

RESEARCH OUTPUT DURING PEACE AND CONFLICT: A CASE STUDY OF UNIVERSITY OF KASHMIR, 1989-2010

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Abstract Universities are hub of research activities. Apart from universities, there are many institutions also which help in enriching the plethora of research. Research is being affected by numerous factors and one of the prominent factor affecting the output is the conflict or war or political instability. Research done in peaceful environment is clearly different from that done in the conflict period. The researchers are not able to give their best during the conflict period. They work harder and can give their best when peace exist. This results in not only the good quality research but also the output increases in terms of number of publications. The present study tries to understand the effect of conflict on the research done in University of Kashmir during conflict period from 1989-1999 and comparative peace period from 2000-2010 in Kashmir. Web of Science is used as data retrieval tool so that comprehensive study can be done. The study reveals that during the peace period from 2000-2010, there was a huge amount of literature published in comparison to conflict period from 1989-1999. The data compiled also indicate that University of Kashmir has more percentage in terms of collaborations made during peace period compared to the conflict period.

Keyword: Research, Research Output, Research-University of Kashmir, Conflict Studies, Peace Studies, War-Research Output

INTRODUCTION

Research in common parlance refers to search for knowledge; one can also define research as a scientific and systematic search for pertinent information on a specific topic. Some people consider research as a movement, a movement from the unknown to known. It is actually a voyage of discovery. Research therefore, is not writing books and collecting data haphazardly. A true research is a systematic enquiry to solve a problem, or to find new facts, or to interpret known facts in new light. Research is also a voyage from darkness to light as it advances our understanding and makes us adaptable. It will be enough here, however, to describe research briefly as the careful and exhaustive investigation of all the ascertainable evidence bearing upon a definite problem. Research is an instrument which mankind has perfected very slowly over a period of several centuries, and it seems to be present our most reliable means of advancing our knowledge. Its purpose, like that of all other methods, is to discover facts and ideas not previously known. In conclusion Research is a very vital to our everyday decision making. It aims us from wrong information's and saves time and money. It is important to our success as we take a life's challenges and career decision making. But we must be careful though, because too much research without action on what you are learning is not good either.

But it is very difficult to research in areas where researchers faces number of problems. While conducting research in conflict or post-conflict areas and dilemmas various problems are faced by researchers while doing research in such areas. It is having some of the practical, methodological, normative and ethical issues that may engulf a researcher's mind to or while doing research in these areas. These include access to the conflict zone, the insider/outsider debate, the feasibility of interviewing civilians and armed combatants, informed consent of the locals, the importance of the socio-cultural context, distinction between victims and perpetrators of violence, assessing trauma in conflict and post-conflict zones, and expectations of the locals (Dixit, 2012).

As Shrivats and Bhattacharya (2014) has shown that prior to 1995, Indian authors had sporadic international collaboration resulting in only a very insignificant volume in comparison to India's overall publication. The change could be observed from 1995; during the period 1995-2012, the number of internationally collaborated scientific publications as a percentage of overall Indian scientific publications increased from about 11% to about 20%. The role of international collaboration in India's overall publication productivity has shifted from a position of little importance to one of significant importance. The results thus show that internationally collaborative papers have played a significant role in the increase of total volume of papers from India.

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Universities are domes of higher studies and learning. It is the place where not only knowledge is acquired, but even more character is built. The universities are usually among the foremost research and advanced training providers in every society. Most universities not only offer courses in subjects ranging from the natural sciences, engineering, architecture, or medicine, to sports science, social science, law and humanities. Research is a key ingredient in the institutional identity of universities and an Indispensable prerequisite for a successful programme of teaching and public service. Research is an Endeavour to discover, develop, and verify knowledge. It is an intellectual process always searching the truth (Singh, 2006).

The University of Kashmir is an apex institution of higher education in the state situated on the outskirts of Srinagar at Hazratbal, an idyllic area on the western side of the fabulous Dal-Lake of Srinagar and held in the veneration by the Muslims for the beautiful mosque. The University is spread over 263 acres of lush green land with three adjacent campuses of exquisite beauty Amar Singh Bagh, Naseem Bagh and Mirza Bagh. The university has really developed into multi-faculty university by imparting instructions in various domains in the field of Humanities, Physical Sciences, Biological Sciences, Social Sciences, Education, Law, medicine, Engineering and Music & fine arts. The university genuinely focuses on the execution of high quality academics; research and extension work and thus develops the frontiers of knowledge. The university has made the mark in every field.

