3rd International Conference

on Public Policy (ICPP3)

June 28-30, 2017 – Singapore

Panel T17 P05 Session 2

Educational Policies, its Tensions, Agendas and Developments

Title of the paper

Regulating and Promoting Quality Research in India: Assessing the Role of the University Grants Commission

Author(s)

B. S. Ghuman

Dean, Faculty of Arts and Professor, Department of Public Administration, Panjab University, Chandigarh, India

Email- ghumanbs@pu.ac.in

Mohammad Sohail

Senior Research Fellow, Department of Public Administration Panjab University, Chandigarh, India

Email-msohaildhillon90@gmail.com

Date of presentation

Friday, June 30th 13:45 to 15:45 (Block B 3 - Lecture (250)

Regulating and Promoting Quality Research in India: Assessing the Role of the University Grants Commission

Abstract

The present study aims to assess the role of the University Grants Commission (UGC)- a major regulatory body in higher education in India, in promoting and regulating quality research in institutes of higher learning. The UGC broadly regulates and promotes quality research through two mechanisms. First is through research schemes for institutes, faculty members and research students, Secondly by framing regulations for ensuring quality standards in M.Phil/PhD programmes. Based on primary and secondary data, the study has found that the UGC has not been fully successful in regulating and promoting quality research through schemes and regulations at MPhil/PhD level. To improve the mechanism of UGC schemes, it is suggested that the UGC should adopt measureable quality assurance process along with strong and clearly stated system of monitoring the progress and quality of research, promote institutional collaboration and inter-disciplinarity in schemes, follow balanced approach in promoting science as well as humanities, social science and other discipline research and timely disbursal of grants. For effectively regulating and promoting the quality research at MPhil/PhD level, the UGC Regulations should evolve mechanisms ensuring entry of candidates having sound research aptitude, rigorous training of research students in undertaking quality research, monitoring the quality of research and mitigate repetitive research.

Keywords : Regulation, Promotion, Quality, Research, the University Grants Commission

Introduction

Institutes of higher learning perform functions such as teaching, research, consultancy and training. Out of these teaching and research constitute the core (Thakur, 2006 and Kumar, 2015). Through research and teaching, the institutes create, evaluate and bring about advances

in knowledge and culture (Government of India, 2009). In India teaching has remained core activity of the institutions of higher learning especially in colleges. It is only recently that the role of research has been recognized particularly in the criteria for recruitment and promotion of teachers.

There are three major factors explaining the significance of research. First, teaching and research are complimentary to each other. Research not only improves the quality of teaching but also apprise the teachers to new and emerging developments taking place in the concerned area of study. Secondly, in the era of knowledge-based economies, the role of research is well established. The institutes of higher learning through undertaking research and development activities cater to the "high demand for science, technology, and innovation as the foundations of a knowledge-based economy" (Salem, 2014). India-a developing country also aims to thrive on knowledge as a source of growth for emerging as an economic power. The National Knowledge Commission set up in 2005 by Government of India in its *Report to the Nation (2006-09)* has aptly documented the relevance of undertaking quality research in India by stating, "As India seeks to transform itself into a knowledge society, reviving the culture of research and innovation becomes all the more important. High quality research in all frontiers of knowledge is essential to achieve long term competitive advantage." (Government of India, 2009, p. 206). Thirdly, significance of research is reiterated by the various university ranking surveys assigning maximum weigthage to research indicators (varies from 30-60%). Institutes producing good quality research based on citation indexes garner higher scores hence achieving higher ranks as well. Ranking has a cascading effect on students being influenced to seek admissions in particular institutes (The Guardian, 2013; Bhattacharya, 2014; Downing and Ganotice, 2017) and high ranked universities attracting quality faculty (The Guardian, 2014).

In brief, undertaking quality research, not only help the institutes in contributing to the existing body of knowledge but also improves the quality of teaching and their ranking.

Notwithstanding, the increasing role of research, its quality has remained mediocre in India (National Knowledge Commission, 2009; Palshikar, 2010; Ghuman, 2013; The Hindustan Times, 2013; The Indian Express, 2014; British Council, 2014). It is also evident from status of research in India.

Status of Research in India

The status of research in India can be examined under two heads: (i) status of research in science and technology; and (ii) status of research in social sciences.

(i). Status of Research in Science and Technology

In science and technology, India has produced 112009 research papers in the year 2014 against 62955 in the year 2009 registering compound annual growth rate of 13.9%. In spite of this impressive achievement, the absolute number of papers published by the Indian scholars is much below that of countries like the US, China, the UK, Japan etc. India's contribution to published research in science and technology in the world increased from 3.1% in 2009 to 4.8% in the year 2014 (Government of India, 2016).

India on account of quality of research lags behind. The share of Indian Journals in Science and Technology indexed in SCOPUS was mere 1.86% in 2014.

