	20	0.000
Disc_Inst	0.407	20	0.000	0.618	20	0.000
Syl_curr	0.300	20	0.000	0.793	20	0.001
Almuni_assoc	0.249	20	0.002	0.891	20	0.028
Exam_sys	0.226	20	0.009	0.816	20	0.002
Plcmt_cell	0.172	20	0.123	0.905	20	0.052

a. Lilliefors Significance Correction

From the above test we can conclude that the variables Aca_env, Pub_img, Disc_inst, Syl_curr, Alumni_assoc and Exam_sys and Plcmt_cell significantly **do not follow Normal Distribution**.

v) Pair Wise Test and Observation

In this section, crosstabs are drawn to analyze the relationship between Placement Cell and the independent variables. From there we can form a basis of existence of relationship which is further tested using Chi-Square test and Likelihood Ratio Test. This method is repeated against each independent variables and conclusions are drawn independently of each other.

A) Placement Cell against Academic Environment

Hypothesis:

H_n^1 : There is no association between Placement Cell and Academic Environment

H_a^1 : There is association between Placement Cell and Academic Environment

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Academic Result (**Aca_Env**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Academic Environment (Question 1a of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.105 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_env	1.00	4	3	0	3	0	10
	2.00	1	2	3	1	0	7
	3.00	0	0	2	0	0	2
	4.00	0	0	0	0	1	1
	5.00	0	0	0	0	0	0
Total		5	5	5	4	1	20

In the context of the crosstab between placement cell and Academic environment, it is observed that Faculty members who are having Excellent opinions about the academic environment of the institution are also having Very Good opinions about their Placement.

Only a very small percentage of faculty members rated the academic environment as average, and none of them did so. And only a small percentage of faculty members choose to respond poorly to the institution's placement cell. Additionally, the majority of faculty members have

given the academic climate at non-Jesuit higher education institutions an Excellent grade. Similar to this, the majority of faculty members gave the placement cell their highest possible grade of Very good, Good, or Excellent. The feedback was overwhelmingly favourable, indicating that there may be a link between the academic environment and the institute's placement cell.

The association between Placement Cell and Academic Environment is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.104.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.106 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	31.214 ^a	12	.002
Likelihood Ratio	20.799	12	.053
Linear-by-Linear Association	3.997	1	.046
N of Valid Cases	20		
a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .05.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better Academic environment we get better job prospect for a faculty. The placement cell is monitored and maintained very rigorously by the faculty and institute, and this brings forth a plethora of opportunities for the students to go for research and job fields. The increasing scope of promotion keeps the teachers and the faculty on their toes and gives them opportunities for a better position in the institution. This also keeps the friendly competitive nature of the faculty members to strive for betterment.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-Value at 5% level.

Table - 4.107

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.785	.420
	Cramer's V	.453	.420
N of Valid Cases		20	

B) Placement Cell against Public Image

Hypothesis:

H_0^1 : There is no association between Placement Cell and Public Image

H_a^1 : There is association between Placement Cell and Public Image

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Public Image (**Pub_img**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Public Image (Question 1b of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.108 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Pub_img	1.00	5	3	2	3	0	13
	2.00	0	2	0	1	0	3
	3.00	0	0	2	0	0	2
	4.00	0	0	1	0	1	2
	5.00	0	0	0	0	0	0
Total		5	5	5	4	1	20

In the context of the crosstab between placement cell and Public image, it is observed that Faculty members who are having Excellent opinions about the public image of the institution are also having Very Good opinions about their Placement.

In terms of public image, not a single member of the faculty and just two students both gave poor or average responses. Furthermore, none of the academic members choose to respond poorly to the institution's placement cell. Additionally, the majority of the faculty members believe that non-Jesuit higher education institutions should receive an Excellent grade for their public image. Similar to this, the majority of faculty members gave the placement cell the highest ratings of Very good, Good, and Average. The feedback was mostly favourable, indicating that there may be a link between the institute's Public Image and Placement Cell.

The association between Placement Cell and Public Image is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.104.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.109 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.2454 ^a	12	.036
Likelihood Ratio	19.226	12	.083
Linear-by-Linear Association	3.760	1	.053
N of Valid Cases	20		

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .10.

The chi-square test statistic results show that the null hypothesis is rejected at a level of 5%. This makes sure that with a stronger reputation, a faculty member will have greater career prospects. There are many options for students to pursue careers in research and employment since the placement cell is closely monitored and maintained by the faculty and institution. Teachers and faculty have opportunity to advance to greater positions within the school thanks to the expanding scope of promotion. This preserves the faculty members' friendly competition and desire for improvement.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.109.1

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	1.052	.036
	Cramer's V	.608	.036
N of Valid Cases		20	

C) Placement Cell against Discipline of the Institution

Hypothesis:

H_n^1 : There is no association between Placement Cell and Discipline of the Institution

H_a^1 : There is association between Placement Cell and Discipline of the Institution

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Discipline of the Institution (**Disc_inst**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Discipline of the Institution (Question 1c of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.110 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	4	5	2	3	0	14
	2.00	1	0	1	1	1	4
	3.00	0	0	1	0	0	1
	4.00	0	0	1	0	0	1
	5.00	0	0	0	0	0	0
Total		5	5	5	4	1	20

In the context of the crosstab between placement cell and Discipline of institute, it is observed that Faculty members who are having Excellent opinions about the discipline of institute of the institution are also having Very Good opinions about their Placement.

Regarding the institution's discipline, not a single faculty member chose a poor rating, and only a few chose an average response. Furthermore, none of the academic members choose to respond poorly to the institution's placement cell. Additionally, the majority of the faculty members have recommended an Excellent grade for the Institution of Non-Jesuit Higher Education Institutions' Discipline. Similar to this, the majority of faculty members gave the placement cell the highest ratings of Very good, Good, and Average. The feedback was quite encouraging, but the data does not seem to support the correlation very well; it suggests that there may not be a link between the institute's discipline and its placement cell.

The association between Placement Cell and Discipline of the Institution is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 5.94.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.111 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.321 ^a	12	.420
Likelihood Ratio	12.021	12	.444
Linear-by-Linear Association	1.292	1	.256
N of Valid Cases	20		

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .05.

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. This shows that the faculty does not think that the discipline of the institute has any impact on the placement.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.112

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.785	.420
	Cramer's V	.453	.420
N of Valid Cases		20	

D) Placement Cell against Syllabus Curriculum

Hypothesis:

H_n^1 : There is no association between Placement Cell and Syllabus Curriculum

H_a^1 : There is association between Placement Cell and Syllabus Curriculum

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Syllabus Curriculum (**Syl_curr**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Syllabus Curriculum (Question 1b of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.113 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Syl_curr	1.00	3	1	0	0	0	4
	2.00	2	4	3	2	1	12
	3.00	0	0	2	2	0	4
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		5	5	5	4	1	20

In the context of the crosstab between placement cell and Syllabus curriculum, it is observed that Faculty members who are having Excellent opinions about the syllabus curriculum of the institution are also having Very Good opinions about their Placement.

Regarding the syllabus curriculum, absolutely no faculty members answered with Average or Poor. Furthermore, none of the academic members choose to respond poorly to the institution's placement cell. Additionally, the majority of the faculty members believe that the Syllabus Curriculum of Non-Jesuit Higher Education Institutions deserves a favourable ranking. Similar to this, the majority of faculty members gave the placement cell the highest ratings of Very good, Good, and Average. The feedback was very favourable, which suggests that there may be a link between the institute's placement cell and its curriculum.

The association between Placement Cell and Syllabus Curriculum is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 5.94.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.114 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.000 ^a	8	.151
Likelihood Ratio	14.001	8	.082
Linear-by-Linear Association	6.645	1	.010
N of Valid Cases	20		
a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .20.			

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. According to the Faculty member of non-Jesuit institution, the Syllabus curriculum does not affect the Placement offered by the institution.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-Value at 5% level.

Table - 4.115

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.775	.151
	Cramer's V	.548	.151
N of Valid Cases		20	

E) Placement Cell against Alumni Association

Hypothesis:

H_n^1 : There is no association between Placement Cell and Alumni Association

H_a^1 : There is association between Placement Cell and Alumni Association

Notations:

In this study we have two variables in focus, one is Placement Cell (**Plcmt_cell**) and Alumni Association (**Almuni_assoc**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Alumni Association (Question 11 of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.116 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Almuni_assoc	1.00	3	1	0	0	0	4
	2.00	1	1	0	0	0	2
	3.00	1	2	3	3	0	9
	4.00	0	1	2	0	0	3
	5.00	0	0	0	1	1	2
Total		5	5	5	4	1	20

In the context of the crosstab between placement cell and Alumni association, it is observed that Faculty members who are having Excellent opinions about the alumni association of the institution are also having Very Good opinions about their Placement.

