Chapter II

Review of Literature
Chapter VI: Analysis and Interpretation-III

This chapter determines the association between gender and professional growth (doing research, attending training and refresher programs, presenting papers, promotion to senior level and increment.)

Chapter VII: Analysis and Interpretation-IV

This chapter identifies the challenges faced by men and women college teachers from the work and family.

Chapter VIII: Summary and Conclusion

It presents the summary of the findings and provides an overall conclusion to summarize the entire research study. Subsequently, the limitations of the study are also highlighted and recommendations of the study for future research in the related area is proposed. It also includes recommendations to the MHRD, UGC, State Government, Universities, colleges and teachers.
evaluation on teachers of higher education, perceptions of various universities across the globe on PA and performance indicators and the Institutional Support received. It also gives an account of the relevant earlier studies relating to challenges faced by teacher’s of both the gender from work and family.

Chapter III: Methodology

This chapter provides the methodology adopted to conduct the study. It includes nature of the study, sources of data collection, method of data collection, target population, area of study, assessment and accreditation of higher education institutions - Autonomous and Non Autonomous colleges, survey instrument, questionnaire design, pilot study, validity of the questionnaire, sampling method, sampling procedure and statistical techniques used.

Chapter IV: Analysis and Interpretation-I

This chapter determines to compare the gender perception of the college teachers on the importance of Academic Performance Indicators related to Teaching, Service and Research, across the college status (Autonomous and Non Autonomous).

Chapter V: Analysis and Interpretation-II

This chapter identifies, if there exists any gender difference in perception of college teachers towards the Institution, Department and family support extended to meet the expected academic performance standards in Teaching, Service and Research across the college status.
1.22 Organization of the Study

The study is presented in eight chapters. The brief content of the chapters are as follows:

Chapter I: Introduction

This chapter introduces topic under study. It includes role of Women in society; Empowerment of Women; Gender empowerment, Gender Equality and Gender Equity; Feminism and on women movement; Status and Empowerment of Women in India; Women and Education; Women in Higher education; Globalization of Higher Education Sector; Growth of Higher Education in India; Women and Teaching Profession; Role of Teachers; Performance Appraisal of Teachers in Higher education Institution; Nature and purpose of Educational Performance Indicators; Role of UGC and NAAC in quality enhancement; Need for Teachers Appraisal in areas of Teaching, Service and Research; Institutional Support towards Quality Enhancement in Higher Education; Women and Family; Gender Issues in Academic Profession and Family Responsibilities. It also presents the importance of the study, objectives, scope, limitations of the study and Chapterisation.

Chapter II: Review of Literature

This chapter presents a host of literature on definition and meaning of performance appraisal (PA), need of performance appraisal of teachers in higher education, Educational performance indicators used in various universities across the world for assessment of teachers and institutions, various approaches of
arising from their profession and the extent of gender equity existing in all important areas of academic growth.

There is an urgent need to sensitize the policy makers, regulatory bodies and academicians of higher education by enabling them to draft policies in enabling the professionalism of teachers. This could be done by providing adequate facilities to improve performance in areas of teaching, service and research and maintain a healthy work environment, which has a direct impact on the family, thereby ensuring quality in Higher education which is an important need of the hour.

### 1.21 Limitations of the Study

The study is limited to accredited colleges, affiliated to University of Madras in and around Chennai, Tiruvallur and Kanchipuram districts.

Only perception of college teachers of both the Autonomous and Non Autonomous colleges were considered for the study.

The sample size was limited to 416 college teachers of both the gender.

Limitations of the collection of data using the questionnaire method are applicable to this study as well.

All the limitations relating to secondary data applies here.
1.19 Objectives of the Study

1. To compare the Gender perception of college teachers on the importance of Academic Performance Indicators related to Teaching, Service and Research, across college status (Autonomous and Non Autonomous).

2. To determine gender differences in perception of college teachers towards the support extended by Institution, Department and Family, to meet the expected academic performance standards in Teaching, Service and Research, across college status.

3. To identify the association of gender and professional growth.

4. To identify the challenges faced by men and women college teachers in work and family, across college status.

1.20 Scope of the Study

The central concern of this research is to reveal the grim picture of the perception of academic staffs of both the gender on the importance of Academic Performance Indicators (API) to measure Teaching, Learning and Evaluation related performance, Co-curricular, Extension, Professional Development Related Activities, Research and Academic Contribution; to highlight the current scenario prevailing in the colleges on the necessary support extended by way of new and emerging technologies to enhance teaching and learning methodology, adequacy and competence provided to the continuous professional development of the faculty; to provide insight into the work and family challenges faced by the academic staffs.
Appraising teachers is a sure way of assessing the quality and the extent to which the goals and objectives of education can be attained. Another crucial reason for teacher appraisal is the need to obtain detailed up to date information on the developmental needs of teachers and of the institution. Through appraisal reports, better management of the teaching force can be realized and the need for retraining and in -service programmes can be established to correct and improve on teachers felt needs as well as reviewing college programmes periodically.

Therefore it is important to identify the college teacher’s perception on the importance of the academic performance indicators, with respect to teaching, service, and research, which may potentially influence the fairness and quality of the performance appraisal system on teachers.

The Institutional support and facilities extended with no gender bias, towards providing technological advanced infrastructure and good work environment in college, has also become inevitable to make a visible impact on academic development as well as to meet the standard of quality performance of both teachers and students to compete with the global partners.

Finally, the challenges in the academic profession, due to expanded faculty roles, and gender inequality, also influences the performance, which need to be handled with all diligence, to bring in optimum efficiency.