On the basis of citation parameter (-showing academic impact of publication), the situation has witnessed an improvement. India's annual citation count as share of the world's citation count for the period 2009-14 has increased from 2.5% in the year 2009 to 3.7% in the year 2014. Use of published research in patents (Patent Citation) is another criterion exhibiting the high utility and academic impact of the research. India contributed merely 2.9% as annual amount of patent citation as share of world's amount of patent citation for the period 2009-2014 which is very low as compared to other countries (Government of India, 2016).

(ii) Status of Research in Social Sciences

Performance of social sciences on account of publication of papers is equally impressive. The publication of papers in social sciences has experienced a steep increased. India is in top 15, ranked at number 11 out of total 160 countries for publishing 30938 papers comprising 1.9% of the total published papers across the globe from 2009 to 2014. Interestingly India's compound annual growth rate in number of social sciences papers published (11.78) is highest as far as top 15 countries are concerned during the period from 2009 to 2014.

In case of the quality research in social sciences, the performance is dismal. India runs short of having good journals in social sciences. Out of total 1992 Indian journals in social sciences, only 144 are indexed in international databases constituting only 7% of the total journals world over. Average real citation per document registered a shocking decline. The average real citation per paper which used to be at 4.57 in 2010 came down to only 0.07 in 2014. India is presently ranked at 145 in case of average real citation per document out of total 204 countries. In social sciences the academic impact and utility of research can be examined through use of social science research in policy documents of the governments comprising programme and process documents, evaluation reports of technical committees and vision documents. A perusal of policy documents of the Ministry of Human Resource Development, Ministry of Rural Development, Ministry of Women and Child Development and erstwhile Planning Commission finds good number of references of social science published research in the policy content, designing, analysis and inferences. It is also found that participation of those working in the social science research arena in working groups constituted for formulation of policy documents of the Governments Departments is very low (Thorat and Verma, 2017).

The present status of the quality research in India necessitates examining the role of regulatory bodies looking after regulating and promoting quality research in Indian institutes of higher learning. It is in this backdrop that the study has been undertaken.

Organization of the Paper

The Study has been divided into three Parts. Part I deals with the objectives and research methodology of the paper. Assessment of the role of the UGC is carried out in Part II. Part III contains policy prescriptions for improving the role of the UGC in regulating and promoting quality research.

I

Objectives

The paper aims to assess the role of University Grants Commission in regulating and promoting quality research in institutes of higher learning in India and suggest policy prescriptions for improving the effectiveness of the UGC to promote quality research.

Research Methodology

The role of the UGC in regulating and promoting research has examined by covering (i) various research schemes funded by the UGC for institutions, faculty members and research students and (ii) the regulations adopted by the UGC for maintaining standards of quality of research in M.Phil/Ph.D programmes.

Role of research schemes has been assessed through parameters namely awareness about the schemes and efficacy of the schemes in regulating and promoting quality research. In case of M.Phil/Ph.D programmes, the study has focussed on ascertaining the awareness and compliance of UGC (Minimum Standards and Procedure for Awards of M.Phil/Ph.D. Degree), Regulations 2009 (-also referred to as UGC Regulation, 2009 in the later text) by institutes of higher learning; and efficacy of these regulations in monitoring quality research at PhD level. UGC Regulations, 2009 have been superseded by newly enacted UGC

(Minimum Standards and Procedure for Awards of M.Phil/Ph.D. Degree), Regulations 2016 (- referred to as UGC Regulation, 2016 in the later text). The study mainly covers UGC Regulations, 2009 as most of the Indian institutes of higher learning have yet to adopt UGC Regulations, 2016 due to its enactment in July 2016 by the UGC. However, perceptions of respondents regarding ability of UGC Regulations 2016 for better regulating quality research at M.Phil/PhD level have also been sought.

The study mainly uses primary data. Primary data has been collected from a total of 219 respondents through interview schedule. Out of 219 respondents, 38 are faculty members including Deans, Chairpersons, Directors, Principal Investigators and Coordinators of the UGC schemes and Presidents of Teachers' Associations. Remaining 181 are research students enrolled for M.Phil, Ph.D. and Post-Doctoral programmes at Panjab University, Chandigarh.

Among faculty members, 19 respondents are the recipients of different UGC schemes. Remaining respondents are associated with the administration of the schemes in different capacities. The Schemes received by the institute and the faculty members are namely, Special Assistance Programme, UGC Basic Science Research Start Up Grant, Major Projects, Minor Project, and Centre with Potential for Excellence in Particular Area (CPEPA) in "Application of Nanomaterials Nanoparticles and Nanocoposites" and "Cultural Fixation on 'honour': A Gender Audit of Punjab and Haryana".

Out of 181 research students, 168 are enrolled in PhD, 10 in M.Phil and 3 in Post-Doctoral programmes.