Problem

The wealth of research is vast and keeps on growing with each passing day. The research output during the times of peace and conflict in a region is an area worth to be researched. The present work analyzed, explored and compared research output during peace and conflict period.

Objectives

- To analyze and compare the research output of University of Kashmir during peace and conflict period.
- To analyze and explore the research contributions in major subject fields in the university and compare contribution during peace and conflict.
- To investigate contributions in terms of collaborations at international level in the university during the times of peace and conflict.

Scope

The present work analyzed and explored research contributions in major subject fields of University of Kashmir from 1989-2010.

Methodology

Web of Science, an online retrieval tool with high backend database is used so that comprehensive and scientific results are achieved in order to fulfill the above mentioned objectives.

The data is gathered after searching all the articles published from the University of Kashmir. After doing a thorough search, different parameters are set like total number of publications in peace and conflict period, total number of citations received, collaboration done internationally during the period of peace and conflict etc. so that it could be found whether there is any relation between conflict and research output.

REVIEW OF LITERATURE

Bandyopadhyay and Nandi (2008) believes that research is simply the process of arriving at dependable solution to a problem through the systematic collection, analysis and interpretation of data. Abbott and Doucouliagos (2003) consider that research plays an important role in underpinning a country's economic and social life. Universities are at the center of the research and human capital generating process. Universities impart postgraduate education, and conduct and promote research in a variety of disciplines. Being at the apex of the educational pyramid, universities have a key role in producing quality teachers and researchers for the education, science and technology systems. The developed nations are attracting brilliant scholars from other countries. If this trend continues, India will face a shortage in R & D personnel very soon (Varghese, 2005). Study carried out by Panat (2014) on the research papers published from India and China in the fields of sciences and engineering between the years 1975 and 2012, it is found that while Indian research output has increased steadily, the Chinese research output has been increasing at a rate far outpacing that of India. But the research carried out by Elsevier (2014) for the UK's Department of Business, Innovation and Skills (BIS) and based on Scopus data contradict this statement. The study shows that India has achieved substantial growth in research articles output, increasing from 54 thousand in 2008 to 93 thousand in 2012 at an annualized growth rate

of 14.4%. This is a rate higher than that of China (10.9%), Brazil (7.9%), Russia (1.9%) and the U.K. (2.9%).

Basu (2013) tried to do performance evaluation of academic and research institutions on the basis of criteria like funding agencies, students, employers etc. Scientometric methods using research publication and citation data feature in almost all rankings of research excellence. A bibliometric analysis has been carried out by Bala and Kumari (2013) regarding the research performance of National Institutes of Technology (NITs) of India from 2001-2010. In their study, several parameters were considered which could reveal the overall contribution, growth, citation impact, international collaboration, etc. The tool that was used for this study was Scopus and the results reveal that NIT-Rourkela is the leading contributor towards the research publication with total share of 12.8%. Further, it has been shown that USA is the major collaborating partner with NITs with 22.8% international collaboration. NIT - Tiruchirappalli has published highest number of international collaborative papers with 24.6%.

Another study made by Kumbar and Gupta (2013) has been carried out and a comparative approach has been taken here between two universities- Mysore University and Karnatak University in S&T. This study provide us the analyses of the national collaborating links of the two universities, annual growth etc. according to this study, Mysore university is leading Karnatak university as far as the number of publications is concerned. Physical science has remained the most productive field of study in both the universities. In nut shell, Mysore University has contributed more papers in terms of overall research output, international collaboration, etc. However. Karnatak University has got more comparatively larger share of its national collaborative links.

Study of Gupta, Saxena and Visakhi (2013) reveal that 20 Indian agricultural universities together contribute 2.75% of the Indian research output during 2007-11. They conducted the study on 20 Indian agricultural universities on the parameters of number of papers, number of international collaborative paper and quality of research output (citation analysis). Higher collaboration was found in biochemistry, genetics and molecular biology.