Thus the need for the study arises to enlighten the current scenario existing among the college teachers, their perception on, academic performance indicators and the institutional support extended, to achieve the expected standards in performance amidst the challenges from work and family.
behavior, where some mothers, who are working, felt the need to minimize or hide parental responsibilities in order to avoid negative career repercussions. 

Although administrators may have the same written standards for all faculty, women and men seem to share the perception of a difference between the way they are treated at work and this perception impacts them professionally. Bereman and Scott (1991) substantiates the prevalence of disparity in academic salaries and gender inequities, through his study.

When comparing men and women in higher education a discrepancy in productivity exists. Women spend more time on teaching and service, and carry heavy teaching loads, creating a disadvantage for research time, while men have more access to research facilities and resources. Although there has been an increase of women who are tenured or on tenure-track in higher education, they are still under represented in many departments, colleges, and universities. This impact of inequality is reflected in the status of women worldwide and in India.

1.18 Importance of the Study

It is therefore very important at this juncture, when the educational system is experiencing crises of standard and quality, to eliminate inefficiency, ineptitude, undesirable human behaviors among teachers and gender discrimination in the educational system.


The family is in the international agenda. The two-parent family is the sure foundation of all that is stable and noble in our civilization. The support extended by men would certainly ensure equality within the family. “Working women will feel more freedom to pursue their interests and choices if men gradually learn to accept more responsibilities for child-care and home making” says Ms. Kadambari. Thus women need to be empowered within the family.

1.17 Gender Issues in Academic Profession and Family Responsibilities

College faculty's are involved in a wide array of demanding work including teaching, scholarly activity, and professional service. Houston, Meyer and Paewai (2006) addresses this complexity of work in the environment of academia. The researchers believe that women are equally committed to their profession as men, but may have limits on their progress in profession due to myriad of factors. Numerous research data supports, the stress that women in academia experience by juggling their career and having a family. Williams (2004) reports that women who become mothers soon after completing their doctorate degrees are less likely to gain tenure than their male counterparts who become fathers at the same point in their educational pursuits. Added to that is the perception that familial responsibilities limit career advancement and fragment career growth. Drago et al. (2005) explains that, women with children in the home have more demands placed on them than men. Other research studies, discusses the influence of work climate on women’s

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59 Monk-Turner and Fogerty 2010, Chilly environments, stratification, and productivity differences. Online publication: Springer Science + Business Media. LLC.
and development in various fields has become an important responsibility of the Institution.

The institutions should demonstrate social responsibility by encouraging the staff and students involvement in conducting relevant extension programmes and be responsive to community needs.

Institution should also initiate in building partnerships between educational institutions communities, and industries aiming at improving the student exposure and job readiness of young people.

The Institutional supportive role in encouraging teachers in research activities, presenting papers (national and international), consultancy services in the respective fields of expertise by way of providing financial support, flexible working hours, leave with pay, on-duty permission etc. has also become imperative in today’s Higher Education context.

Thus the environment in which colleges function today demands that the institutions be both supportive and effective in providing necessary infrastructure, facilities and encouragement to faculties in achieving these performance indicators.

1.16 Women and Family

The United Nations declared the year 1994 as the year of the family and assured policies that will aim at fostering quality between women and men within the family and to bring about a fuller sharing of domestic responsibilities and employment opportunities.
Institution should thus, enforce powerful policy tools for teaching and learning arrangements which would enable improvement in quality of the teaching workforce. Teaching and learning arrangements consist of aspects related to the size of classes, teaching workloads, or the average number of classes per teacher. Such arrangements have an impact on teachers’ satisfaction at the workplace; effectiveness of the teaching and learning and the number of teachers required to be recruited in the colleges.

To keep pace with the developments in other spheres of human endeavor, HEIs have to enrich the learning experiences of their wards by providing them with the campus community adequately prepared to make optimum use of the Information and Communication Technology (ICT) for resource sharing and networking. Thus to enhance effective teaching the role ICT, in the education sector, plays an important role, especially in the process of empowering the technology into the educational activities. The influence of ICT, especially internet cannot be ignored in the student’s lives. So, the learning activities should be reoriented and reformulated, from the manual source centered to the open source ones.

Thus technological advancement and innovations in Higher Education Institutions have to be undertaken, to make a visible impact on academic development as well as to meet the standard in quality of performance with the global partners.

Conscious effort of the institution’s to train the faculty suitably by organizing workshops, conferences and seminars to upgrade them on recent changes
the use of research performance as a yardstick of an institution’s value. Johnson (2009), also argues that research activity receives markedly higher status in measuring productivity than teaching or service.\textsuperscript{57}

Teacher appraisal plays a very useful role in the overall monitoring, evaluation and development of the entire educational system, thus, the emphasis of teaching, service and research performance of teachers as a yardstick to evaluate the quality of teacher’s speaks volume about the Institution’s standards.

### 1.15 Institutional Support towards Quality Enhancement in Higher Education

Academic staff in higher education constitute a particular group of knowledge-based workers whose commitment is central to the effective operation of their institutions. Authorities in higher education, therefore, have responsibility for designing and operating performance management systems that both motivate academic staff and align their efforts to institutional objectives.

Throughout the world, Higher Education Institutions (HEIs) function in a dynamic environment and India is no exception to this. The institutions of higher education are facing many challenges and are undergoing significant changes from time to time. The need to expand the system of higher education, the impact of technology on the educational delivery, the increasing private participation in higher education and the impact of globalization, have necessitated such marked changes in the Indian higher education scenario.

content, organization, enthusiasm, communication skills, motivating students and earning their respect as knowledgeable authority.\textsuperscript{55}

The teacher’s currently are expected to extensively employ interactive and participatory approach in transaction of theory. The faculty adopts an ‘eliciting’ stance rather than an ‘informing’ stance. Conscious efforts are made to establish the interconnectedness in theory as well as practice with the involvement of students in real situations. Field experiences allow students to apply and reflect on their content, professional and pedagogical knowledge, skills and attitudes in diverse college situations. The faculty accompanies students involvement in a variety of academic and non-academic based activities directed at the improvement of teaching and learning and the students learning is integrated into the college program and teaching practice.