In respect to the Alumni Association, nearly no faculty members replied with a Poor and almost extremely few with an Average rating. Furthermore, none of the academic members choose to respond poorly to the institution's placement cell. Additionally, according to the majority of the faculty, the Alumni Association of Non-Jesuit Higher Education Institutions should receive an Excellent grade. The majority of faculty members gave the placement cell similar ratings of Very Good, Good, and Average. The feedback was very favourable, and it suggests that there may be a link between the institute's alumni association and placement cell.

The association between Placement Cell and Syllabus Curriculum is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 4.114.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.117 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24.389 ^a	16	.081
Likelihood Ratio	22.999	16	.114
Linear-by-Linear Association	9.803	1	.002
N of Valid Cases	20		

a. 25 cells (100.0%) have expected count less than 5. The minimum expected count is .10.

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. Thus the contribution of the alumni association is not that prominent when it comes to the Placement offered by the institution.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.118

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	1.104	.081
	Cramer's V	.552	.081
N of Valid Cases		20	

F) Placement Cell against Examination System

Hypothesis:

H_n^1 : There is no association between Placement Cell and Examination System

H_a^1 : There is association between Placement Cell and Examination System

Notations:

In this study we have two variables in focus, one is Placement Cell (**Picmt_cell**) and Examination System (**Exam_sys**). According to the questionnaire, Placement Cell (Question 6 Faculty Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Similarly, Examination System (Question 11 of Faculty Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Good
- 4 = Average
- 5 = Poor

Table 4.119 - Cross tab Analysis

Crosstab							
Count							
		Plcmt_cell					Total
		1.00	2.00	3.00	4.00	5.00	
Exam_sys	1.00	2	2	1	1	0	6
	2.00	3	3	2	1	0	9
	3.00	0	0	2	2	1	5
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		5	5	5	4	1	20

In the context of the crosstab between placement cell and Examination system, it is observed that Faculty members who are having Excellent opinions about the examination system of the institution are also having Very Good opinions about their Placement.

There were nearly no faculty members who gave an average or poor response about the examination system. Furthermore, none of the academic members choose to respond poorly to the institution's placement cell. Additionally, the majority of the faculty members have given the Examination System of Non-Jesuit Higher Education Institutions ratings of Excellent and very excellent, respectively. The majority of faculty members gave the placement cell similar ratings of Very good, Good, and Average. The feedback was very favourable, which suggests that there may be a link between the institute's placement cell and examination system.

The association between Placement Cell and Examination system is examined using chi-square test this is because the variables do not follow Normal Distribution as referred in Table 6.04.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.120- Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.367 ^a	8	.398
Likelihood Ratio	10.357	8	.241
Linear-by-Linear Association	4.382	1	.036
N of Valid Cases	20		

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. Thus the placement of the Non-Jesuit institutes is not associated with the Examination System of the institute.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table 4.121

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.647	.398
	Cramer's V	.457	.398
N of Valid Cases		20	

VI) Consolidated Chi-Square Result and Conclusion

Table 4.122

Dependent Variable: Employability

Perceptions	Chi-Square Test Statistic	p-value	Strength of Association	Decision
Academic Environment	31.214	0.002	STRONG	H _n is rejected
Public Image	25.2454	0.036	STRONG	H _n is rejected
Discipline of Institute	12.321	0.420	WEAK	H_n is accepted
Syllabus Curriculum	12.000	0.151	WEAK	H_n is accepted
Alumni Association	24.389	0.081	WEAK	H_n is accepted
Examination System	8.367	0.398	WEAK	H_n is accepted

Overall, the faculty's impressions are broken down into the following categories: the college's discipline, atmosphere, teaching and learning processes in relation to the substance of the curriculum, and the examination method used by the alumni association.

The academic environment and public image are two factors that might offer placement-related inputs. The non-Jesuit institute is less prevalent in terms of placement alternatives in terms of institutional rules, the curriculum it offers, the role of the alumni association, and the procedure for administering exams. This will be necessary to open up a variety of career opportunities. Regarding the existence of an active placement cell at each of the Non-Jesuit Colleges represented in the sample, the faculty has voiced their perspectives.

Therefore, in order to expand job chances, institutions should place enough emphasis on the academic environment and upholding a positive public perception of the institution.

C) Model 3: Perception of Parents

Under this model we will explore the parent's perception on the Education quality of the Non-Jesuit Higher Education Institutions. The total number of parent response sampled is 90. The questionnaire for this module is attached at the end of appendix.

i) Nature of Data collected

In this study the following variables have been considered:

- e) Discipline of the Institution
- f) Academic Environment
- g) Personality Development
- h) Co-curricular Activities

And,

- i) Name
- j) Gender
- k) Age
- l) Name of Institution
- m) Course and Year of Study
- n) Stream Chosen
- o) Subject
- p) Monthly income

According to our objective we are focusing on the impact of the above said variables on Employability.

ii) Different Dimensions affecting Employability of students perceived by parents:

Employability is one of the main objectives for every student attending an Institute. The ultimate objective of every scholar or student is to utilise their knowledge to support themselves once they have finished a course. Therefore, if an institution can provide its students with multiple possibilities to use their knowledge in the industry or through subsequent academic study, its value will naturally increase with a higher Employability Rate. Additionally, this gives the pupils assurance about the future and confidence in the course they have selected. By forging closer ties with numerous corporations and other higher education institutions, an institution can ensure that its students will have an advantage in the job market and will have better opportunities for further study.

The employability rate also shows how widely appealing and applicable an institution's pedagogy and ideologies are. Employability Rate is therefore a crucial element in judging a school's worth in the eyes of parents. We have gathered comments about how happy parents are with the employability of the various institutions based on parent input. The purpose of our research is to establish a link between the aforementioned factors and their impact on an institute's employability rate. The section that follows will provide further clarity on the variables and how they affect employability.

i) Discipline of the Institution: An institution's overall code of conduct and collection of rules and regulations may be summed up as its discipline. Whether a school has strict or lax discipline, neither is beneficial for a student's overall development. With well-balanced discipline, a student will improve both academically and non-academically overall. Students who attend a decent, orderly school are encouraged to adhere to the school's code of conduct, which has a lasting impact on the student's future and career. An institution that aims for more discipline also ensures a higher employment potential since a stronger code of conduct and discipline will be enforced in the corporate environment, something that the society as a whole highly demands. Because of this, one of the elements that we consider when determining how dependent an institution is on its employment status is discipline.

ii) Academic Environment: The ideal learning environment facilitates students' social, psychological, and physical development while also preparing them for future careers. Numerous factors have a big impact on how students perceive and engage with their education.

A good, healthy learning environment includes a well-maintained classroom, proper topic equipment, a functional library full of helpful books and resources, and an academically competent college/institution system. Students must develop positive attitudes toward successful academic careers in the academic setting. Additionally, it makes sure that students are getting the most out of their education, which directly affects their whole intellectual growth in modern society.

iii) Personality Development: Any student's personal development is essential to their mental and personal progress. Through a range of extracurricular activities and social work opportunities, an institution contributes significantly to a student's personality development. In their future occupations, students with healthy, balanced personalities are more likely to succeed since they will develop and uphold a positive character. Any school that can set up the right programmes and activities for their students to explore and give them the chance to develop their personalities with plenty of time to correct and mend oneself will ensure that a student performs well in their future endeavours. Consequently, we shall look into the empirical relationship between work and overall personality development.

iv) Co-curricular Activities: The co-curricular activities that an institution may offer are one of its most crucial components. Co-curricular activities are academic or non-academic pursuits that take place outside of the regular course of study. To enforce the norm that all students must engage their time in activities that will shape their overall growth as a functional member of society, most institutions nowadays have a distinct set of credit requirements that must be satisfied by a student in order to get their graduation diploma. Some of the most common ways to establish a healthy co-curricular activity by students include authoring articles, planning festivals or college/alumni events, arranging donation camps, volunteering for an NGO or doing social work, participating in student contests, and so on. This aids the learner in practising and becoming acclimated to out-of-the-book situations that arise in real life. As a consequence, a school that can offer engaging extracurricular activities will undoubtedly produce practical students who are prepared to take on any kind of corporate difficulties, and as a result, this will draw corporate interest. This may increase an institution's capacity to get employment.

Therefore, it is evident that depending on actual evidence, the aforementioned characteristics may or may not have an effect on an institution's employability. In order to run a cross tab for

a direct conclusion and a chi-square analysis, we first coded the variables to turn the satisfaction level into ordered numeric quantities.