Wharton and Oyelere, 2011 explore the educational accumulation and enrollment gap created by being directly affected by internal armed conflict in Colombia. Shemyakina, 2011 discusses the effect of violent conflict on schooling outcomes during 1992-1998 armed conflict in Tajikistan. Similarly, Lai and Thyne, 2007 examine the negative effects of civil wars and the post-civil war environment on educational expenditures and enrollment. Birowo, 2010 discussed the use of community radio as an important information system in managing natural disaster in Indonesia. Landgren and Bergstrand, 2010 discussed about the adoption of live-video technology in emergency response work to improve situation awareness in the times of crisis. Zgonjanin (2005) expresses concern over the crimes made against the libraries all over the world. Crimes that involve the destruction of libraries and archives are not prosecuted as separate incidents due to the courts' failure to specifically list such crimes as separate counts of indictment. The lack of the prosecution of the individuals responsible for crimes of library and archive destruction is one of the reasons why the assault on the documentary heritage of the world continues.

A study carried out by Lone, Shah, Wahid and Khan (2015) reveal that political instabilities have clear impact on the research and E-resource usage. They conducted a study on University of Kashmir's research output and E-resource usage and found that the output and usage of E-resources get badly hampered during the times of conflict.

ANALYSIS OF DATA

Research Output during Peace and Conflict (University of Kashmir)

The below graph is divided in two parts peace (2000-10) and conflict (1989-1999) and it shows the real difference that in conflict period only 108 articles are published while in peace period 318 articles are published. Thus it is clear from the data that research is greatly affected by the conflict. It is shown in fig. 1.

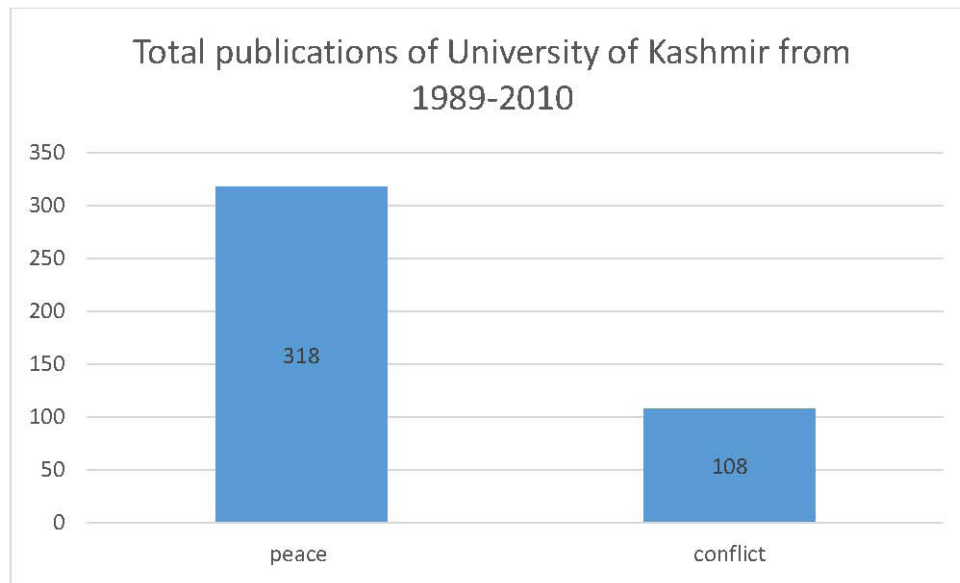


Fig. 1. Total Publications of University of Kashmir from 1989-2010.

Average Citation during Peace and Conflict (University of Kashmir)

The data compiled for the conflict and peace period indicate that the average citations received by the articles published by the University of Kashmir is higher in peace period than that of conflict period. This also indicates that the quality

of research get affected during conflict and is not very much improved during the period of peace in the Kashmir valley. The possible reason could also be the gap of 10 years during which the articles of conflict period have received the citation. Probably the difference could be clearer in next decade. It is clear from fig 2.