Selection of Panjab University as a Locale of Study

Panjab University has been selected on account of its highest ranking among Indian institutes of higher learning in the Times Higher Education Asian University Ranking for the year 2015 and the Times Higher Education World University Ranking 2014-15 owing to getting good scores in the research category.

The University is one of the oldest in India set up in 1882. It has 78 teaching and research departments and 15 Centers/Chairs for teaching and research at the main campus located at Chandigarh.

II

UGC's role in Regulating and Promoting Quality Research: An Assessment

The UGC is the major and oldest regulatory body out of around 18 regulatory bodies for higher education in India. Other regulatory bodies are field specific like All India Council for Technical Education for technical education, Bar Council of India for legal studies, Medical Council of India for medical sciences. The jurisdiction of UGC encompasses maximum of the streams. Set up in 1956 by an Act of the Parliament, besides being a funding agency, the mandate of UGC includes determining and maintaining standards of teaching, research and examination in higher education India. For promoting and regulating research, UGC has introduced many schemes for institutes and individual researchers.

As mentioned in research methodology, the assessment of UGC's role in regulating and promoting quality research is undertaken by covering (i) UGC research schemes promoting and regulating quality research, and (ii) regulations adopted by the UGC for maintaining standards of M.Phil/Ph.D programmes.

1. Regulation and Promotion of Quality Research through Schemes

The UGC funds around 20 schemes for regulating and promoting research for institutions, faculty members, and researchers. The major schemes of the UGC for institutes include Universities with Potential for Excellence, Colleges with Potential for Excellence; Centre with Potential for Excellence in a Particular Area (CPEPA); Establishment of New Centres/ Institutes; Centre for the Study of Social Exclusion and Inclusive Policy (CSSEIP) and Special Assistance Programme (SAP)- comprising three levels namely (i) Centre of Advanced Study (CAS) , (ii) Department of Special Assistance (DSA) and Departmental Research

Support (DRS). In case of faculty, the UGC has introduced schemes such as Development Grant for strengthening of infrastructure in colleges and University Science Departments; Faculty Research Promotion Scheme; Major and Minor Research Projects for Teachers; Research Awards/Research Scientists; Emeritus Fellowships; Research Workshops/Seminars/Symposia and Conferences; Incentivisation of Teachers, Subject/Discipline-based Association for Organization of various Academic and Research Activities; Basic Scientific Research in Universities; Networking Research Centres: Summer-Winter Schools; Start up Grant for Newly Recruited Faculty; and One Time Grant to teachers under Basic Scientific Research Programme. In the most of the cases, reports are submitted at the end of the schemes. In many cases mid-term reviews are also undertaken. For research students the UGC funds Research Fellowships for undertaking research through M.Phil/Ph.D and Post Doctoral programmes.

Panjab University has received research grants under many UGC schemes. Details about major UGC grants received by the University under various UGC schemes between 2010-11 to 2013-14 are given in Table 1.

Table 1
List of UGC Schemes Availed/Being Availed by the University and Status of Grants

Sr. No.	**Project Name**	**Period (dd.mm.yy)**	**Grant received in 2010-11 (in rupees)**	**Grant received in 2011- 12 (in rupees)**	**Grant received in 2012-13 (in rupees)**	**Grant received in 2013- 14 (in rupees)**	**Total Grant received (in rupees)**
i.	DRS in Zoology	01.04.06 to 31.03.11	575971	727607			1303578
ii.	DRS in Zoology	01.04.07 to 31.03.12	519049				519049

iii.	CAS-VI in Geology	01.04.06 to 31.03.11	907168				907168
iv.	DRS in Economics	01.04.07 to 31.03.12	444201	304529			748730
v.	CAS in Pharmacy	2006-11	505455				505455
vi.	DSA in Bio-Physics	01.04.09 to 31.03.14	347939	452209	4631464		5431612
vii.	CAS in Chemistry	01.04.07 to 31.03.12	435894	460358			896252
viii.	DRS-III in Education	01.04.07 to 31.03.12	113307	113815			227122
ix.	DRS-II in Botany	01.04.07 to 31.03.12	470170	330901	464984		1266055
x.	CAS-I in Physics	01.04.08 to 31.03.13	431503	441303	459904		1332710
xi.	CSSEIP	01.04.07 to extended up to 12th plan 31.3.2017	0	0	0	0	0
xii.	DSA-I in Biotechnology	01.04.07 to 31.03.12	358988	343749			702737
xiii.	CAS-I in Sociology	01.04.07 to 31.03.12	609284	364370			973654