Thus, we code our variables accordingly for performing further calculations in SPSS:

- a) Employability = Empl
- b) Discipline of the Institution = Disc_inst
- c) Academic Environment = Aca_env
- d) Personality Development = Prsn_dev
- e) Co-curricular Activities = Co_cur_act

iii) Creation of index: An index was developed taking into account the different dimensions of Employability of an institution:

$$Empl = f(Disc_inst, Aca_env, Prsn_dev, Co_cur_act)$$

Where Empl is a **dependent variable**.

Where Disc_inst, Aca_env, Prsn_dev, and Co_cur_act are the **independent variables**.

iv) Test for Normality

To analyze the contribution and benefit of Non-Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

- a) Kolmogorov-Smirnov
- b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.123 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Disc_inst	0.428	90	0.000	0.621	90	0.000
Aca_env	0.356	90	0.000	0.698	90	0.000
Prsn_dev	0.398	90	0.000	0.624	90	0.000
Co_cur_act	0.256	90	0.000	0.804	90	0.000
Empl	0.259	90	0.000	0.862	90	0.000

a. Lilliefors Significance Correction

From the above test we can conclude that the variables Disc_inst, Aca_env, Prsn_dev, and Co_cur_act and Empl significantly **do not follow Normal Distribution**.

v) Pair Wise Test and Observation

Crosstabs are created in this section to examine the interaction between Employability and the independent variables. From there, we may establish a premise for a relationship's existence, which is then verified using the "Chi-Square test" and the "Likelihood Ratio Test." This approach is used repeatedly to several independent variables, and results are reached independently of one another.

A) Employability against Discipline of Institution

Hypothesis:

H_n^1 : There is no association between employability and Discipline of institution

H_a^1 : There is association between employability and Discipline of institution

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Discipline of institution (**Disc_inst**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Discipline of institution (Question 8a of the Parent Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.124 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	13	30	15	3	1	62
	2.00	1	12	12	1	0	26
	3.00	0	0	2	0	0	2
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		14	42	29	4	1	90

In the context of the crosstab between employability and discipline of institution, it is observed that Parents who are satisfied with the Discipline of the institute are also satisfied with their employment.

It has been noted that the majority of parents who stated that they were "very happy" with the institution's discipline were followed by "satisfied." Similar to this, a significant majority of parents who have expressed satisfaction with a student's employability score dominate the

count. Thirty parents chose satisfied employment and very satisfied institutional discipline. No parents have ever expressed dissatisfaction or extreme dissatisfaction with the institutional discipline. Few parents are dissatisfied or extremely dissatisfied with the career opportunities provided by non-Jesuit higher education schools. Overall, the feedback is favourable, and it is clear that parents are happy with the institution's employment policies and disciplinary practices.

The association between employability and Discipline of institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 5.40.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.125 - Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.985 ^a	8	.203
Likelihood Ratio	12.398	8	.134
Linear-by-Linear Association	4.257	1	.039
N of Valid Cases	90		
a. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .02.			

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. This implies that the Discipline of the institute is not significantly associated with the Employment provided by the Non-Jesuit institutions according to the parents' view.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-Value at 5% level.

Table - 4.126

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.349	.203
	Cramer's V	.247	.203
N of Valid Cases		90	

B) Employability against Academic Environment

Hypothesis:

H_n^1 : There is no association between employability and Academic Environment

H_a^1 : There is association between employability and Academic Environment

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Environment (**Aca_env**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Similarly, Academic Environment (Question 8b of the Parent Questionnaire) has five response types:

1 = Highly satisfied

2 = Satisfied

3 = Neutral

4 = Unsatisfied

5 = Highly unsatisfied

Table 4.127 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_env	1.00	12	25	10	2	1	50
	2.00	2	16	17	2	0	37
	3.00	0	1	2	0	0	3
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		14	42	29	4	1	90

In the context of the crosstab between employability and academic environment, it is observed that Parents who are satisfied with the academic environment are also satisfied with their employment.

It has been noted that the majority of parents who stated that they were extremely happy with the academic environment of the school were followed by those who said they were satisfied. Similar to this, a significant majority of parents who have expressed satisfaction with a student's employability score dominate the count. 25 parents have chosen the institute's highly satisfied academic environment and contented employment. Regarding the academic environment of the institute, just one student chose an Unsatisfied response, and absolutely no parents reacted with Highly Unsatisfied. Few parents are dissatisfied or extremely dissatisfied with the career opportunities provided by non-Jesuit higher education schools. Overall, the feedback is favourable, and it is clear that Parents are happy with both the Employment and Academic Environment of the institute.

The association between employability and Academic Environment of the institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.123.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.128 - Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.2453 ^a	8	.144
Likelihood Ratio	13.488	8	.096
Linear-by-Linear Association	5.785	1	.016
N of Valid Cases	90		
a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .01.			

The chi-square test statistic results indicate that the null hypothesis is accepted at a level of 5%. According to the parents, this means that the academic setting has no impact on the employability provided by Non-Jesuit Higher Education.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.129

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.367	.144
	Cramer's V	.260	.144
N of Valid Cases		90	

C) Employability against Personal Development

Hypothesis:

H_n^1 : There is no association between employability and Personal Development

H_a^1 : There is association between employability and Personal Development

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Personal Development (**Prsn_dev**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Personal Development (Question 8g of the Parent Questionnaire) has five response types:

- 1 = Always
- 2 = Often
- 3 = Sometimes
- 4 = Occasionally
- 5 = Never

Table 4.130- Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Prsn_dev	1.00	12	32	15	1	1	61
	2.00	2	9	8	2	0	21
	3.00	0	1	2	1	0	4
	4.00	0	0	4	0	0	4
	5.00	0	0	0	0	0	0
Total		14	42	29	4	1	90

In the context of the crosstab between employability and personality development, it is observed that Parents who are satisfied with the personality development are also satisfied with their employment.

It has been noted that the majority of parents who replied very happy with the institution's opportunities for personal growth are followed by those who responded satisfied. Similar to this, a significant majority of parents who have expressed satisfaction with a student's employability score dominate the count. 32 parents have chosen the institute's chance for Highly Satisfied Personal Development and Satisfied Employment. Regarding the Personal Development opportunity provided by the institute, just four students and zero parents have indicated that they are Highly Dissatisfied. Few parents are dissatisfied or extremely dissatisfied with the career opportunities provided by non-Jesuit higher education schools. Overall, the feedback is favourable, and it is clear that parents are happy with the institute's opportunities for employment and personal growth.

The association between employability and Personal Development opportunity offered by the institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 6.13.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.131 - Chi-Square Test Results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	19.351 ^a	12	.080
Likelihood Ratio	19.053	12	.087
Linear-by-Linear Association	8.928	1	.003
N of Valid Cases	90		

a. 15 cells (75.0%) have expected count less than 5. The minimum expected count is .04.

Chi-square test statistic results indicate that the null hypothesis is acceptable at a 5 percent level. According to the parents who expressed their opinions on Non-Jesuit Higher Education Institutions, there is no improvement in the employment of the institute with the advancement of personal growth.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.132

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.464	.080
	Cramer's V	.268	.080
N of Valid Cases		90	

D) Employability against Co-curricular activities

Hypothesis:

H_n^1 : There is no association between employability and Co-curricular activities

H_a^1 : There is association between employability and Co-curricular activities

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Co-curricular activities (**Co_cur_act**). According to the questionnaire, Employability (Question 8d of the Parent Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Co-curricular activities (Question 8e of the Parent Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.133 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Co_cur_act	1.00	13	14	3	1	1	32
	2.00	1	25	17	2	0	45
	3.00	0	3	8	1	0	12
	4.00	0	0	1	0	0	1
	5.00	0	0	0	0	0	0
Total		14	42	29	4	1	90

In the context of the crosstab between employability and personality development, it is observed that Parents who are satisfied with the personality development are also satisfied with their employment.

It has been noted that the majority of parents who replied are content with the extracurricular possibilities provided by the school, followed by those who are extremely satisfied. Similar to this, a significant majority of parents who have expressed satisfaction with a student's employability score dominate the count. 25 parents have chosen the institute's satisfied employment and co-curricular opportunities. Regarding the Co-curricular activity options provided by the institute, zero parents and just one student have indicated that they are Highly Dissatisfied. Few parents are dissatisfied or extremely dissatisfied with the career opportunities provided by non-Jesuit higher education schools. Overall, the feedback is favourable, and it is clear that parents are happy with the institute's employment and extracurricular activity prospects.

The association between employability and Co-curricular activities opportunities offered by the institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 5.40.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.134 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	36.437 ^a	12	.000
Likelihood Ratio	38.752	12	.000
Linear-by-Linear Association	16.332	1	.000
N of Valid Cases	90		
a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is .01.			