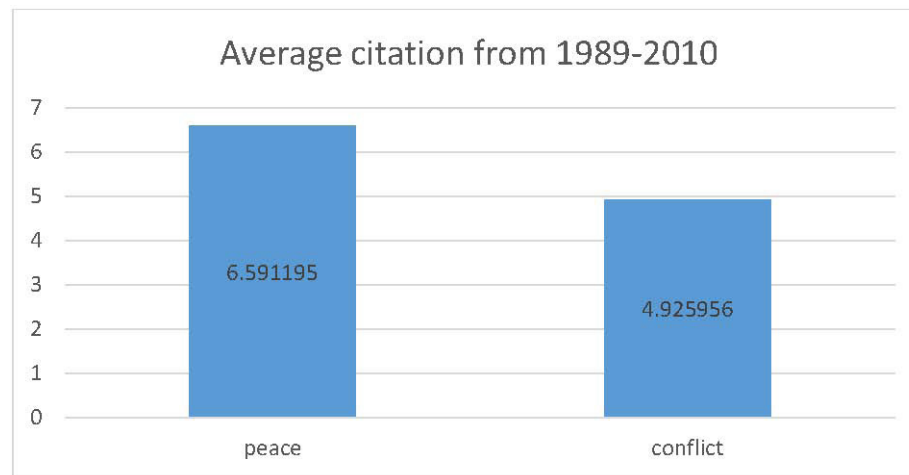


Fig. 2: Average Citation during Peace and Conflict Period

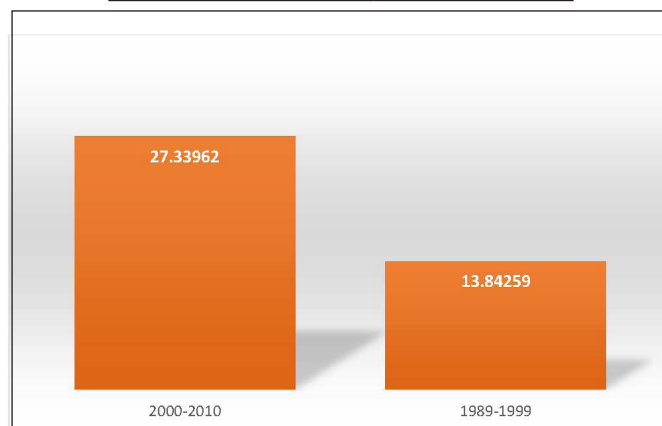
Cited References (related material consulted)

In total, 108 paper published from University of Kashmir have consulted 1495 references which were published during the conflict period while as during the peace period 318 papers published from University of Kashmir consulted 8694 references. This shows that researchers of University of

Kashmir during the peace period were having more access to the resources and on the contrary during conflict period they were not able to get access to the related material. The effect could be the use of technology more during the last 15 years but the possibility of having less resources during conflict cannot be overlooked also.

Table 1: Total Number of Cited References

Cited References	Total Number
2000-2010 (Peace)	8694
1989-1999 (Conflict)	1495

**Fig. 3: Average Cited References during Peace and Conflict**

Above graph makes it quite clear that during the conflict period the cited references were very less compared to the peace period. During the peace period the average cited

reference have doubled in number. This makes it quite clear that during the peace period the sources of information are more used by the scholars compared to the conflict period.

Subject wise Output (University of Kashmir)

The top 10 subjects provided by the Web of Science were categorized for the analysis as far as subject wise output of University of Kashmir is concerned. Table 2 shows that during the conflict period Mathematics is the leading subject in which maximum number of articles (21) got published from University of Kashmir while as during the peace period Electronic, Electrical engineering subject is the leading subject in which maximum number of articles (29) got published. In conflict period, Electronic, Electrical engineering is having few publications (5) only. However, the number of articles remained same in both the conflict and peace periods for the Mathematics. Plant Sciences is the 2nd leading subject in conflict period but its number got decreased from conflict to peace period.

Among the top 10 subjects, the output got decreased in Mathematics, Electronic, Electrical engineering and Plant Sciences. In other words, we can say that the most affected subjects include Mathematics, Electronic, Electrical engineering and Plant Sciences.

Table 2: Subject wise Output (University of Kashmir)

Top 10 Subjects	Output during conflict period (1989-1999)	Top 10 Subjects	Output during peace period (2000-2010)
Mathematics	21	Engineering Electrical Electronic	29
Plant Sciences	13	Chemistry Physical	28
Biochemistry Molecular Biology	10	Physics Multidisciplinary	26
Marine Freshwater Biology	9	Mathematics	21
Oncology	9	Chemistry Medicinal	18
Chemistry Multidisciplinary	8	Plant Sciences	18
Environmental Sciences	8	Chemistry Multidisciplinary	17
Mathematics Applied	6	Pharmacology Pharmacy	15
Engineering Electrical Electronic	5	Physics Nuclear	15
Toxicology	3	Chemistry Organic	11

International Collaboration (University of Kashmir)

The collaboration at international level has increased tremendously from conflict period to the peace period. It clearly shows that there is huge impact of conflict on the international collaborations as can be seen from Fig. 4. The

figure shows that there were 40 countries during the peace period with which collaboration was done by the researchers of University of Kashmir compared to only 10 countries during conflict period. For peace period, USA remained the leading collaborating country for the University of Kashmir and for conflict period, Germany remained the leading collaborating country.