Thus in addition to this, teacher’s are also responsible to make contributions to the institution and to the community at large. Faculty’s need to serve, as appropriate, on departmental, college, and university committees and are expected to engage in activities such as consultation, mentor, organizer and involvement in extension activities.

Besides teaching and service, a teacher is also expected to involve in a scholarly endeavour. The functions of knowledge creation and knowledge transmission through research and teaching is stressed by Romainville.\textsuperscript{56} There are empirical studies, witnessing this relationship existing between teaching and research. However, evaluation methods also tend to overemphasize research, and

\textsuperscript{55} Daniel A Panici , 1991,“Methods of assessing teaching investigating the how and why”, Journalism and mass communication educator, 54 ,2: Academic Research Library pg.61.

is also a need to recognize that the quality of the programs depends to a large extent on the quality of the work of teachers who deliver them. Faculty can interpret and apply intellectual standard in different ways and some teachers teach more effectively than others. The quality of the teachers also imply acceptable social and financial status, a will to reduce inequalities such as those relating to gender; a concern to manage staff in accordance with the merit principle and provide them with the in-service training they need, in order to fulfill their role in a changing society.

According to OECD, teacher quality encompasses the following five dimensions: knowledge of substantive curriculum area and content; pedagogic skill, including the acquisition and ability to use a repertoire of teaching strategies; reflection and ability to be self-critical, a hallmark of teacher professionalism; empathy and commitment to the acknowledgement of the dignity of others and possess managerial competence, as teacher assures a range of managerial responsibilities within and outside the classroom.\(^{54}\)

Teaching is the most important category for evaluation of Teachers Performance. The term “effective teaching” means different things to different people. According to Daniel.A.Panici, effective teaching is described as a teacher-centered activity, which characterizes effective communication, imparting knowledge, conveying vital information in an effective manner, presenting information in a lively, engaging, contextualized fashion, knowledge of fairness, availability to students, willingness to learn, effective condensation of knowledge /

\(^{54}\) OECD, 1994, Attracting, Developing And Retaining Effective Teachers Design and Implementation Plan for the Activity at a meeting of OECD Country Representatives held at OECD, Paris, 7-8 March 2002.
Research guidance.

Refresher courses, teaching-learning-evaluation technology, faculty development programmes.

Papers presented in conferences, seminars, workshops, symposia.

Invited lectures and chairmanships at national or international conference/seminars.

Co-curricular, extension and professional development-related activities.

Teaching-learning and evaluation-related activities.

University Grants Commission has prescribed model performance based appraisal system (PBAS), proforma to be adopted by the university and college concerned. Thus the step of the UGC aims to improve the functioning of the colleges by elevating the academic standards and work culture.

In an interview to a leading daily, THE HINDU, Mr. Ranganath, Director, NAAC says “Institutions should ensure that, quality is sustained as a continuous process. They have to make self-assessment on a regular basis.”

1.14 Teachers Appraisal in areas of Teaching, Service and Research

Teachers are the crux of the entire educational system. Without the help of teacher’s, reforms will go nowhere. Reforms start at the classroom level so that everyone sees the effects of efforts to improve. In defining quality of teachers there

53 THE HINDU, Educational Plus, Monday, December 26, 2011
Academic Staff in Universities and Colleges and measures for the Maintenance of Standards in Higher Education. By which the teachers will be graded and assessed annually on their performance, based on a Performance Based Assessment System (PBAS) in which scores are assigned to each sub-dimension or Academic Performance Indicator (API) under three categories of Teaching, Service and Research which also serves as a criteria for promotions and career advancements.

The new Academic Performance Indicators (API) scoring system prescribed in the UGC regulations, enables selection of better faculty and assessment of their knowledge, teaching skills and domain knowledge, ability to communicate clearly and effectively, ability to make effective presentations, aptitude for teaching, research potential, analytical ability and innovative thinking. It also assesses the candidate for positive and critical analysis competence, contribution to higher education, national development, instantaneous planning and other essential features. It facilitates self assessment to considerable extent by the faculties themselves to know where they stand. This new API considers the following factors while calculating API scores:52

- Research papers published in refereed journals.
- Research papers published in non-refereed journals/reputed journals.
- Conference proceedings as full papers.
- Articles/chapters published in books.
- Books published as single author or as editor.
- Ongoing research projects and consultancy projects.
- Projects completed and project outcome.

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52 The Hindu, Educational Plus, Monday, December 26, 2011
Following are the Vision and Mission of NAAC:

**Vision**

To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives.

**Mission**

- To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;
- To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;
- To encourage self-evaluation, accountability, autonomy and innovations in higher education;
- To undertake quality-related research studies, consultancy and training programmes, and
- To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.

1.13.1 The Role of UGC and NAAC in Quality Enhancement

The new role in ensuring academic quality, is quality in “Teaching” and hence the University Grants Commission (UGC) has notified in 2010 the “Regulations on Minimum Qualifications for Appointment of Teachers and other
cost effectiveness), comparability through adherence to internationally agreed standards, consistency over time, location and efficiency in the use of resources.\textsuperscript{49}

Thus, concerns about the quality of Higher education with growing demands for accountability, standards monitoring, benchmarking, college effectiveness and reform, have long been, high priority policy issues in all OECD (Organisation for Economic Co-operation and Development) countries.