xiv.	DRS-I in Bio-Chemistry	01.04.09 to 31.03.14	277885	1172305			1450190
xv.	DRS-I Microbiology	01.04.09 to 31.03.14	575257	412537	899761		1887555
xvi.	DSA-III in Pol. Science	01.04.09 to 31.03.14	335234	1807797			2143031
xvii.	CAS-I in Geography	01.04.09 to 31.03.14	605523	5600000	341685		6547208
xviii.	CAS-V in Mathematics	01.04.10 to 31.03.16	725000	486444	572500	5750000	7533944
xix.	CAS-I, in Anthropology	01.04.11 to 31.03.16	475000	359358			834358
xx.	DSA in Statistics	01.04.10 to 31.03.15	1756415	478291			2234706
xxi.	DRS-I, in Chemical Engineering	01.04.11 to 31.03.16	5490000				5490000
xxii.	DRS-III, in University Business School	01.04.11 to 31.03.16	640000				640000
xxiii.	DRS-I in English	01.04.11 to 31.03.16	1210000	447019			1657019
xxiv.	CAS VII in Geology	01.04.12 to 31.03.17	00	11020000	00		11020000
xxv.	CAS II in University	01.04.12 to	790000				790000

	Institute of Pharmaceutical Sciences	31.03.17					
xxvi.	DRS-I in University Institute of Engineering and Technology	01.04.12 to 31.03.17		3560000			3560000
xvii.	DRS-III in Botany	01.04.13 to 31.03.18	00	00		540000	540000
xviii.	DRS-II in Biotech	01.04.13 to 31.03.18				200000	200000
xxix.	CPEPA in "Application of Nanomaterials Nanoparticles and Nanocoposites"	18.01.12 to 17.01.17		17750000			17750000
xxx.	CPEPA in "Cultural Fixation on "honour" A Gender Audit of Punjab and Haryana	18.01.12 to 17.01.17		9250000			9250000

(Source: Panjab University, 2014)

During the last four years the university departments undertook various research projects funded by the UGC amounting Rs. 44151590. Presently 38 projects funded by the UGC are in progress having Rs. 21267133 as grant from the UGC.

The assessment of the UGC schemes promoting and regulating quality research has been undertaken in the following manner:

(i).Awareness about the Schemes

The data about the awareness about the UGC schemes promoting and regulating quality research has revealed encouraging trend as all the respondents consisting of those receiving or not receiving grants from UGC are aware about the UGC schemes (See Table 2).

Table 2
Awareness about the Schemes

Items	Yes	No
Are you aware about the schemes of the UGC for regulating and promoting quality research in institutes of higher learning	38 (100%)	00 (00%)

(Figures in parentheses are percentages)

(ii).Efficacy of the Schemes

The UGC is offering schemes for promoting and regulating quality research, most of the respondents (81.57%) have opined that through schemes the UGC has not been fully successful in promoting and regulating quality research (See Table 3).

Table 3
Efficacy of UGC Schemes in Regulating and Promoting Quality Research

Items	Yes	No
Do you think through these schemes UGC is effectively promoting and regulating quality research in institute of higher learning?	07 (18.43%)	31 (81.57%)

(Figures in parentheses are percentages)

(iii). Factors Constraining the UGC in Regulating and Promoting Effectively Quality Research through Schemes

Around 82% of the respondents stating UGC not being fully effective in regulating and promoting quality research through schemes have listed diverse reasons. Each respondent has provided multiple views in regards to factors affecting the effectiveness of the UGC schemes. Some views have drawn major support in the form of higher percentages, the remaining have found few takers. The constraining factors are discussed as under:

a) Cumbersome and Time Consuming Application Process

The process entails online applying for schemes followed by the interaction meeting with the subject experts at the UGC head quarters in New Delhi. With the introduction of online application process, however, the paper work has reduced but the majority of respondents (61.29%) still feels that the process of applying grants is cumbersome and time-consuming (See Table 4). During the field visits, few teachers complained that even after two years of applying under a UGC scheme they are still awaiting the result. According to faculty members the repeated attempt to contact UGC faculty members failed to yield satisfactory response. One of the recipients of research schemes also complained that while appearing for the interview the UGC did not invite experts in the concerned subject and the applicant had to appear before the experts from allied discipline. There was no help desk arranged by the UGC where applicants queries can be answered. The lack of proper arrangements by the UGC is also revealed by one of the respondents by opining that during the interaction meetings the sitting arrangements is also not adequate as the number of applicants is large.

b) Inadequate Number of Schemes and Amount Offered under Schemes

Higher education sector in India has undergone tremendous expansion and diversification. India is among the top countries in the world on account of number of institutes and students enrolment. A large number of schemes have been introduced by UGC for various disciplines but the number is still not sufficient considering the expansion and diversification of higher education in India. 38.7% of the respondents are dissatisfied with the number of UGC schemes. Same is the case about the amount offered under the UGC schemes. 25.80% of the respondents stated that amount offered under schemes is insufficient (See Table 4).

c) Disciplinary Bias in Providing Grants

The disciplinary bias in terms of awarding schemes to sciences and other discipline is a disturbing trend as far as the development of research in disciplines in other than sciences is

concerned. According to an estimate, the UGC granted Rs. 397.82 crore for major and minor research projects in pure sciences against just Rs. 131.38 crore for social science research for the period 2008–13. (Thorat and Verma, 2017). Thus share of grants provided to sciences constitute around 75% of the total grants. Table 4 suggests that 54.83% of the respondents have supported this view.

d) Lack of Mechanisms Examining Regularly the Progress of the Work

The progress of research can be assessed at two stages namely at the end of the project or making the progress measurement yardstick part of the application. On both account the required mechanisms for measuring the progress of quality of research are not adequately articulated. Around 48% of the respondents revealed that there is an absence of mechanism to ensure the quality outcome of the UGC schemes (See Table 4).