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better co-curricular activities we get better job prospect for students. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent,

which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.135

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.636	.000
	Cramer's V	.367	.000
N of Valid Cases		90	

VI) Consolidated Chi-Square Result and Conclusion

Table 4.136

Dependent Variable: Employability

Perceptions	Chi-Square Test Statistic	p-value	Strength of Association	Decision
Discipline of institute	10.985	0.203	WEAK	Hn is accepted
Academic Environment	15.2453	0.144	WEAK	Hn is accepted
Personal Development	19.315	0.080	WEAK	Hn is accepted
Co-curricular Activities	36.437	0.000	STRONG	Hn is rejected

Table 5.404

Overall, the parent impressions are broken down into four categories: the student's personal growth, the college environment and its discipline, and extracurricular activities. Co-curricular activities are the only ones that have an independent influence on placement.

This will be essential for obtaining various employment prospects. The parents have expressed opinions about the existence of an active placement cell at all of the non-Jesuit colleges included in the sample. The involvement of Discipline of the institution, the environment of the institution and the personal development experience offered by the Non-Jesuit higher education institution does not contribute much to the Employment offered. Thus, focusing on these fields will not be fruitful for the institutions betterment in terms of the employment.

In order to maximise career chances, institutions should place enough emphasis on the co-curricular activities of students' personal development.

D) Model 3: Perception of Alumni

Under this model we will explore the alumni's perception on the Education quality of the Non-Jesuit Higher Education Institutions. The total number of alumni's response sampled is 78. The questionnaire for this module is attached at the end of appendix.

i) Nature of Data collected

In this study the following variables have been considered:

- f) Discipline of the Institution
- g) Quality Education
- h) Syllabus Content
- i) Academic Result
- j) Examination System

And,

- h) Name
- i) Gender
- j) Age
- k) Name of Institution
- l) Occupation
- m) Monthly income
- n) Name of the course studied

According to our objective we are focusing on the impact of the above said variables on Employability.

ii) Different Dimensions affecting Employability of students perceived by Alumni:

One of the key goals for every student attending an Institute is employability. Every scholar's or student's ultimate goal is to use their education to sustain themselves after they have completed a course. Therefore, an institution's worth will automatically improve with a greater Employability Rate if it can give its students a variety of opportunities to use their expertise in the business or through further academic study. Additionally, this offers the students

confidence in their chosen course and security about the future. A higher education institution may make sure that its students will have an edge on the job market and will have greater prospects for future study by developing deeper relationships with multiple firms and other institutions of higher learning.

The rate of employability also demonstrates how popular and useful an institution's teaching and ideology are. Therefore, the Employability Rate is a key factor in determining a school's value in the eyes of alumni. Based on feedback from parents, we have gathered remarks regarding how pleased Alumni are with the employability of the various universities. Our study aims to identify a relationship between the aforementioned elements and their influence on an institute's employability rate. In the part that follows, we will learn more about the variables and how they affect employability.

i) Discipline of the Institution: The discipline of an institution may be summed up as its overarching code of conduct and set of rules and regulations. Both rigorous and lenient school discipline are detrimental to a student's overall growth. A pupil will generally become better both academically and non-academically under balanced discipline. The student's future and career are positively impacted by upholding the school's code of behaviour, which is promoted in reputable, well-run schools. A more disciplined organisation also guarantees a better employment potential since a more rigid code of ethics and discipline will be upheld in the workplace, something that society as a whole highly values. As a result, one of the factors that we take into account while deciding how dependent an institution is on its employment status is discipline.

ii) Quality Education: The phrase "Quality Education" describes the overall standard of assistance offered to clients by the Education Institute. A high-quality education is impacted by a number of elements, such as a well-trained and disciplined staff, highly experienced teachers, a thorough library book collection that is in line with course syllabuses, a smoothly-running academic and non-academic credit system, and many more. A university that can offer a high-quality education would undoubtedly be of interest to businesses, increasing employment at the school. Expectations for what a student must do in the career are also set by a high-quality education. The student's academic career and education are favourably benefited. We are considering the independence between Quality education and Employment in order to get significant conclusions.

iii) Syllabus Content: The syllabus curriculum lists the goals of each course a student is enrolled in. Any organisation or institution will want a curriculum that is current, pertinent, packed with knowledge, and has real-world applications. Time limits and avoiding information overload for students should both be taken into account by the content. Because it shows how the study relates to knowledge and time in the present, which is significant for both future research and corporate employability, the syllabus Content is extremely important. A good curriculum should be engaging and give students the skills they need to advance their education or find better employment. We shall thus look into the relationship between the Syllabus curriculum and its effect on placement.

iv) Academic Result: One of the most significant outcomes for any student at an academic institute is their academic performance. A student's academic performance is a very practical way to assess their overall academic growth and accomplishment. Everyone aspires to success since it boosts self-esteem and guarantees their employment. Students may not always be able to achieve their highest possible academic goals, though. Most of the time, everything is based on each student's degree of satisfaction, which fluctuates. How much they enjoyed themselves depended on how much effort they put in and how it affected the outcome. A fair grading system not only earns students respect, but also helps them to evaluate their strengths and flaws in order to better position themselves for future professional advancement. In order to establish an empirical connection between academic achievement and the institution's employability, we shall use our data.

v) Examination System: One of the distinguishing characteristics of education is examination; every course and organisation is expected to evaluate students' subject-matter expertise. Additionally, a well-run examination system will provide pupils a fair chance to show off their knowledge and abilities. The teaching staff creates and implements an enjoyable examination process for the pupils. This has a direct effect on a student's performance, and in accordance with the previous model, a student's academic success affects their employment at a Non-Jesuit higher education school. We will continue to look at the Examination system and how the Placement Cell and the appropriate exam interact to bring the research to a close.

Therefore, it is evident that depending on actual evidence, the aforementioned characteristics may or may not have an effect on an institution's employability. In order to run a cross tab for a direct conclusion and a chi-square test for independence, we first coded the variables to turn the satisfaction level into ordered numeric values.

Thus, we code our variables accordingly for performing further calculations in SPSS:

- a) Discipline of the Institution = Disc_inst
- b) Quality Education = Qlty_edu
- c) Syllabus Content = Syl_cont
- d) Academic Result = Aca_Reslt
- e) Examination System = Exam_sys
- f) Employability = Empl

iii) Creation of index: An index was developed taking into account the different dimensions of Employability of an institution:

$$Empl = f(Disc_inst, Qlty_edu, Syl_cont, Aca_Reslt, Exam_sys)$$

Where Empl is a **dependent variable**.

Where Disc_inst, Qlty_edu, Syl_cont, Aca_Reslt and Exam_sys are **independent variables**.

iv) Test for Normality

To analyze the contribution and benefit of Non-Jesuit higher education institutions in providing employability and job opportunities. In this following section, we are going to check if the above independent variables are following a normal distribution. The study used 2 methods to determine the same:

- a) Kolmogorov-Smirnov
- b) Shapiro-Wilk

After conducting the test, the results are as follows:

Table 4.137 - Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Disc_inst	0.523	26	0.000	0.376	26	0.000
Qty_Edu	0.480	26	0.000	0.504	26	0.000
Syl_cont	0.356	26	0.000	0.637	26	0.000
Aca_Reslt	0.356	26	0.000	0.637	26	0.000
exam_sys	0.443	26	0.000	0.598	26	0.000
Empl	0.222	26	0.002	0.808	26	0.000

a. Lilliefors Significance Correction

From the above test we can conclude that the variables Empl, Disc_inst, Qty_edu, Syl_cont, Aca_Reslt and Exam_syssignificantly **do not follow Normal Distribution**.

v) Pair Wise Test and Observation

In this part, crosstabs are made to look at how employability and the independent factors interact. The presence of a relationship can therefore be predicated, which is subsequently confirmed using the Chi-Square test and the Likelihood Ratio Test. This process can be repeated with each independent variable to enable independent conclusion-making.

A) Employability against Discipline of Institute

Hypothesis:

H_n^1 : There is no association between employability and Discipline of Institute

H_a^1 : There is association between employability and Discipline of Institute

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Discipline of Institute (**Disc_inst**). According to the questionnaire, Employability (Question 3d

of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Discipline of Institute (Question 3a of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.138 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Disc_inst	1.00	4	10	9	0	0	23
	2.00	2	1	0	0	0	3
	3.00	0	0	0	0	0	0
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		6	11	9	0	0	26

In the context of the crosstab between employability and discipline of institute, it is observed that alumni including student, parents and few staff members who are satisfied with the discipline of institute activities are also satisfied with their employment.

Alumni who said they were "Satisfied" with the institute's discipline came in second to those who claimed they were "Highly Satisfied," in terms of satisfaction. In a similar vein, an unusually high percentage of graduates have reported satisfaction with their ability to obtain job. Ten alumni members have made the decision to adhere to the institute's rules and found fulfilling jobs. Absolutely no alumni have expressed dissatisfaction, extreme dissatisfaction, or a lack of opinion on the Institute's discipline. Alumni from non-Jesuit higher education schools are often not disappointed with the positions they are offered, if at all. The response is generally positive, and it is evident that graduates are content with the institute's hiring practices and discipline.