\textbf{1.13 University Grants Commission (UGC) and National Assessment and Accreditation Council (NAAC)}

Awareness of quality control has started permeating the minds of educational planners, academics and administrators in India, during the recent past. This is no doubt due to the declining standards of higher education noticed in a large section among our universities and colleges.\textsuperscript{50} It is against this background that the setting up in 1994 of the National Assessment and Accreditation Council (NAAC) as an Autonomous entity by the University Grants Commission (UGC) was viewed.

NAAC over a period of time strives to improve the quality of Higher Education through the process of assessment and accreditation by partnering with institutions with minimum standards in place. The fact that only around 130 out of 600 Universities and 2,800 out of 30,000 colleges have opted for accreditation in the country speaks volumes about the quality in higher education in the country\textsuperscript{51}.

\textsuperscript{49} Rowe and Lieveley, 2002, Educational Performance Indicators: Their construction and use, ACER, Melbourne April 16-19, 2002.

\textsuperscript{50} “Pranab Mukherjee asks for improving standards of higher education in India”, 2012, India Today, Chennai, December 28, 2012 | Updated 18:49 Ist.

\textsuperscript{51} The Hindu, Educational Plus, Monday, December 5, 2011
Regular appraisal of teachers are also emphasized, to create in them, an internalized self-discipline. According to Geraldine, if the process is accompanied with rewards, it can be a source of motivation, which would help improved individual’s performance by keeping them functioning at their best.

Thus an effective and fair appraisal system, is essential not only for monitoring the performance of individuals, it also provides a basis for judgments concerning the effectiveness of the total organization.

1.12 Nature and Purpose of Educational Performance Indicator’s

Educational Performance Indicators (PIs) is defined as, data indices of information by which the functional quality of institutions or systems may be measured and evaluated, typically, within the context of specified goals and objectives. Hence, it’s a measure of various operational and functional aspects of institutions or systems, and provides evidential bases for determining the extent to which such goals and objectives have and are being met. PIs serve various purposes, the most notable of which are for monitoring, evaluating, reforming, policy formulation and target-setting.\(^{48}\)

The quality of a PI is comprised of many components which includes validity, reliability, relevance to policy, potential for disaggregation (e.g., by gender, socio-economic and ethnic groupings, education, administration, etc.), timeliness (i.e., currency and punctuality), coherence across different sources, clarity and transparency with respect to known limitations; accessibility and affordability (i.e.,

emotional development of children. In education, each instance of learning involves the strengthening of a learner’s tendency to respond in a certain way to a given set of circumstances. The teachers are artists at recognizing, encouraging, and developing the normal desires of children to understand and make intelligent use of things that appear to concern them. Thus teachers build the foundation for civilized humanity and society at large and should always possess a positive attitude on the profession and field of education.

1.11 Performance Appraisal of Teachers in Higher Education Institutions

As higher education systems grow and diversify, society is increasingly concerned about the quality of programmes offered. Much attention is given to public assessments and international rankings of higher education institutions. It is therefore very important that at this time when our educational system is experiencing crisis of standard and quality, teacher’s appraisal is very eminent in order to eliminate inefficiency, ineptitude and all forms of undesirable behavior in the educational system.

Geraldine view’s, appraisal as a process of collecting information on teacher’s performance for the purpose of determining pay levels, disciplinary warnings, dismissal, promotion and in-service needs, and expects it to be more objective, to identify teachers who are either professionally competent or incompetent and those who may require retraining.\(^{47}\)

1.9 Women and Teaching Profession

Teaching since the ages has been gendered, as a suitable profession for women than men because of her feminine qualities and gifts. The potential contribution of women’s motherly skills such as care, love, patience, empathy and role of discipline, were seen as, very useful qualities in professions like teaching and nursing, where women could play ‘a disciplining role with love’ in schools and nursing where women could play a caring role.

Secondly, the increase in women enrollment in Higher Education has lead to high proportions of women in the teaching job. The statistics showed that, during 2011-12, the total enrolment of women were 86,72,431, comprising 42.66% of women in Higher Education.\textsuperscript{43} The percentage of total women enrolment in the faculty of Arts revealed 41.91% and in Science 19.17%.\textsuperscript{44} The total women colleges (including nursing) in India during 2011-12, reported 4,266\textsuperscript{45} and the teaching staff, of various designations, (including Principals and senior teachers who are equivalent to Professors), in Affiliated Colleges accounted to 7,75,851.\textsuperscript{46}

Thus these were the prime reasons, instrumental in promoting women in the teaching profession.

1.10 Role of Teachers

The teacher plays a vital role in spreading education and building up a healthy society. A teacher contributes towards the cognitive, social, intellectual and

\textsuperscript{43} Appendix IV, UGC Annual Report 2011-12
\textsuperscript{44} Appendix XI, UGC Annual Report 2011-12
\textsuperscript{45} Appendix XII, UGC Annual Report 2011-12
\textsuperscript{46} Appendix IX, UGC Annual Report 2011-12
indicated to have occupied half of the places in the ranking list of top universities in the world.\(^\text{42}\)

The Table 1.1 indicates, the rank of top 10 Indian Universities across the globe, evaluated by Times Higher Education.