Secondly, having inbuilt mechanism of clearly stated procedure for examining the progress of research work being undertaken during schemes helps in a big way regulating the quality research. The respondents (38.70%) found that the absence of such procedures is another constraining factor in UGC schemes not being fully effective in regulating and promoting quality research (See Table 4).

e) Delay in Releasing Grants by the UGC

The major reason for dissatisfaction of respondents (74.19%) with the UGC research schemes is that the UGC does not release funds on time (See Table 4). The respondents opined that the funds for one financial year are usually released at the fag-end and are left with short span of time to utilize these funds. Due to paucity of time, the quality of activities being undertaken during the schemes suffers. Equipment and stationary are not bought on time hindering the research work. Those drawing salaries under the schemes are also at receiving end as salaries

are not paid regularly. Field visits by the researchers are also delayed in the absence of release of funds.

Table 4
Factors Constraining the UGC in Regulating and Promoting Effectively Quality Research through Schemes

Sr. No.	Factors	Number of Respondents
i.	Number of schemes is not sufficient	12 (38.70%)
ii.	Amount offered under these schemes is not sufficient	8 (25.80)
iii.	Cumbersome and time consuming procedure of application	19 (61.29%)
iv.	Delay in receiving grants	23 (74.19%)
v.	Absence of quality assurance mechanism	15 (48.38%)
vi.	Absence of clearly stated procedure for examining the progress	12 (38.70)
vii.	science disciplines are better placed than social science, humanities and other disciplines as far as number and amount of schemes for promotion of research are concern	17 (54.83)

(Figures in parentheses are percentages)

2. Regulating and Promoting Quality Research in MPhil/PhD Programme

In case of M.Phil/PhD programme, the UGC has adopted UGC (Minimum Standards and Procedure for Awards of M.Phil/Ph.D. Degree), Regulations 2009 which were superseded by UGC (Minimum Standards and Procedure for Awards of M.Phil/Ph.D. Degree) Regulations, 2016. UGC Regulations 2009 consist of guidelines pertaining to eligibility criteria for faculty to be recognized as research supervisor both for M.Phil and Ph.D, procedure for admission, allocation of supervisor, course work and evaluation and assessment methods for M.Phil/Ph.D. UGC Regulations 2016 besides including the provisions of UGC Regulations, 2009 also contain guidelines relating to setting up of Research Advisory Committee to review research proposal and finalize the topic of the research, application of plagiarism software on

thesis, and academic, administrative and infrastructure requirement to be fulfilled by the colleges for getting recognition for offering M.Phil/Ph.D. programme.

Panjab University has also implemented the UGC (Minimum Standards and Procedure for Awards of M.Phil/Ph.D. Degree) Regulations 2009. The processes of adopting Regulations, 2016 is in progress.

Assessment of the UGC in regulating and promoting quality research in programmes such as M.Phil/PhD is undertaken as followed:

(i)Awareness about UGC Regulations, 2009

Most of the respondents among research students and faculty members are aware about UGC Regulations, 2009. Table 5 suggests that awareness among research students is as high as 82.32%. In case of faculty members, the awareness level is 100% (See Table 4).

Table 5
Awareness about UGC Regulations, 2009

Items	Research Students		Faculty members	
	Yes	No	Yes	No
Are you aware about UGC Regulations 2009?	149 (82.32)	32 (17.68)	38 (100%)	00 (00%)

(Figures in parentheses are percentages)

(ii). Implementation/Compliance of the UGC Regulations, 2009

Most of the provisions of the UGC Regulations are implemented by the University. 100% of the respondents have confirmed that eligibility criteria prescribed in the regulations was adhered by the Panjab University during the admission process. In case of implementation of other provisions by the University, the research students' opinion varies. This is due to the inter-departmental variations. The issue of non compliance were prominent in case of number of seats mentioned by the institution in the advertisement for admission, procedure adopted

for allocation of supervisors and conducting pre M.Phil/Ph.D presentation prior to the submission of thesis which is open to all faculty members and research students. Around 46% of the students opined that number of seats was not mentioned by the University in the advertisement for admission. However it is found that the present prospectus for M.Phil/PhD admission for the session 2017-18 contains the details about the available number of seats in every Department. In regard to allocation of supervisors, 55.24% of the research students revealed that the allocation of the supervisor are not done in accordance with the procedure prescribed in the UGC Regulations and was left to the students and concerned teachers. 22.65% of the research students have revealed that M.Phil/Ph.D presentation prior to the submission of thesis are also not conducted by the Departments (See Table 6).