The association between employability and Discipline of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 4.137.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.139 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.031 ^a	2	.133
Likelihood Ratio	4.256	2	.119
Linear-by-Linear Association	3.539	1	.060
N of Valid Cases	26		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .69.

The chi-square test statistic results indicate that the null hypothesis is accepted at a level of 5%. This suggests that the institution's discipline is not strongly correlated with or linked to the employability services provided by the non-Jesuit school.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.142

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.394	.133
	Cramer's V	.394	.133
N of Valid Cases		26	

B) Employability against Quality Education

Hypothesis:

H_n^1 : There is no association between employability and Quality Education

H_a^1 : There is association between employability and Quality Education

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Quality Education (**Qlty_edu**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Quality Education (Question 4 of the Alumni Questionnaire) has five response types:

- 1 = Excellent
- 2 = Very Good
- 3 = Satisfied
- 4 = Average
- 5 = Poor

Table 4.141 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Qlty_edu	1.00	5	8	8	0	0	21
	2.00	0	2	1	0	0	3
	3.00	1	1	0	0	0	2
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		6	11	9	0	0	26

In the context of the crosstab between employability and quality education, it is observed that alumni including student, parents and few staff members who are satisfied with the quality education activities are also satisfied with their employment.

Alumni who gave the education at the institute a "Satisfied" rating in the majority were followed by alumni who gave it a "Neutral" rating. Similar to this, a surprisingly high number of graduates expressed satisfaction with their ability to get employment. Eight graduates have chosen to uphold the institute's high standards of learning and found rewarding employment. There have been zero graduates who have reported serious displeasure with the Institute's educational standards. Alumni from non-Jesuit universities are frequently, if not always, satisfied with the jobs that are given to them. The feedback is typically favourable, and it is clear that graduates are happy with the hiring policies and superior education of the school.

The association between employability and Education Quality of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 6.27.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.142 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.629 ^a	4	.622
Likelihood Ratio	3.791	4	.435
Linear-by-Linear Association	.612	1	.434
N of Valid Cases	26		

a. 7 cells (77.8%) have expected count less than 5. The minimum expected count is .46.

The chi-square test statistic results indicate that the null hypothesis is accepted at a level of 5%. This demonstrates that there is no correlation between a non-Jesuit institute's employability and the calibre of education it offers.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.141

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.318	.622
	Cramer's V	.225	.622
N of Valid Cases		26	

C) Employability against Syllabus Content

Hypothesis:

H_n^1 : There is no association between employability and Syllabus Content

H_a^1 : There is association between employability and Syllabus Content

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Syllabus Content (**Syl_cont**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Syllabus Content (Question 5 of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.144 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Syl_cont	1.00	3	6	3	0	0	12
	2.00	3	5	6	0	0	14
	3.00	0	0	0	0	0	0
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		6	11	9	0	0	26

In the context of the crosstab between employability and syllabus content, it is observed that alumni including student, parents and few staff members who are satisfied with the syllabus content activities are also satisfied with their employment.

Alumni who indicated they were "Satisfied" with the institute's curriculum came in second to those who claimed they were "Highly Satisfied," in terms of satisfaction. Similar to this, an increasing percentage of graduates have said they are happy with the jobs they have been able to secure. Six alumni members have made the decision to adhere to the institute's curriculum and found fulfilling jobs. Absolutely no graduates have expressed extreme dissatisfaction with the Institute's curriculum, and none have voiced an unfavourable view. Alumni from non-Jesuit higher education schools are often not disappointed with the positions they are offered, if at all. The feedback is generally positive, and it is evident that graduates are satisfied with the institute's hiring practises and course offerings.

The association between employability and syllabus content of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 6.27.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.145 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.943 ^a	2	.624
Likelihood Ratio	.956	2	.620
Linear-by-Linear Association	.506	1	.477
N of Valid Cases	26		
a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 2.77.			

The null hypothesis is accepted at a 5 percent level, according to the results of the chi-square test. This suggests that, in the opinion of the alumni members, a stronger curriculum will have no influence on the employability provided by a Non-Jesuit Higher Education Institution.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level

Table - 4.146

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.190	.624
	Cramer's V	.190	.624
N of Valid Cases		26	

D) Employability against Academic Result

Hypothesis:

H_n^1 : There is no association between employability and Academic Result

H_a^1 : There is association between employability and Academic Result

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Academic Result (**Aca_reslt**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Academic Result (Question 7 of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.147 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Aca_reslt	1.00	4	6	2	0	0	12
	2.00	2	5	7	0	0	14
	3.00	0	0	0	0	0	0
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		6	11	9	0	0	26

In the context of the crosstab between employability and academic results, it is observed that alumni including student, parents and few staff members who are satisfied with the academic results activities are also satisfied with their employment.

Alumni who indicated they were "Highly Satisfied" with the institute's academic outcomes came in second to those who said they were "Satisfied" in the majority. In a similar vein, an unusually high percentage of graduates have reported satisfaction with their ability to obtain job. Seven alumni members have made the decision to pursue neutral employment and follow the institute's academic outcomes. Absolutely no graduates have expressed an extremely unhappy, unsatisfied, or neutral view on the calibre of the Institute's academic results. Alumni from non-Jesuit higher education schools are often not disappointed with the positions they are offered, if at all. The response is generally positive, and it is evident that graduates are satisfied with the institute's hiring practises and academic achievements.

The association between employability and academic results of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 6.27.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.148 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.402 ^a	2	.005
Likelihood Ratio	3.559	2	.005
Linear-by-Linear Association	3.025	1	.000
N of Valid Cases	26		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 2.77.

According to chi-square test statistic findings the null hypothesis is rejected at 5% level. This ensures that the with better academic results activities we are having better placement and employment. The placement availability ensures the students get many opportunities to use their knowledge in practice and the high positive response indicates that the placement availability is excellent, which in turn gives the parents the security that their pupil will be trained for the corporate world as well familiar with the work field.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.149

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.362	.183
	Cramer's V	.362	.183
N of Valid Cases		26	

E) Employability against Exam System

Hypothesis:

H_n^1 : There is no association between employability and Examination System

H_a^1 : There is association between employability and Examination System

Notations:

In this study we have two variables in focus, one is Employability (**Empl**) and Examination System (**Exam_sys**). According to the questionnaire, Employability (Question 3d of the Alumni Questionnaire) has five options to choose from, we have coded the responses as follows:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Similarly, Examination System (Question 10 of the Alumni Questionnaire) has five response types:

- 1 = Highly satisfied
- 2 = Satisfied
- 3 = Neutral
- 4 = Unsatisfied
- 5 = Highly unsatisfied

Table 4.150 - Cross tab Analysis

Crosstab							
Count							
		Empl					Total
		1.00	2.00	3.00	4.00	5.00	
Exam_sys	1.00	4	8	7	0	0	19
	2.00	1	3	2	0	0	6
	3.00	1	0	0	0	0	1
	4.00	0	0	0	0	0	0
	5.00	0	0	0	0	0	0
Total		6	11	9	0	0	26

In the context of the crosstab between employability and academic results, it is observed that alumni including student, parents and few staff members who are satisfied with the academic results activities are also satisfied with their employment.

Alumni who indicated they were "Satisfied" with the institute's examination system came in second to those who claimed they were "Highly Satisfied," in terms of satisfaction. In a similar vein, an unusually high percentage of graduates have reported satisfaction with their ability to obtain job. Eight former students have made the decision to pursue the academic success of the school and find satisfying work. There have been very few alumni members who have expressed their dissatisfaction with the Institute's examination system, and none at all. Alumni from non-Jesuit higher education schools are often not disappointed with the positions they are offered, if at all. The response is generally positive, and it is obvious that graduates are satisfied with the institute's employment policy and examination system.

The association between employability and Examination System of Institute is examined using chi-square test this is because the variables do not follow Normal Distribution as reported in Table 6.27.

To test our hypothesis, Chi-Square test is applied, the test goes as follow:

Table 4.151 - Chi-Square Test Results

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.588 ^a	4	.465
Likelihood Ratio	3.195	4	.526
Linear-by-Linear Association	.837	1	.360
N of Valid Cases	26		

a. 7 cells (77.8%) have expected count less than 5. The minimum expected count is .23.

According to chi-square test statistic findings the null hypothesis is accepted at 5% level. This infers that according to the alumni, the examination system has no effect on employability of students.

Statistically the strength of the association is also robust as confirmed by the statistical significance of Phi-V at 5% level.