**Table 1.1**

**Rank of Top 10 Indian Universities across the Globe**

<table>
<thead>
<tr>
<th>BRICS and Emerging Economies Rank</th>
<th>World University Rankings 2013-14</th>
<th>Name of the Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>226-250</td>
<td>Punjab University</td>
</tr>
<tr>
<td>30</td>
<td>351-400</td>
<td>Indian Institute of Technology Kharagpur</td>
</tr>
<tr>
<td>34</td>
<td>351-400</td>
<td>Indian Institute of Technology Kanpur</td>
</tr>
<tr>
<td>37</td>
<td>351-400</td>
<td>Indian Institute of Technology Delhi</td>
</tr>
<tr>
<td>37</td>
<td>351-400</td>
<td>Indian Institute of Technology Roorkee</td>
</tr>
<tr>
<td>46</td>
<td>Not ranked</td>
<td>Indian Institute of Technology Guwahati</td>
</tr>
<tr>
<td>47</td>
<td>Not ranked</td>
<td>Indian Institute of Technology Madras</td>
</tr>
<tr>
<td>47</td>
<td>Not ranked</td>
<td>Jadavpur University</td>
</tr>
<tr>
<td>50</td>
<td>Not ranked</td>
<td>Aligarh Muslim University</td>
</tr>
<tr>
<td>57</td>
<td>Not ranked</td>
<td>Jawaharlal Nehru University</td>
</tr>
</tbody>
</table>

Source: Indian varsities lag behind in research, December 9, 2013, THE HINDU, Educational Plus, Chennai. (http://www.timeshighereducation.co.uk/world-university-rankings/)

Thus, stakeholders in Higher Education of India should understand and analyze how the Indian education system can be re-structured to shape the cognitive skills, inter-personal sensibilities and cultural sophistication of the children of the country and prepare them for a globalized knowledge society.

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\(^{42}\) Indian Varsities lag behind in research, THE HINDU, EDUCATIONAL PLUS, Chennai, Monday, December 9, 2013. (http://www.timeshighereducation.co.uk/world-university-rankings/)
in 2011-2012 as against 32,964 colleges in 2010-2011, registering an increase of almost 8\%.\(^{36}\) To meet the XI Plan target of 15\% Gross Enrolment Ratio (GER), efforts have been made to open more number of Universities/Colleges and also to increase the existing intake capacity of each course in every University/College. GER has increased from about 11 percent in 2005-06 to about 19 percent in 2012-13.\(^{37}\) Considering the present trend, both in terms of increase in number of institutions and students, the country is likely to touch a GER of 30 percent by 2020.\(^{38}\) There has also been considerable increase in the number of teachers in higher education in the country, with an over two-fold increase in the number of teachers from nearly four lakhs in 2000-01 to over nine lakh in 2012-13.\(^{39}\)

At the end of the financial year 2011-2012, the total number of colleges recognized under Section 2(f) of the UGC Act, 1956 was 8,288 as compared to 7802 in the previous year. During XI plan period (2007-2012), as many as 1935 (30.46\%) colleges had been recognized by UGC as compared to the figure 6,353 at the end of the X plan.\(^{40}\)

The top University rankings among the BRICS nations: Brazil, Russia, India, China and South Africa, showed no Indian university figuring in the first 200 ranks in the prestigious Times Higher Education survey for 2011-12.\(^{41}\) China and Thaivan

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\(^{36}\) UGC Annual Report 2011-12
\(^{37}\) UGC Annual Report 2011-12
\(^{38}\) Dr Akhilesh Gupta, Secretary, UGC, (July 2013), Shaping Higher Education in India, Proquest http://www.ugc.ac.in/pdfnews/6805988_HEglance2013.pdf
\(^{39}\) Dr Akhilesh Gupta, Secretary, UGC, (July 2013), Shaping Higher Education in India, proquest
\(^{40}\) UGC Annual Report 2011-12
\(^{41}\) Indian varsities lag behind in research, December 9, 2013, THE HINDU, Educational Plus, Chennai.
of higher education sector. The UGC has been contributing immensely to this growth in the higher education through various policies, programmes, academic reforms and administrative and financial support to the institutions. They have been working ceaselessly with the challenge of providing equal opportunity for quality higher education to ever-growing number of students while maintaining equity with the societal and sectoral diversity of the country. The other challenges include; reinvigorating institutions, achieving excellence of international benchmarks and extending frontiers of knowledge. Keeping these challenges in mind, the UGC aims at achieving rapid expansion for deepening excellence and providing equal access to quality higher education during the 12th Five Year Plan.

There has been an unprecedented growth in the number of institutions in recent years. At the time of independence, there were only 20 universities and 500 colleges in the country with 2.1 lakh students in the higher education system. But, after independence, there has been a phenomenal growth in all these numbers. At the end of XI Plan, the number of Universities has gone up to 700 and the number of Colleges to 35,539, thus registering an increase of 58% in the number of Universities and 68% in the case of Colleges in comparison to the figures at the end of X Plan.

So far as the number of Universities in states is concerned, the state of Tamil Nadu tops the list with 55 Universities, followed by Uttar Pradesh (54), Rajasthan (47) and Andhra Pradesh (43). As many as 2575 new colleges were established in various states during 2011-2012, thus taking the total number of colleges to 35,539
the need arises to understand the impact of globalization within the more localized sphere of ground realities in India.

Education market in India currently stands at a year-on-year growth of 15 per cent. However there is a further demand of investments worth US$ 100 billion by 2014 for construction and provision of educational facilities especially in K – 12 (on-line education) and higher education segments, according to a report titled ‘Indian Education Investment Report 2013’. The report states that the higher education sector in India is expected to witness a growth of 18.0 per cent Compound Annual Growth Rate (CAGR) till 2020. At present, the sector witnesses spends of more than Rs 46,200 crores, which is estimated to grow at an average rate of more than 18.0 per cent to over Rs.232,500 crores in 10 years. Increased government spending is expected to further support the growth of this sector. UGC has been allocated the general plan budget of Rs 4,390 crore for 2010-11. The education sector has also attracted a foreign direct investments (FDI) worth Rs 3,332.97 crore (US$ 552.09 million) during April 2000 to March 2013. The target public spending on higher education during the Twelfth Plan is 1.50% of India's GDP, up by1.22% compared to XI th Plan.