Table 6
Implementation and Compliance of UGC Regulations, 2009: Research Students' Perspective

Sr. No.	Item	Yes	No	Don't Know
i.	Total number of seats mentioned by the institution in the advertisement for admission	98 (54.18%)	83 (45.85%)	NA
ii.	Admission as per UGC Regulations, 2009	181 (100%)	00 (00)	NA
iii.	Interview conducted as part of the admission process	158 (87.30%)	23 (12.70)	NA
iv.	Interview Board discussed your research interests during the interview	136 (86.08%)	22 (13.92%)	NA
v.	Institutions follow the National/State reservation policy during admission	75 (41.43%)	12 (6.62%)	94 (51.93%)
vi.	Allocation of the supervisor was made by the institute as per UGC Regulations, 2009	81 (44.75%)	100 (55.24%)	NA

vii.	Got supervisor as per the area of interest	167 (92.23%)	14 (7.73%)	NA
viii.	Undertook course work after getting admission in M.Phil./Ph.D. Programme	181 (98.90)	00 (00)	NA
ix.	The duration of the course work minimum of one semester	169 (93.37)	12 (6.62%)	NA
x.	Course on research methodology taught during course work	174 (96.13%)	07 (3.87%)	NA
xi.	The course work examination was passed before starting work on M.Phil/Ph.D. thesis	172 (95.03%)	09 (4.97%)	NA
xii.	The Institute conducted pre M.Phil/Ph.D presentation prior to the submission of thesis which is open to all faculty members and research students	122 (67.40%)	41 (22.65%)	18 (9.95%)
xiii.	The Institute ensured that the student incorporated the suggestions and feedback received during the presentation in the M.Phil/Ph.D thesis	104 (93.44)	9 (7.38%)	9 (7.38%)
xiv.	The Institute made it necessary for MPhil/PhD students to publish a research paper in a referred Journal before the submission of the thesis	157 (86.74%)	7 (3.86%)	17 (9.39%)
xv.	Overall Compliance	130 (71.82%)	51 (28.18%)	NA

(Figures in parentheses are percentages)

Both research students (72%) and faculty members (87%) have expressed agreement with overall compliance suggesting satisfactory compliance to UGC Regulations, 2009 by the University (See Table 6 and Table 7).

Table 7
Implementation and Compliance of UGC Regulations, 2009: Faculty members' Perspective

Items	Yes	No
Does your institute implement all the guidelines/provisions of UGC Regulations, 2009?	33 (86.84)	5 (13.16%)

(Figures in parentheses are percentages)

(iii). Efficacy of UGC Regulations, 2009 in Regulating and Promoting Quality Research

The efficacy of the UGC Regulations, 2009 in regulating and promoting quality research in M.Phil/PhD programmes garnered mixed responses. In case of research students, 51% of the research students opined that UGC Regulations, 2009 are effectively regulating and promoting quality research in M.Phil/PhD programmes against 49% opposing this view. However in case of faculty members, 63.16% of the respondents expressed opinion reflecting the ineffectiveness of the UGC Regulations, 2009 in promoting and regulating quality research in M.Phil/Ph.D. programmes (See Table 8).

Table 8
Efficacy of UGC Regulations, 2009 in Regulating and Promoting Quality Research

Items	Research Students		Faculty members	
	Yes	No	Yes	No
Do you think UGC Regulations 2009 effectively regulate and promote the quality of M.Phil/ Ph.D.?	92 (50.82%)	89 (49.18%)	14 (36.84%)	24 (63.16%)

(Figures in parentheses are percentages)

(iv). Factors Constraining UGC Regulations, 2009 in Regulating and Promoting Quality Research in M.Phil/Ph.D. Programmes

The respondents have provided multiple and diverse views on factors hindering the UGC Regulations, 2009 in promoting and regulating quality research at M.Phill/Ph.D. level which have been discussed as followed:

(a). Admission Process Failing to Ascertain Research Aptitude of the Students

The Regulations prescribes three types of entry mechanisms in the PhD Programmes namely (i) qualifying University level entrance test; (ii) National Eligibility Test (NET)/ Junior Research Fellowship (JRF) and other similar tests; and (iii) direct admission after M.Phil in case of M.Phil/Ph.D. integrated programme. Teachers working in the affiliating colleges of the University are exempted from the entrance test. In case of M.Phil the admission is undertaken through entrance exam. The data suggests that these mechanisms have not been fully successful in ascertaining research aptitude of those seeking admission in M.Phil/PhD programmes and end up not getting many good candidates for pursuing research. Around Faculty members (around 67%) and research students (41.57%) confirmed that research aptitude is not adequately factored in admission process (See Table 9). The entrance examination, however. contains some portion on research methodology but is not sufficient and adequate in assessing the research aptitude of the student. The qualifying examinations such as National Eligibility Test, Junior Research Fellowship, Graduate Aptitude Test in Engineering (GATE) and other similar tests for direct admission to the PhD programme also lack rigorous process for testing the research aptitude of the aspirants.