Table - 4.152

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.371	.005
	Cramer's V	.263	.005
N of Valid Cases		26	

VI) Consolidated Chi-Square Result and Conclusion

Table 4.153

Dependent Variable: Employability

Perceptions	Chi-Square Test Statistic	p-value	Strength of Association	Decision
Discipline of institute	4.013	0.133	WEAK	Hn is accepted
Quality Education	2.629	0.622	WEAK	Hn is accepted
Syllabus content	0.943	0.624	WEAK	Hn is accepted
Academic Result	3.402	0.005	STRONG	Hn is rejected
Examination System	3.588	0.465	WEAK	Hn is accepted

Overall, the impressions of the alumni are broken down into the following categories: college discipline, the teaching-learning process as it relates to the provision of high-quality education, the substance of the curriculum, and academic output or outcomes as measured by the examination system.

According to alumni, the one thing that directly affects employability is having high academic results. We can observe from the test that the other criteria, including discipline, quality education, syllabus substance, and exam system of Non-Jesuit colleges, are unsuccessful.

Therefore, the institutions should put enough emphasis on improving academic results in order to maximise career chances.

4.9 Major Findings

One of the major drivers of employability in the study refers to the impart of soft skills. However, the students of Non –Jesuit colleges opined that soft skills are not required to enhance employability. The inference based on the responses of the students from Jesuit colleges state that soft skills development is crucial to take use of employment opportunities.

The faculty responses are reflecting different results across the two different categories of colleges. The inferences related to Non-Jesuit colleges lead to the outcomes that public image, interaction with alumni association and examination system are not significant for harnessing the employability of the students. On the contrary, the faculty responses with regard to Jesuit colleges strongly opine that public reputation is very crucial for attracting prospective employers. The existence of an active alumni association will ensure better networking and can offer a plethora of prospective employment opportunities. Every Jesuit College believes strongly in having an active alumni association. The procedures and modalities related to examination system appear to be a crucial driver for fostering employability. This emphasizes on the need to have a fair and just examination procedures which is consistent within the vision and mission statement of Jesuit Colleges.

The stakeholders namely parents also express their different opinions regarding the factors necessary for employability. In case of non-Jesuit colleges, only participation in Co-Curricular activities will determine the potentials for employability as reflected by parents' responses. But for Jesuit colleges, personality development, academic environment and discipline of the institution are all the major drivers. Hence the Jesuit colleges stress upon the holistic development of the individual with equal emphasis on better academic ambience and maintaining consistently the code of discipline.

Another significant stakeholder refers to the perceptions of Alumni. The Alumni opine that only academic result is crucial for exploring employment opportunities for non-Jesuit Colleges. But this finding significantly differs with respect to the responses from Jesuit Colleges. The alumni responses from Jesuit Colleges strongly opine those quality educations, discipline of the institution and syllabus content are equally crucial along with academic result. This finding strongly believes on the presence and active participation of alumni association in case of Jesuit Colleges.

Hence, the empirical findings strongly assert that all the stakeholders from Jesuit Colleges have opined on the factors namely, the academic factors such as academic environment, discipline of the institution followed by personality development and impart of soft skills and the institutional based factors such as public image, quality education, presence of an active alumni association are conducive for propelling the employability potentials. This emphasizes on the wider canvas of drivers necessary to boost employability for Jesuit Colleges. The holistic dimensions are nurtured by the Jesuit Colleges and the benefits are realized in boosting the attribute of employability.

Students Perspective: From the Student's perspective we can conclude that the institutions should focus adequately on academic environment, market friendly teaching learning process and a holistic development of an individual to harness the employment opportunities

Faculties Perspective: From the faculty perspective we can conclude that the institutions should focus adequately on academic environment, market friendly teaching learning process and connection with alumni association, to perform better in employment sector.

Parents Perspective: From the parents perspective we can conclude that the institutions should focus adequately on academic environment and its discipline, and personal development of the student academically and through co-curricular activities to make sure that the institute is providing better employability.

Alumni Perspective: From the perspective of the alumni, we can conclude that the institutions should focus adequately on discipline of the college, market friendly teaching learning process and better focus on academic result for better outcome of placement, thus giving much varied and better job opportunities.

5.0. Summing up

This chapter deals with the analysis related to the objectives of the study. The role of higher education in India is discussed in this chapter. The emphasis on the role of Jesuits in fostering education is the crux of the study. To substantiate this issue, the primary data is collected from institutions through questionnaires. Summing up the entire observations from the graphs of the fees structure and enrollment, we can conclude that the Jesuit Colleges are delivering a much higher course counts at very reasonable cost and, the enrollment count is also gradually rising with passing years. Further the study takes care of the perceptual analysis based on the

responses obtained from different stakeholders namely students, faculty, parent and alumni respectively from selected Jesuit and non-Jesuit colleges. The empirical findings strongly assert that all the stakeholders from Jesuit Colleges have opined on the factors namely, the academic factors such as academic environment, discipline of the institution followed by personality development and impart of soft skills and the institutional based factors such as public image, quality education, presence of an active alumni association are conducive for propelling the employability potentials. The holistic dimensions are nurtured by the Jesuit Colleges and the benefits are realized in boosting the attribute of employability.

The next chapter will deal with conclusions and policy recommendations.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

In this chapter we delve into the conclusion and recommendations of the study. We selected the following institutions and classified them for the purposes of our study into two categories - Jesuit Colleges and Non-Jesuit Colleges. The later was reclassified into missionary and non-missionary institutions. The sampling technique used was probability random sampling as the sampling frame is known.

The list of sampled institutions with the year of establishment (within parentheses) included the following:

I. Jesuit Colleges

- i. St. Xavier's College (Autonomous), Kolkata (1860)
- ii. St. Joseph's College, North point, Darjeeling (1927)
- iii. North Bengal St. Xavier's College, Rajganj, Jalpaiguri (2007)
- iv. St. Xavier's College, Burdwan (2014)

II. Non-Jesuit Colleges

a) Missionary

- i. Scottish Church College, Kolkata (1830)
- ii. St. Paul's Cathedral Mission College, Kolkata (1865)
- iii. Loreto College, Kolkata (1912)
- iv. Ramakrishna Mission Vidyamandira, Howrah (1941)

b) Non-Missionary

- i. City College of Commerce and Business Administration, Kolkata (1879)

ii. Rishi Bankim Chandra College, Naihati (1947)

iii. Prafulla Chandra College, Kolkata (1954)

iv. Bhairab Ganguly College, Belghoria (1968)

Thus, this study used a sample of 12 colleges which includes 4 Jesuit Colleges, 4 Non-Jesuit Missionary Colleges and 4 Non-Jesuit Non-Missionary Colleges from all over West Bengal. The total number of students across all the selected four Jesuit Colleges were 12,976, the population size. This was based on 95% Confidence Interval and Z-score, and the optimum number of respondents required for this study stood at 374. Hence the total students in the sample were 380. From among the non-Jesuit Colleges the total number of students were 17,738, the population size. Based on 95% Confidence Interval and Z-score, the optimum number of respondents required for this study was 376 and hence the sample included a total number of students at 380.

We used a combination of primary and secondary data to substantiate our objectives. For the purpose of primary data collection four separate questionnaires were used for the different stakeholders, namely, Students, Faculty, Parents, and Alumni. The selection of individual respondents across selected colleges were also based upon probability random sampling. The total number of respondents across the different categories were - Student Respondents - 760, Parent Respondents - 302, Faculty Respondents - 94 and Alumni Respondents - 103.

The methodology used for this study was exploratory data analysis. We used coded variables or categorical data. Normality test was required to be done for selecting the appropriate testing procedure as per Inferential Data Analysis. The Chi-Square Test Statistic was applied. Further, to ensure the robustness of Chi square test results, another non-parametric test namely Likelihood Ratio test is also applied.

Our first objective was to study the role of Higher Education in India with an emphasis on Jesuit HEI. Using secondary data and as available from different reports of University Grants Commission, and Ministry of Education, Government of India. A spatial picture of higher educational scenario has been arrived at with the help of the four indicators of colleges and universities – namely the number of HEI, state-wise distribution of HEI, faculty and gross enrolment ratio. Based on secondary data we observed that the number of Colleges and Degree

Awarding Universities/Institutions in India has consistently grown in India post- independence. The distribution of colleges and universities revealed wider inter-state variation in the country. Wide regional variations exist given the area and population density of the states being different. The national average of the GER is 20.8 percent, lags behind as compared to the developed as well as developing countries. We also observed that, the relevance of Jesuit Higher Education is immense in Indian context.

Our second objective was to make a comparative analysis of the cost involved in providing higher education by Jesuit Institutions as against non-Jesuit Institutions in West Bengal. Based on the framework of the study, the individual costs are measured by the fees paid by the major stakeholders namely students. Our analysis shows, that with regard to the fees structure and enrolment, we can conclude that the Jesuit Colleges are delivering a much higher course counts at very reasonable cost, the enrolment count is also gradually rising with passing years. The non-Jesuit Missionary colleges are having lower student count and low fees, and lastly the non-Missionary colleges are having very high student count with low fees.