1.8 Growth of Higher Education in India

Higher education in India has reported an impressive growth since independence. However, the last decade has witnessed an unprecedented expansion

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28 ‘Indian Education Investment Report 2013’.
29 Ministry of HRD Annual Report 2010-11
30 Ministry of HRD Annual Report 2010-11
31 Department of Industrial Policy and Promotion (DIPP).
32 Higher Education in India: Twelfth Five Year Plan (2012-2017) and beyond, pg 48
1.6 Women in Higher Education

Higher Education has been recognized as a great equalizer and a powerful tool of upward social mobility, capable of being used for reducing socio-economic disparities and building an inclusive society.

The first three modern universities in India had been established in 1857 and the first women admitted to the University of Calcutta, was in the year 1877, the second to the University of Madras in 1881, and the third to the University of Bombay in 1883.\textsuperscript{24} Since the first women entered the university education, India witnessed a steady progress in women’s higher education. There were 634 universities (30 universities in 1950-51) and 33,023 colleges in India during 2010-11 (700 colleges in 1950-51), out of which Tamil Nadu comprised 50 universities and 2267 colleges in 2010-11.\textsuperscript{25} The enrollment of women students in higher education marked 41.5\% on the total student enrollment in 2010-11 (girl’s enrollment on total as on 1950-51 was 10.8\%).\textsuperscript{26} The growth of girl student enrollment in Arts and Science colleges against boys were 79\%.\textsuperscript{27} Hence significant growth was witnessed in the participation of women in colleges and universities in India during the 21st century.

1.7 Globalization of Higher Education Sector

Globalization has meant an increased demand from students, employers, and academics for indicators of the international academic standing of universities. Thus,

\begin{itemize}
  \item \textsuperscript{24} Desai, A.S. (1999), Women in higher education and national development. \textit{University News, AIU}, Vol. 39, No. 9, March 1, 1999;
  \item \textsuperscript{25} Higher Education in India at a glance – Brochure, UGC, 2012
  \item \textsuperscript{26} Higher Education in India at a glance – Brochure, UGC, 2012
  \item \textsuperscript{27} Higher Education in India at a glance – Brochure, UGC, 2012
\end{itemize}
live births) as per Sample Registration System (SRS) during 2009-10 is 200, worker population ratios (per 1000) male 819 female 336 and MP’s in Lok Sabha 89.18% male and 10.82% female. Thus status of women still needs improvement in these spheres.

### 1.5 Women and Education

Education is a very effective tool for women’s empowerment, both from the point of view of literacy and also has an inter-linkage with other social parameters viz. population growth, health care and education of children. It enables rural women to acquire knowledge and technology, required for improving and developing their tasks in all fields. Social reformers like Jyotiba Phule, Savithri Bhai Phule, Periyar, and Baba Saheb Ambedkar took various initiatives to make education available to deprived sections of the society including women. However, education of women got a boost only after independence and the new government took effective measures in this regard. Besides availing new opportunities and combating emerging challenges of a dynamic society, women education is essential for higher standards of health and improved “maternal competence” which leads to lower infant mortality. It also raises women’s economic productivity.

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21 Ministry of Women and Child Development XIth Five Year Plan - Census 2011
22 Ministry of Women and Child Development XIth Five Year Plan - Census 2011
independent beings with equal rights in property, rights in marriage and rights to
vote. In mid 1970’s, issues of violence against women-rape, dowry deaths, sati, eve
teasing, sexist portrayal of women in the media and domestic violence all came to be
focused upon by the urban women’s movement.\textsuperscript{16}

Periyar’s views and Ambedkarism have also influenced the understanding of
the women’s question in India. Ambedkar fought to gain equality for the Dalits and
women in India and Periyar exposed the Brahminical traditions that denied women
equal status.

Thus the women’s movements in different centuries, lead by different
reformist using the feminist approaches has brought in revolutionary changes, but
the fight to attain equality is in progress.

1.4 Status and Empowerment of Women in India

Empowerment of women is closely linked to the opportunities they have in
education, health, employment and in political participation. Over the years,
significant change have been made in India on the counts of sex ratio between male
1000 and female 940\textsuperscript{17} and child sex ratio (0-6 years) male 1000 and female 914.\textsuperscript{18}

But, despite the effort to reinforce gender mainstreaming into society, there
still exists a vast number of gender inequality in India. Data on literacy rates showed
male with 82.14\% and female with 65.46\% ,\textsuperscript{19} maternal mortality rates (per 100,000

\textsuperscript{16} Avanti, 2006, Philosophical trends in the Feminist Movement, PEOPLE’S MARCH
\textsuperscript{17} Ministry of Women and Child Development XIth Five Year Plan - Census 2011
\textsuperscript{18} Ministry of Women and Child Development XIth Five Year Plan - Census 2011
\textsuperscript{19} Ministry of Women and Child Development XIth Five Year Plan - Census 2011
1.3 Feminism and Women’s Movement in India

"To alter the position of woman at the root is possible only if all the conditions of social, family, and domestic existence are altered."\textsuperscript{15} 

– Leon Trotsky

Feminists have always been concerned with the role, identity and relationship of women to men. The Feminist are an eclectic group who adopt a diverse range of approaches, perspectives and frameworks, evolved from many disciplines, political agendas, philosophical stances, values, ideologies and points of view like Existentialism, Marxism, Anarchism, Liberalism towards women movements.