(b). Allocation of Supervisors not in accordance with the UGC Regulations, 2009

The UGC Regulations provide an impartial and rational process for allocation of supervisors. The process consists of three guidelines, namely, (i) students per faculty per member, (ii) the available specialization among the faculty supervisors and (iii) research interest of the student as indicated during the interview. The UGC Regulations also states, the allotment/allocation of supervisor shall not be left to individual student or teacher. However a sizeable percentage of faculty members and research students i.e. 45.83% and 52.80% respectively claimed that selection of a supervisor depends more on individual teachers and students rather than procedure prescribed in the UGC Regulations, 2009 (See Table 9).

(c). Deficiencies in Training the Researchers

Before start working on his/her thesis, a researcher has to undergo course work and clear the examination. Students are expected to study a compulsory course of research methodology and two other papers relating to the concerned discipline. The experience suggests that course work classes are not held rigorously as suggested by 50% of the faculty members and 39.32% research students. The research students also expressed dissatisfaction with the course contents, teaching pedagogy, internal evaluation and terminal examination. This is also the reason that 60.71% of the faculty members and 67.41% of the research students felt lack of training in writing quality research term paper/ synopsis/papers/thesis etc. during course work (See Table 9).

(d). Lack of Seriousness at the Stage of Approval of Synopsis

Research synopsis is a blueprint or a research design explaining in detail the idea of a problem on which the research is to be undertaken. The major contents of the synopsis include, introduction about the research problem, rationale of selecting the research problem, objectives, hypotheses/research questions, locale of the study, scope of the study, research methodology including methods of data collection, timeline for the completion of research work, proposed scheme of chapterization etc. The approval of research synopsis consists of two steps. In the first step, the researcher presents the synopsis before the Pre- Research Degree Committee (Pre-RDC) comprising faculty members and researchers of the Department. The faculty members and researchers are expected to provide their suggestions on content and quality of the synopsis. The researcher after incorporating the suggested changes in consultation with the supervisor submits the revised synopsis for presentation before the Research Degree Committee (RDC) chaired by the Dean of the respective faculty. The RDC normally suggest changes. After incorporating the necessary changes the synopsis is submitted for final approval to the Joint Research Board. The whole process needs to be

2

taken very seriously as it has a major impact on the nature and quality of research problem However, in reality, 50% of the faculty members and 31.46% of the research students opined that there is a lack of seriousness at the stage of approval of synopsis (See Table 9). Lack of healthy and constructive discussions during the synopsis presentation also came to fore. Few researchers during the informal discussions also revealed that sometimes synopsis presentation become battleground for faculty members for settling their scores. Heated discussions take place between the faculty members and in the process the quality of research suffer.

(e). Problem of Repetitive Research

The UGC Regulations do not deal with repetitive research in explicit form. Both the research students (41.57%) and faculty members (58.33%) revealed that repetitive research is constraining the UGC Regulations to be effective in promoting and regulating quality research (See Table 9). The repetitive research not only leads to lack of contribution to the existing body of knowledge but also discourages creativity, innovation and generation of new ideas. Those putting extra efforts to undertake research on new, relevant and significant research themes are also not incentivized.

Repetitive research also does not ensure value for money the UGC invest through fellowships in a research student over the period of five years during the research programmes. It is relevant to mention here that the amount of funding UGC provides under a fellowship to research student is to the tune of around Rs 20 Lakhs.

(f). Lack of Analytical Rigour in M.Phil/Ph.D Theses

Analytical rigour is important in enriching the quality of research. The analytical rigour "reflects an assessment of process quality, affording communication about the process, rather than the product, of analysis… application of precise and exacting standards... to better understand and draw conclusions... based on careful consideration or investigation" (Woods,

2007). Around 63% of the faculty members and 27% of the research students felt the lack of mechanism ensuring analytical rigour of the research work being undertaken during M.Phil/Ph.D. programme is also a major factor constraining the efficacy of UGC Regulations, 2009 in promoting and regulating quality research (See Table 8). Many research students ascribe it to lack of training in conducting quality research and bringing analytical rigour in the findings of the study.

