Chapter V

FINDINGS AND CONCLUSION

The findings of the present study lead to the following concluding remarks.

The result of source-wise publication of research output in Gender Studies in Informatics examines the following facts. The conference proceedings form of research output in Gender Studies in Informatics occupies the first in order of reporting, journal article form the second, news item the third, online publications the fourth and project report form of publications the last.

The findings of the continent-wise publication of research output in Gender Studies in Informatics indicate the following facts. The North American continent has contributed the highest number of research output in Gender Studies in Informatics and Australia has taken the lowest position in its contribution of research output. The European continent takes the second order with respect to research output contribution in Gender Studies in Informatics, Asia the third and Africa the fourth.

The findings of continent-wise sources of publication of research output in Gender Studies in Informatics examine the following facts. The African continent's conference proceedings form of publication is less than other continents. The journal articles form of publication is predominant in Asian and
European continents and it is conference proceedings cum. journal article form publications of Gender Studies in Informatics in Australian and North American Continents.

The findings of country-wise research output performance in Gender Studies in Informatics examine the following facts. South Africa tops the list among the countries in the African continent in publishing research output in Gender Studies in Informatics. Nigeria comes next in position. In the African continent six countries each published only two papers and seven countries each published only one paper during the study period. South Africa alone has sources of published research output.

The findings of country wise research output performance in Gender Studies in Informatics of the Asian continent examine the following facts. It is observed that seven countries have not published conference proceeding form of research output in the Asian continent. Most of the publications are done by Indian scholars. Five countries have not published any paper in journal article form. Among the countries publishing papers in the Asian continent, India and Bangladesh are noteworthy. Eight countries have not published any paper in the form of news item. It is published in three countries, viz., India, Israel and Thailand. Eighth countries have not published any paper in the form of project and it is reported only in three countries. Further five countries have not published any paper in the form of online discussion.
The findings of research output performance of the European continent indicate the following facts. It is seen that England shares more than two-third of the publications in Europe. The Netherlands contributes to considerable level of publications. The remaining sixteen countries share less than 25 per cent of the total output in the European continent. It could be noted that fifteen countries have not published any paper in the form of online discussion and fourteen countries in the form of project and news item form of publications.

The findings of country-wise research output performance of the Australian continent reveal the following facts. It is observed that Australia shares most of the publications in the Australian continent and New Zealand shares only 2 publications of research output in Gender Studies in Informatics.

The findings of country-wise research output performance of the American continent indicate the following facts. USA is a leading contributor of research output in Gender Studies in Informatics. Canada shares a considerable level of research output in Gender Studies in Informatics and the contribution of other countries is quite discouraging as it is less than one per cent each.

The findings of overall relative growth rate of literature in Gender Studies in Informatics examine the following facts. Relative growth rate of publication has shown a declining trend. Consequently the mean doubling time for publications of Gender Studies in Informatics has shown an increasing trend.
The result of the relative growth rate of conference proceeding form of publication indicates the following facts. The mean relative growth rate of conference form of publication has shown a declining trend. Consequently the mean doubling time for publication has also shown a declining trend, due to rapid increase in output during 2000-01 and 2002-03.

The findings of the relative growth rate of conference proceeding form of publications reveal the following facts. It is observed that the relative growth rate has shown a declining trend. However, it has shown an increasing trend during 1984-85 and 1992-93. Contrastingly, the doubling time for publication has shown an increasing trend in journal article form of publications in research output in Gender Studies in Informatics.

Regarding the result of news item form of publication, the mean relative growth rate of news item form of Gender Studies in Informatics has shown an increasing trend and the mean doubling time for publication has shown a declining trend.

It is observed from the result of analysis that the relative growth rate of project and online discussion form of literature output has shown a declining trend. Contrastingly, the doubling time of publication has shown a massive level of increasing trend.

The findings of continent-wise relative growth rate of publication of research output in Gender Studies in Informatics bring out the following facts.
At the overall level the relative growth rate has shown an increasing trend in the case of research output of North American continent literature whereas the doubling time of publication has shown a declining trend in this connection.

It is observed that the relative growth rate of European continent has shown a declining trend with the exception of the year 1990-91. Contrastingly, the mean doubling time of publications has shown an increasing trend in this connection.

It is seen from the result of the study that the relative growth rate of the Australian continent literature has shown a declining trend whereas the doubling time of publication of literature in Gender Studies in Informatics has shown a declining trend, indicating large time taken in doubling number of research output in Gender Studies in Informatics.

It is observed from the result of the analysis that the relative growth rate of the Asian continent literature has shown a declining trend whereas the doubling time of publication has shown an increasing trend.

The relative growth rate of African continent literature has shown a declining trend. Contrastingly, the doubling time of publications has shown an increasing trend.