We observed that Jesuit colleges are way more effective than the alternatives. This substantiates the fact that Jesuit colleges are attaining the balance between fees structure and enrolment count, which tends to play an instrumental role in higher education. In conclusion, the selected Jesuit Colleges in the sample are consistent in maintaining a reasonable fee structure in comparison to non-Jesuit Colleges in the sample. Further, in Jesuit Colleges experienced a steady rise in student enrolment throughout the years as compared to non-Jesuit Colleges.

Our third objective was to analyse the contribution and benefit of Jesuit HEI in providing employability and job opportunities. We used separate questionnaires for Students, Faculty, Parents and Alumni. All responses are collected from the respective respondents on the Likert scale, scaled at one to five.

The student's perceptions were categorized into the categorical variables namely environment of the college, and its discipline, holistic development in terms of personality and soft skills, teaching learning process in terms of the delivery of quality education and syllabus content followed by academic output or results. All these perceptions are capable enough to deliver inputs for employability. This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the students have opined on the presence of an

active placement cell. We observed, from the students' perspective that the institutions should focus adequately on academic environment, market friendly teaching learning process and a holistic development of an individual to harness the employment opportunities.

The faculty perceptions were categorized into the factors namely environment of the college, and its discipline, public image, teaching learning process in terms of the syllabus content and examination system followed by alumni association. All these perceptions are capable enough to deliver inputs for placement except the discipline of the institute. This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the faculty have opined on the presence of an active placement cell. The faculties perspective showed that the sampled institutions should focus adequately on academic environment, market friendly teaching learning process and connection with alumni association, to perform better in employment sector.

The parent perceptions were categorized into the factors namely environment of the college, and its discipline, personal development of the student and the co-curricular activities. All these perceptions are capable enough to deliver inputs for placement. This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the parents have opined on the presence of an active placement cell. The analysis of the parents' perspective showed that the institutions should focus adequately on academic environment and its discipline, and personal development of the student academically and through co-curricular activities to make sure that the institute is providing better employability.

The alumni perceptions were categorized into the factors namely discipline of the college, teaching learning process in terms of the delivery of quality education and syllabus content followed by academic output or results with examination system. All these perceptions are capable enough to deliver inputs for employability, except the examination shows a no effect on the employability according to the alumni. This will be crucial for availing different job opportunities. Across the Jesuit colleges as collected in the sample, the alumni have opined on the presence of an active placement cell. The review of the alumni perspective showed that the institutions should focus adequately on discipline of the college, market friendly teaching learning process and better focus on academic result for better outcome of placement, thus giving much varied and better job opportunities.

Limitations of our study

The present study is restricted to West Bengal. A pan India study may be considered to gain greater insight. Also the sample size has been limited in the case of students, staff, parents, and alumni. Larger sample size would have enhanced the construct validity of the study. The empirical results of the study largely depend on the perceptions of the students, staff, parents, and alumni. The perceptions are not static and change with time. Hence, conducting the same or similar study in the future could possibly give different results.

Policy Recommendations

Accessibility of, equity in, and excellence of higher education is crucial for socio economic development. In this regard policies are the driving force for fulfilling the objectives and obtaining the desired outcomes. However, for policies to be effective they have to be based on evidence and not subjective expertise and personal experience of the policy makers. Our study focuses on obtaining an in-depth understanding of the dynamics of higher education and can be interpreted in the context of macro-measures of outcomes.

The role of higher education in India is evolving and the role of Jesuit HEI in fostering education is the central theme of this study. We observed that the Jesuit HEI are delivering a larger plethora of course at a reasonable cost and the enrolment count is also gradually rising with time. Thus, the Jesuit model may be considered for the development of the other HEI for the benefit of the stakeholders. This is further substantiated by the perception study conducted by using the responses obtained from various stakeholders. On the basis of the empirical findings we observe, the stakeholders of the sampled Jesuit HEI have opined that factors such as the academic environment, discipline of the institution, personality development and soft skills courses and the institutional based factors such as public image, quality education, presence of an active alumni association are all conducive for ensuring the employability potentials.

A cost-effective fee structure is required to be in place. The benefits to the major stakeholders namely students can be realized if the vision statement of the educational institution focuses on maintaining better academic environment and discipline of the institution. This is strongly supported by the findings of Jesuit HEI only. The holistic development in terms of initiatives on personality and soft skills development will be capable enough to foster employability. This

is highly pronounced within the inherent policy statement of Jesuit HEI. The public image and the presence of an active alumni association can augment the benefits of exploring better employment opportunities. The HEI should be more conscious about the public perception and reputation. Therefore, we believe, HEI should also institutionalize the formation of an active Alumni Association in this regard.

Recommendations on policies on staff, funding, infrastructure, and perception have been the main instruments for fulfilling the desired objectives and obtaining the outcomes. We believe that greater emphasis on the use of information technology will have far reaching impact.

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APPENDICES

I. Student Questionnaire

*Questionnaire for conducting a survey as a part of Doctoral Dissertation. Any information obtained in connection with the study will be used only for academic purposes and strictly remain confidential.
Thanking you for your kind cooperation.*

Name: _____

Gender: Male / Female / Other

Age: Below 20, 21-25, above 26

Name of the Institution: _____

Course and Year of study: **UG Courses:** First/ Second/ Third **PG Courses:** First/
 Second

Stream chosen: Arts/ Science/ Commerce/ Others (please specify)

Subject: _____

Email: _____ Mobile No.(optional):

1. What was your preference for choosing this Institution (Please tick anyone):

First/ Second/ Third/ Fourth / No other option

2. Reasons for choosing this Institution (Please tick the appropriate ones):

Good academic environment / Public image / Discipline / No
political interference / Affordable fees structure/ Near to the house/

Others (Please specify) _____

3. Are there any Hostel facilities available: Yes/ No

4. Are there any Concession/Scholarship facilities available to economically weaker students:
Yes/ No

5. **Are you satisfied with the Institution with regard to (Please tick anyone)?**

a) Discipline of the Institution- Highly satisfied/ Satisfied/ Neutral/
Unsatisfied/ Highly unsatisfied

- b) Academic environment- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
- c) Fees structure- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
- d) Employability- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
- e) Co-curricular activities- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
- f) Cleanliness of the Institution: Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
- g) Are you happy with the student-teacher relationship? Extremely happy/ Happy/ Neutral/ Unhappy/ Extremely unhappy
- h) My institution encourages the fullest possible development of my talents and assist in developing my self-worth and value system - Always/ Often/ Sometimes/ Occasionally/ Never
- i) My institution teaches me to take responsibility for what I am and how I learn
 Always/ Often/ Sometimes/ Occasionally/ Never
- j) My Professors genuinely care about students
 Always/ Often/ Sometimes/ Occasionally/ Never
- k) My institution challenges me to develop my intellectual skills to be a lifelong learner
 Always/ Often/ Sometimes/ Occasionally/ Never
6. Quality of teaching: Very good/ Good/ Satisfied/ Poor/ Very poor
7. Are you happy with the content of the syllabi:
 Extremely Happy/ Happy/ Neutral/ Unhappy/ Extremely unhappy
8. Are the syllabi completed in time: Always/ Often/ Sometimes/ Occasionally/ Never
9. Are you happy with the academic results of the Institution:
 Extremely happy/ Happy/ Neutral/ Unhappy/ Extremely unhappy

10. Are you happy with the examination system of the Institution?
 Extremely happy/ Happy/ Neutral/ Unhappy/ Extremely unhappy
11. What is the proportion of senior students getting admission for Post Graduate studies in Universities:
 Below 25%, 26-45%, 46-65%, 66-85%, Above 85%
12. Is there any placement facility provided by your Institution: Yes / No
13. Is the placement facility active: Always/ Mostly/ Sometimes/ Occasionally/ Never
14. Are you satisfied with the placement facility: Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
15. Are you happy with the infrastructural facilities available in your Institution:
 Extremely happy/ Happy/ Neutral/ Unhappy/ Extremely unhappy
16. Are you happy with the reading/reference facilities available in the library:
 Extremely happy/ Happy/ Neutral/ Unhappy/ Extremely unhappy
17. Are you happy with the lending facilities available in the library:
 Extremely happy/ Happy/ Neutral/ Unhappy/ Extremely unhappy
18. What is your overall rating about the Institution:
 Excellent/ Very good/ Good / Average/ Poor

Signature:

II. Teaching Faculty Questionnaire

Questionnaire for conducting a survey as a part of Doctoral Dissertation. Any information obtained in connection with the study will be used only for academic purposes and strictly remain confidential.
Thanking you for your kind cooperation.