During the 19\textsuperscript{th} century, the emergence of social movement in India, battled issues primarily affecting women with the upper castes, like sati, purdah, child marriage and widow re-marriage. During this era, it was the male social reformers like, Gopala Krishna Gokhale, Ram Mohan Roy who advocated education for women to improve the conditions of women.

The approach taken by Jyothiba Phule and Savithribai Phule was democratic. They demanded equal rights for all castes and women. Many more social reformers like Pandita Ramabai, Muthulaxmi Reddy joined the movement and strove to spread education among women and to help women in distress and take up employment.

During the 20\textsuperscript{th} century, both Liberals and Marxists trends were influential among women. In the post -1947 period, women in India still were not accepted as

\textsuperscript{15} Trotsky,1938, \textit{Women and the Family}, p. 45.
mainstreaming, described by UN Economic Social Council (ECOSOC), is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated.\(^{11}\)

Gender Empowerment Measure (GEM), developed by UNDP, focuses on opportunities and captures gender inequality in three key areas: ‘Political participation and decision-making power’, ‘Economic participation and decision-making power’ and ‘Power over economic resources’, which intendeds to measure women’s and men’s abilities to participate actively in economic and political life and their command over economic resources.\(^{12}\)

Gender Equity is yet another concept, defined by UNESCO, as “the process of being fair to men and women. To ensure fairness, measures must often be put in place to compensate for the historical and social disadvantages that prevent women and men from operating on a level playing field. Equity is a means. Equality is the result.”\(^{13}\)

Thus the Government of India, in its XII Five Year Plan (2012-17) visions, to ensure improving the position and condition of women by addressing structural and institutional barriers as well as strengthening gender mainstreaming.\(^{14}\)

\(^{11}\) ECOSOC Agreed Conclusions 1997/2
\(^{12}\) Gendering Human Development Indices: Recasting the Gender Development Index and Gender Empowerment Measure for India, 2009, Ministry of Women and Child Development Government of India.
\(^{13}\) UNESCO’s Gender Mainstreaming Implementation Framework, Baseline definitions of key concepts and terms, Last updated 2003.
1.2 Gender Empowerment, Gender Equality and Gender Equity

The UN Secretary-General Ban Ki-Moon expounded on the theme for Women’s Day’ 2014, “Equality for women is progress for all,” stating:

"Countries with more gender equality have better economic growth. Companies with more women leaders perform better. Peace agreements that include women are more durable. Parliaments with more women enact more legislation on key social issues such as health, education, anti-discrimination and child support. The evidence is clear: equality for women means progress for all."\(^9\)

Gender equality does not imply that all women and men must be the same. Instead, it entails equipping both with equal access to capabilities; so that they have the freedom to choose opportunities that improve their lives. It means that women have equal access to resources and rights as men, and vice versa.\(^10\)

Gender equality can be understood in two ways: firstly, formal equality means treating everyone identically, regardless of circumstances. It is premised on the theory that all people are equal, that treating all people in the same way is therefore fair. Substantive equality, on the other hand, is arriving at equality of outcomes rather than giving identical treatment.

Government of India is taking steps to promote an active and visible policy of mainstreaming a gender perspective in all policies and programs. Gender


\(^10\) Power, Voice and Rights 2010, Asia Pacific Human Development Report, UNDP
status of women and bringing them into the mainstream of national development was focused during the seventh plan (1985-1990). This plan also emphasized the “Beneficiary Oriented Schemes” (BOS)\(^6\) in various development sectors which extended direct benefits to women and children.

United Nations Development Programme (UNDP) in 1990, introduced Human Development Index (HDI), an average measure of achievements in a country with regard to ‘Long and healthy life’, as measured by life expectancy at birth; ‘Knowledge’, as measured by the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio; and ‘A decent standard of living’, as measured by estimated earned income in Purchasing Power Parity (PPP US$).\(^7\) With human development as its major focus, Government of India played an important role in the development of women, on the emergence of HDI, during the eighth plan (1992-1997).\(^8\)

“Empowerment of Women” laid importance during the ninth plan (1997-2002), enabling an environment where women could –freely exercise their rights both, within and outside home, as equal partners along with men. This plan also stressed the importance on “Gender Development Index” (GDI) to monitor the impact and implementation of the three dimensions that were captured in the HDI, to account for the inequalities between men and women and in raising the status of women from time to time. Thus empowerment serves as an aid to help women to achieve gender equality that is meaningful and sustainable.

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\(^6\) Budgeting for women and the Plan commitments National Mission… nmew.gov.in / printcont.php?id=97&lang=1&level=2...36...

\(^7\) Gendering Human Development Indices: Recasting the GDI and GEM for India (2009), Ministry of Women and Child Development, Government of India.

\(^8\) Women in Development pib.nic.in/feature/feyr2000/fmar2000/f130320001.htm
E.V.R. Periyar a famous social reformer of India once stated,

“There should be a drastic revolution in the desires and ideals of Indian Women. They should equip themselves to do all types of work that men are doing. They should have good domestic life without allowing nature’s obstacles in their own lives. Therefore, there should be a welcome change in the minds of our women. The administrators also must pay special attention to the advancement of women.”

The significant role of Women in Development (WID) had been recognized by the Government of India right from the first five year plan (1951-1956). However, women in these earlier plans were considered as subjects of welfare and clubbed together under the category of disadvantaged groups such as destitute, disabled, aged etc. The same welfare approach continued to reflect from the second five year plan till 1979, providing priority to women education, their rights and status of women in the fast changing socio-economic condition of the Indian society.