The findings of research output performance of South African continent analyze the following facts. The relative position of research output position is quite encouraging in South Africa as it stands above world average and it is
considerable in the case of Nigeria. Some countries such as Burkina Faso, Ghana, Mali, Mauritius, Morocco, Sierra Leone and Zambia are at the infancy state with respect to publication of research output in Gender Studies in Informatics.

The findings of journal source-wise research output performance in Gender Studies in Informatics point out the following facts. It is observed that 72 journals have got below the annual average level of publications as per the index value. The noted journals are ACM SIGCSE Bulletin, computer education, computer weekly and gender education as they have more number of publications and also much obtained index score.

The findings of research output performance of conference proved by form of publications indicate the following facts. Among the conference proceedings, ICWES-12, WIT 2002, IFIP 6th, IFIP 4th the noteworthy. In general, all the conference proceedings have got above world annual average level of index value, indicating the predominant position of conference proceedings form of publication in Gender Studies in Informatics.

The result of project form of publications performance in Gender Studies in Informatics indicates the following facts. Among the total project form of publications, women engineering advisory committee and women networking for education and training in technology have above total of all sources of annual average number of publications. Most of the projects have less number of publications.
Regarding performance of news item form of publications, news item of wired news and business wire are noteworthy in publishing Gender Studies in Informatics. In this study, most of the news item is published each in a paper.

The findings of authorship pattern in Gender Studies in Informatics bring out the following facts. More than two-thirds of the research papers in Gender Studies in Informatics are single authored papers. The double-authored papers come next in order, triple authored paper the third, four authored paper the fourth, above five authored papers the fifth and five authored papers the last. It could be noted that when the number of authors increases, their proportion of contributed papers decreases and the vice versa.

It is observed that single authored papers predominate the research output in Gender Studies in Informatics during the study period.

It is also observed from the result of this study that though the degree of collaboration in producing research output in Gender Studies in Informatics is low, it has shown an increasing trend during the study period since it is a new discipline.

The findings of coword analysis in Gender Studies in Informatics show the following facts. It is observed that coword like Barriers, education of computer science among women, women's participation in I.T. Education and training, under representation of women in computing and gender bias. More number of themes relating to barriers, education, gender bias participation,
gender gap, women employment initiatives, under representation of women in computing, recognition of women in computing strategies to promote women's participation, gender equity and gender access have appeared mostly during the period 1997-98 and 2002-03. The first period 1982-83 shows varied level of publication of output and cowords occurrence.

The result of continent wise analysis examines the following facts. The North American continent tops the list in using number cowords in the literature in Gender Studies in Informatics the European continent the second, the Asia continent the third, the Africa continent the fourth and the Australia continent the last.

The findings of source-wise coword use behaviour in literature in Gender Studies in Informatics exhibit the following facts. The conference proceedings top the list of cowords usage since their number of publications is quite large and journal article form of publication comes second with respect to coword used in their publications, new item form of publication takes the third position in their coword use behaviour, online publication form of publications the fourth and the project form of publications the last.

The findings of continent-wise coword usage in Gender Studies in Informatics indicate the following facts. The cowords such as women in I.T. Education, women in I.T. employment, initiatives and strategies to promote women participation in I.T industry, under representation of women in employment, education and computing and gender bias, gender gap, gender
discrimination and gender equity occupy a predominant position in Gender Studies in Informatics as they represent more than 10 per cent each one share in total cowords used in the study. The cowords like opportunities to women, male domination, absence of women in decision making, skill shortage, retention of women in decision making, and ways to attain equity in gender access share less in number with respect to overall cowords used in the study. Among the chosen continents, the North American continent shares 61.92 per cent of the cowords used in Gender Studies in Informatics, Europe comes to next position, Asia the third, followed by Africa.

The findings of coword usage in Gender Studies in Informatics of the African continent examine the following facts. The cowords retention of women's decision making and ways to attain gender equity take more than 10 per cent of global share usage among the African continent scholars. In the African continent cowords appeared only assess 1992-93, because the publication of literature in gender studies informatics shares asses 1992-93. Among the countries in the African continent, Nigeria and South Africa are the major contributors of cowords in Gender Studies in Informatics. The period 1992-93 and 1996-97 have witnessed relatively less number of coword used in Gender Studies in Informatics. Many of the African countries have contributed less than 1 per cent of cowords used in Gender Studies in Informatics during the study period.
It is observed from the results of analysis that the usage of cowords is found to be predominant in the publications of Indian scholars, followed by Philippines. The coword male domination, absence of women in decision making, and opportunities to women, ways to attain equity in gender access have received the attention of scholars of only two Asian countries. The cowords like women in I. T. Education and I. T. employment have received the attention of all scholars of Asian Countries in their published output on Gender Studies in Informatics.