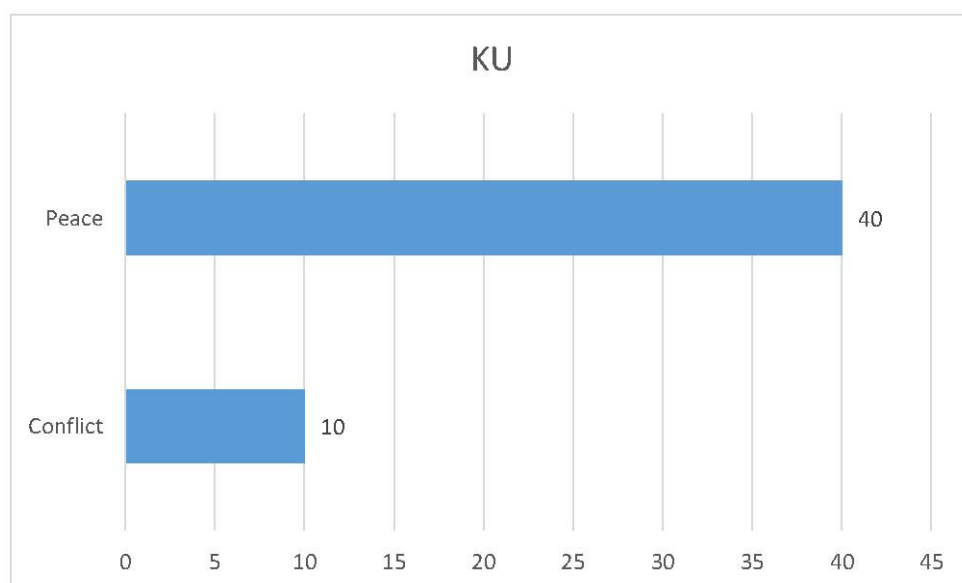


Fig. 4: International Collaboration

CONCLUSION

The conflict has clear impact on the research done in a region. Research done in times of conflict vary from the peace period. There is evident difference between peace and conflict periods as far as number of papers and average citation is concerned. Thus, it is clear that research is greatly affected by the conflict. The data compiled for the conflict and peace period indicate that the average citations received by the articles published by the University of Kashmir is higher in peace period than that of conflict period. The top 10 subjects provided by the Web of Science were categorized for the analysis as far as subject wise output of University of Kashmir is concerned. During the conflict period Mathematics is the leading subject in which maximum number of articles (21) got published from University of Kashmir while as during the peace period Electronic, Electrical engineering subject is the leading subject in which maximum number of articles (29) got published.

During the conflict period, there were only 10 countries with which the researchers of the University of Kashmir collaborated compared to 40 countries with which the University of Kashmir collaborated during peace period.

So, it can be easily deducted that research output, citations, collaboration are badly affected by the conflict in a region.

SUGGESTIONS

Much has been achieved so far but there should always be thirst of becoming famous among the scholarly community of world which can be done only when we take care of things at the grass root level. Some of the suggestions with which

output can get improved in the conflict region like Kashmir are:

- Proper aim of research should be set.
- Curriculum should be enriched with latest concepts and knowledge.
- Guidance by experts should be provided every now and then via various media.
- All the facilities related to research should be provided without any barrier.
- Interdisciplinary research should be encouraged.
- Collaboration should be done within the departments.
- Collaboration should be done by the faculty themselves first and the same thing should be incorporated in the Research Scholars.
- Collaboration should be made with national and international institutions.
- Market driven research should be given preference.
- More funding should be done to enhance quality of research.
- Teaching standards should be enriched.
- Proper evaluation should be done in all the research works.
- Technology should be used more to enhance the quality of teaching and research.
- Privatization should also be encouraged to some extent.
- Libraries should provide good literature to the researchers and more efforts need to be taken by the UGC in providing the resources for the research.
- Libraries should be open round the clock.

- High speed Internet facility should be provided continuously.
- User awareness programmes should be mandatory during all the courses taught in the universities.
- Proper lab facilities should be provided even after classes are over.

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