A new chapter was introduced on “Women and Development” (WAD), where strategies for women employment and economic independence, education, health care and the creation of a supreme legal and institutional environment were conceived during the 6th five year plan (1980- 1985). The developmental programmes constituted with the major objective of raising the economic and social
Chapter I

INTRODUCTION

1.0 An Overview

“Knowledge as one of the greatest human virtues has been immensely valued in Indian society and its acquisition and dissemination is considered as a service of highest order throughout the ages.”

– C.P.S. Chauhan

Women play a very strategic role in the development of society in particular and development of economy in general. Woman is portrayed as the chief architect of the family, the first teacher, supplier of further labour power and, by playing a focal role in the development of different sectors like agriculture, industry and service, she contributes towards the creation of an enlightened and civilized society.

1.1 Empowerment of Women

The goals of human development cannot be achieved without the development and empowerment of women. Women empowerment is said to be a socio-political ideal, encompassing notions of dignity and equality, envisioned in relation to the wider framework of women's rights. It is a process of gaining control over self, over resources and over existing societal perceptions and attitudes and would be achieved only when an improvement in the ‘condition’ of women is accompanied by an advancement in their ‘position’ by enlarging the economic, social and political freedoms and choices available to them.¹

Chapter 1
Introduction
UGC  University Grants Commission
UGC  University Grants Commission
UIC’s  University-Industry Co-authored Research Publications
UNDP  United Nations Development Programme
UNESCO  United Nations Educational, Scientific and Cultural Organization
USNWR  U.S. News and World Report
VCI  Veterinary Council of India
VSNIVR  Virginia Commonwealth University results
WAD  Women and Development
WCP  Women Component Plan
WID  Women in Development
K 12       On line Knowledge
LAUSD      Los Angeles Unified School District
MANOVA     Multivariate Analysis of Variance
MCI        Medical Council of India
MHRD       Ministry of Human Resource Development
NAAC       National Assessment and Accreditation Council
NAHE       National Academy of Higher Education
NBPTS      National Board for Professional Teaching Standards
NCATE      National Council for the Accreditation of Teachers Education
NCTE       National Council for Teacher Education
NDC        National Development Council
NEA        National Education Association
NSSTA      National Scheme of School Teacher Appraisal
OECD       Organisation for Economic Co-operation and Development
PBAS       Performance Based Appraisal System
PCI        Pharmacy Council of India
PI         Performance Indicators
PPP        Purchasing Power Parity
QIS        Quality Indicator System
RCI        Rehabilitation Council of India
SCHE       State Councils of Higher Education
SRS        Sample Registration System
SUNY       The State University of New York
TEI        Teaching Evaluation Index
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<td>CSIR</td>
<td>Council of Scientific and Industrial Research</td>
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<td>DCI</td>
<td>Dental Council of India</td>
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<td>DEC</td>
<td>Distance Education Council</td>
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<td>DETYA</td>
<td>The Department of Education, Training, and Youth Affairs</td>
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<td>DIPP</td>
<td>Department of Industrial Policy and Promotion</td>
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<tr>
<td>DM-DBI</td>
<td>DeMoulin Multi-Dimensional Behavior Index</td>
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<tr>
<td>ECOSOC</td>
<td>Economic and Social Council</td>
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<td>ECS</td>
<td>Education Commission of the States</td>
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<td>ECS</td>
<td>Education Commission of the States</td>
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<td>EDWA</td>
<td>Western Australia Education Department</td>
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<td>EDWA</td>
<td>Education Department Of Western Australia</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>EHES</td>
<td>Estonian Higher Education Strategy</td>
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<td>FDP</td>
<td>Federal Demonstration Partnership</td>
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<td>GDI</td>
<td>Gender Development Index</td>
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<td>GEM</td>
<td>Gender Empowerment Measure</td>
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<td>GER</td>
<td>Gross Enrolment Ratio</td>
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<td>GLM</td>
<td>General Linear Model</td>
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<td>HEI</td>
<td>Higher education Institutions</td>
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<td>ICAR</td>
<td>Indian Council of Agricultural Research</td>
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<td>ICWAI</td>
<td>Institute of Cost and Works Accountants of India</td>
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<td>INC</td>
<td>Indian Nursing Council</td>
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<td>IQAC</td>
<td>Internal Quality Assurance Cell</td>
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<td>IWD</td>
<td>International Women's Day</td>
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# ACRONYMS AND ABBREVIATIONS

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<td>AAC</td>
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<td>AACS</td>
<td>American Assembly of Collegiate Schools of Business</td>
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<td>AAUP</td>
<td>American Association of University professors</td>
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<td>ABCTE</td>
<td>American Board for Certification of Teachers Excellence</td>
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<td>ACE</td>
<td>American Council on Education</td>
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<td>ACER</td>
<td>Australian Council for Educational Research</td>
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<td>AEJMC</td>
<td>Association of Schools and Departments of Journalism and Mass Communication</td>
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<td>AICTE</td>
<td>All India Council for Technical Education</td>
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<td>AIU</td>
<td>Association of Indian Universities</td>
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<td>API</td>
<td>Academic Performance Indicators</td>
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<td>BCI</td>
<td>Bar Council of India</td>
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<td>BOS</td>
<td>Beneficiary Oriented Schemes</td>
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<td>CAGR</td>
<td>Compound Annual Growth Rate</td>
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<td>CAUT</td>
<td>Canadian Association of University Teachers</td>
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<td>CCH</td>
<td>Central Council of Homoeopathy</td>
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<td>CCIM</td>
<td>Central Council of Indian Medicine</td>
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<td>CEDAW</td>
<td>Convention on All Forms of Discrimination Against Women</td>
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<td>CIPD</td>
<td>Chartered Institute of Personnel and Development</td>
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<td>CIPD</td>
<td>Chartered Institute of Personnel and Development professional programmes</td>
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