Name: _____

Gender: Male / Female / Other

Age: Below 25, 26-35, 36-45, 46-55, Above 55

Name of the Institution: _____

Department: Arts/ Science/ Commerce/ Others (please specify)

Monthly Income in (Rs.): up to 25000, 25001-50000, 50001-100000, above 100000

Email: _____

Mobile No.(optional):

Qualification: _____

Year of Joining: _____

1. Reasons for choosing this Institution (Please tick anyone):
 - a) Academic environment- Excellent/ Very good/ Good/ Average/ Poor
 - b) Public image- Excellent/ Very good/ Good/ Average/ Poor
 - c) Discipline in the Institution- Excellent/ Very good/ Good/ Average/ Poor
 - d) Political interference- Always/ Often/ Sometimes/ Occasionally/ Never
 - e) Courses offered- Excellent/ Very good/ Good/ Average/ Poor
 - f) Salary structure- Excellent/ Very good/ Good/ Average/ Poor
 - g) Availability of transport- Excellent/ Very good/ Good/ Average/ Poor
 - h) Others (please specify) _____
2. Syllabus and curriculum- Excellent/ Very good/ Good/ Average/ Poor
3. Examination system- Excellent/ Very good/ Good/ Average/ Poor
4. Student-teacher relationship- Excellent/ Very good/ Good/ Average/ Poor
5. Library facilities- Excellent/ Very good/ Good/ Average/ Poor

6. Placement cell- Excellent/ Very good/ Good/ Average/ Poor
7. Infrastructure of the institution- Excellent/ Very good/ Good/ Average/ Poor
8. Scope for faculty development- Excellent/ Very good/ Good/ Average/ Poor
9. Scope for promotion- Excellent/ Very good/ Good/ Average/ Poor
10. Relationship with the management- Excellent/ Very good/ Good/ Average/ Poor
11. Involvement of Alumni Association- Excellent/ Very good/ Good/ Average/ Poor

Signature: _____

III. ALUMNUS/ALUMNA Questionnaire

*Questionnaire for conducting a survey as a part of Doctoral Dissertation. Any information obtained in connection with the study will be used only for academic purposes and strictly remain confidential.
Thanking you for your kind cooperation.*

Name: _____

Gender: Male / Female / Other

Age: Below 25, 26-35, 36-45, 46-55, Above

55

Occupation: Service, Business, any other (please specify): _____

Monthly Income in (Rs.): up to 25000, 25001-50000, 50001-100000, Above 100000

Name of the Institution you studied: _____

Name of the course studied: _____

Email: _____

Mobile No.(optional):

1. What was your preference for choosing your Institution of study (Please tick anyone)?

First/ Second/ Third/ Fourth / No other option

2. Reasons for choosing this Institution (Please tick the appropriate ones):

Good academic environment/ Public image/ Discipline/ No political interference/ Affordable fees structure/ Near to the house/ Others

(Please specify) _____

3. Your feedback about your Institution with regard to (Please tick anyone):

a) Discipline of the Institution-

Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied

- b) Fee Structure-
- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
- Highly unsatisfied
- c) Co-curricular activities-
- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
- Highly unsatisfied
- d) Employability-
- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
- Highly unsatisfied
- e) Political interference-
- Always/ Often/ Sometimes/ Occasionally/ Never
- f) Were you satisfied with the cleanliness of the Institution-
- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
- Highly unsatisfied
4. Quality of teaching:
- Excellent/ Very good/ Satisfied/ Average/ Poor
5. Were you satisfied with the content of the syllabi:
- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
6. Were the syllabi completed in time:
- Always/ Most of the time/ Sometimes/ Occasionally/ Never
7. Were you happy with the academic results of the Institution:
- Extremely happy/ Very happy/ Happy/ Unhappy/ Extremely unhappy
8. Were you happy with the infrastructural facilities available in your Institution:
- Extremely happy/ Very Happy/ Happy/ Unhappy/ Very unhappy
9. Were you happy with the library facilities available in the Institution:
- Extremely happy/ Very Happy/ Happy/ Unhappy/ Very
unhappy
10. How satisfied were you with the examination system of the Institution during your time:
- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
11. Were there any Hostel facilities available in your Institution: Yes / No

12. Were you happy with the student-teacher relationship:
 Extremely happy/ Very Happy/ Happy/ Unhappy/ Very unhappy
13. Were there any Concession/Scholarship facilities available to economically weaker students: Yes/ No
14. Was there any placement facility provided by your Institution: Yes / No
15. Was the placement facility active: Yes / No
16. Did you get placement from the placement facility provided by your Institution: Yes / No
17. Were you satisfied with the placement facility:
 Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly unsatisfied
18. What is your overall rating about the Institution:
 Excellent/ Very good/ Good/ Average/ Poor

Signature: _____

IV. PARENT/GUARDIAN Questionnaire

Questionnaire for conducting a survey as a part of Doctoral Dissertation. Any information obtained in connection with the study will be used only for academic purposes and strictly remain confidential. Thanking you for your kind cooperation.

Name of the Parent (any one) _____

Gender: Male / Female / Other

Age: 26-35, 36-45, 46-55, above 55

Occupation: Service, Business, any other (please specify) _____

Monthly Income in (Rs.): up to 25000, 25001-50000, 50001-100000, Above 100000

Email: _____

Mobile No.(optional):

1. Name of the Institution in which your Son / Daughter is currently studying:

2. Course and Year of study: UG Courses: First/ Second/ Third PG Courses:

First/ Second

3. Name of the Stream your Son/ Daughter is currently studying:

Arts/ Science/ Commerce/ Others (Please specify):

4. What was your preference for choosing this Institution (Please tick anyone):

First/ Second/ Third/ Fourth / No other

option

5. Reasons for choosing this Institution (Please tick the appropriate ones):

Good academic environment/ Public image/ Discipline/ No political interference/

Affordable fees structure/ Near to the house/ Others (please specify)

6. Are there any Hostel facilities available in the campus: Yes / No

7. Are there any Concession/Scholarship facilities available to economically weaker students: Yes/ No
8. Are you satisfied with the Institution with regards to (Please tick anyone)?
- a) Discipline of the Institution- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
 Highly unsatisfied
- b) Academic environment- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
Highly unsatisfied
- c) Fees structure- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly
unsatisfied
- d) Employability- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/ Highly
unsatisfied
- e) Co-curricular activities- Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
Highly unsatisfied
- f) Cleanliness of the campus: Highly satisfied/ Satisfied/ Neutral/ Unsatisfied/
 Highly unsatisfied
- g) The institution encourages the fullest possible development of the student's talents and
assist in developing his/her self-worth and value system Always/ Often/ Sometimes/
Occasionally/ Never
9. Parent-teacher relationship: Very good/ Good/ Satisfied/ Poor/ Very poor

Signature: _____

V. Institutional Questionnaire

Institutional Questionnaire for conducting a survey as a part of Doctoral Dissertation. Any information obtained in connection with the study will be used only for academic purposes and strictly remain confidential. Thanking you for your kind cooperation.

1. Name of the Institution:

2. a) Year of Establishment:

b) Total number of students at present:

3. Institutional details:

a) Is the Institution Fully aided / Partly aided / Unaided?	<input type="checkbox"/> Fully aided / <input type="checkbox"/> Partly aided / <input type="checkbox"/> Unaided
b) Total number of aided courses:	
c) Total number of unaided (self-financed) courses:	

4. Details of Courses offered:

a) Number of undergraduate courses offered:

b) Number of postgraduate courses offered:

c) Any diploma / Certificate courses:

i.	ii.	iii.
iv.	v.	vi.

b. Post-graduate courses

Course wise number of students											
Name of the course	Aided / Unaided	Academic Year									
		2009-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
Student demographics											
	SC										
	ST										
	OBC										
	General										

b. Diploma / Certificate courses:

Course wise number of students											
Name of the course	Aided / Unaided	Academic Year									
		2009-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
Student demographics											
	SC										
	ST										
	OBC										
	General										

c. Diploma / Certificate courses (please maintain the same course-wise chronological order as in point 5(c) above):

Year → Course ↓	2009-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19

7. Student Concession allowed by the College/Institution (Number of Students):

Year	2009-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
UG										
PG										
Diploma / Certificate										
Total amount of Scholarship / Concession (Rs.)										

8. a) Is there any placement cell? Yes/No

b) From which year it has started functioning?

c) Is the Institution maintaining any job-oriented training programme like soft-skill development, personality development? If yes specify

d) Number of students recruited through campus interview

Year → Course ↓	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
UG										
PG										
Diploma / Certificate courses										

9. Is there any Alumni/Alumnae/ Old Students Association? If yes, kindly provide the following:

Year →	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
Number of members										
Number of events organised										

Signature _____