The findings of country-wise coword usage in Gender Studies in Informatics in the European continent reveal the following facts. The cowords have not covered all the eighteen European countries. Among the European countries, the scholars of England occupy the first position in their coverage of all cowords in their publication research output in Gender Studies in Informatics, followed by the Netherlands. The coword like absence of women in decision making, reference to women in decision making, ways to attain gender equity, and male domination have received the attention of scholars of upto five Asian countries.

The findings of coword usage in Gender Studies in Informatics of the North American continent reflect the following facts. The scholars of the North American continent share more than half of the all cowords usage in literature publishing Gender Studies in Informatics. Among the North American continent countries, the scholars of the USA top the list, followed by Canada in
using more proportion of all cowords in their published literature in Gender Studies in Informatics. The cowords like women in I. T. Education and employment have covered the attention of scholars of all chosen countries of the North American continent. Usually, the scholars coword usage level is quite discouraging in contrast in Central America, Eugene, Green Ville, Guatemala, Mexico, Virginia, and West Field, since they have very less number of publications and ultimately they have less coword usage at the global share.

The findings of coword usage in Gender Studies in Informatics of the Australian continent indicate the following facts. Only scholars of the two Australian continent's countries contributed cowords in Gender Studies in Informatics. The New Zealand scholars have not used the coword like skill shortage and male domination. The Australian scholars share a less proportion of all cowords usage at the global level in their published literature in Gender Studies in Informatics, since their number of publications is limited to 24 only.

The findings of duration of coword usage in Gender Studies in Informatics examine the following facts. The highest number of cowords usage is found during the period 1997-98 -2002-03, due to recording of the highest number of publications in Gender Studies in Informatics. The period 1992-93 to 1996-97 records second in order of cowords share with respect to total number of cowords used in the literature of Gender Studies in Informatics, the period 1987-88 to 1991-92 the third and 1982-83 to 1986-87 the last. The period 1982-83 to 1986-87 is said to be at the infancy stage for the shown
literature in Gender Studies in Informatics. Hence this period has a low number of publications and key words usage and thereafter it has grown rapidly particularly during 1997-98 to 2002-03.

The findings of source-wise coword usage in Gender Studies in Informatics indicate the following facts. The conference proceeding form of publication occupy the first position in cowords usage in Gender Studies in Informatics, journal article form the second, news item form of publications the third, online discussion form the fourth and project report form the last. A majority of the key words appeared in conference proceedings and journal articles since they constitute major proportion of the total sources of literature in Gender Studies in Informatics.

It is observed from the study that there would be an enormous scope for emergences of this field as a full-fledged discipline. The rate of growth of publication gives an impression that this field has quite a lot of 'literary warrant' in the years to come. Suggestions

The following suggestions are made on the basis of findings of the present study.

1. The research output in gender studies in informatics is quite low in many of the countries in African continent during the study period except South Africa and Nigeria. Hence there is a need to increase the
research in Gender Studies in Informatics through Government motivation and financial assistance.

2. Some of the Asian countries have not done research in Gender Studies in Informatics. Hence these countries should motivate the researchers to do research in this area with a view to identify the impact of information technology on women empowerment.

3. Most of the European countries are at the infancy stage of research in Gender Studies in informatics. Hence they should develop research in this field.

4. There is a need to encourage the New Zealand's scholars to do research on Gender Studies in Informatics since their relative contribution is lesser than Australian scholars.

5. The research output in Gender Studies in Informatics is quite low in many of the countries in North American Continent, except USA and Canada. Hence they should develop research in the same field.

6. There is a need to identify the core area of research in Gender Studies in Informatics.

7. There is a need to conduct research studies on impact of information technology on women empowerment at the grass root level.

8. There is a need to establish specific research institutions to promote research in Gender Studies in Informatics in developing countries.
9. In order to promote research in Gender Studies in Informatics, a research centre could be started at the University level.

10. To assess the effectiveness of government's programme of information technology on women empowerment, a specific impact study should be done for this purpose.

**Result of Hypotheses Testing**

1. The formulated first hypothesis of significant increase in the growth of literature during the period of study is proved as per the result of growth rate analysis.

2. The formulated second hypotheses deals with a significant inter continental and inter country variation in the growth and concentration of research output in Gender Studies in Informatics is proved as per the result of relating growth rate analysis and also co-efficient of variation analysis.

3. The formulated third hypotheses of the cognitive structure of Gender Studies in Informatics varies significantly among the selected continents in the study is proved as per the result of activity index.

4. The formulated fourth hypotheses of significant variation with respect to institutions, producing research output in Gender Studies in Informatics is valid as per the result of tabular data analysis.