(g). Mechanism in Place to Check Plagiarism

The University follows the practice of applying software called Turnitin on PhD theses for checking plagiarism. However, 29.16% faculty members and 17.97% of the research students revealed that there is no uniform mechanism to check plagiarism as inter-department variation in using the software exists (See Table 9). During the survey it is also found that the research students lack awareness about using the software and interpreting the results emerging from the application of the software. The efficacy of the application of the software is also doubted because the software only shows the similarity in the contents of thesis with other existing sources and it becomes very complex to determine the plagiarized content. It was also observed that the University does not have a policy defining the permissible limits for similarity of content. In its absence, the supervisor, research students and the faculty members are always in a fix whether to allow the thesis for submission or not. In one Department a thesis having 70% similarity was approved for submission whereas in few Departments the supervisors and faculty members emphasize on bringing similarity percentage to a minimum level. Thus effective use of plagiarism software remains a challenge prone to different interpretations.

(h). Absence of Grievance Rederessal Mechanism for Complaints of Research Scholars

The UGC Regulations, 2009 do not provide rederessal mechanism for resolving complaints of research students faced during the completion of their research work. In the University, in

case of any complaint, the research students may contact the Chairpersons of their respective Departments, offices of Dean Students Welfare, Dean of the Faculty, Dean University Instruction, Vice-Chancellor and the Research Promotion Cell. But the University does not have a specified cell looking after disposal of complaints of research student in a time-bound manner. The UGC Regulations, 2009 not having any provision on setting up grievance rederessal mechanism for research students is also a reason (See Table 9).

Table 9
Factors Constraining UGC Regulations, 2009 in Regulating and Promoting Effectively Quality Research in M.Phil/Ph.D. Programmes

Sr. No.	Reason	Faculty members	Research Students
i.	Research aptitude is not adequately factored in admission process	16 (66.66%)	37 (41.57%)
ii.	Course work classes are not held regularly and seriously	12 (50%)	35 (39.32%)
iii.	Lack of training in writing quality research term paper/ synopsis/papers/thesis etc. during course work	17 (60.71%)	60 (67.41%)
iv.	Selection of a supervisor depends more on individual teachers and students rather than procedure prescribed in UGC Regulations, 2009	11 (45.83%)	47 (52.80%)
v.	Repetitive research work ignoring contemporary relevance of research problems	14 (58.33%)	37 (41.57%)
vi.	Lack of seriousness at the stage of approval of synopsis	12 (50%%)	28 (31.46%)
vii.	Lack of analytical rigour in M.Phil/Ph.D thesis	15 (62.50%)	24 (26.96%)
viii.	No Mechanism in place to check plagiarism	7 (29.16%)	16 (17.97%)

ix.	Absence of grievance rederessal mechanism for complaints of research scholars	11 (45.83%)	41 (46.06%)

(Figures in parentheses are percentages)

(v). Awareness about UGC Regulations, 2016

The awareness about the newly enacted UGC Regulations, 2016 superseding UGC Regulations, 2009 is found high among both the research students (69.61%) as well as faculty members (92.10%) as shown in Table 10.

Table 10
Awareness about UGC Regulations, 2016

Items	**Research Students**		**Faculty members**	
	Yes	**No**	**Yes**	**No**
Are you aware of UGC (Minimum Standards and Procedure for Awards of M.Phil/Ph.D. Degree), Regulations 2016 which has superseded UGC Regulations 2009?	126 (69.61%)	55 (30.38%)	35 (92.10)	3 (7.90%)

(Figures in parentheses are percentages)

(vi). Efficacy of UGC Regulations, 2016

The process of adopting the UGC Regulations, 2016 is in progress. Perceptions of research students as well as faculty members were sought in relation to the provisions of UGC Regulations, 2016 in regulating and promoting quality research in M.Phil/Ph.D. programmes in a better manner as compared to the UGC Regulations, 2009. The data suggest that though high percentage of research students (87.29%) favoured that UGC Regulations, 2016 provide better mechanism to promote and regulate quality research in M.Phil/Ph.D programme but the only 31.57% of faculty members agreed to this view. In case of faculty members, higher percentage i.e. 42.10% conveyed indecisiveness in commenting on the efficacy of UGC Regulations, 2016 in achieving desired outcome (See Table 11).

Most of the respondents specially the faculty members opined that the the UGC Regulations, 2016 in comparison to UGC Regulations, 2009 will not make much difference in overcoming issues emerging out of the implementation of the earlier regulation in regulating and promoting quality research in M.Phil/Ph.D. programme. The respondents also opined that the success of the UGC Regulations, 2016 rest on how the institutes implement the regulation religiously in their true spirit.

Table 11
Efficacy of UGC Regulations, 2016

Items	**Research Students**			**Faculty members**		
	Yes	**No**	**Can't Say**	**Yes**	**No**	**Can't Say**
Do you think UGC Regulation 2016 will be able to better regulate and promote the quality research at M.Phil/Ph.D. level?	158 (87.29%)	15 (8.28%)	08 (4.84%)	12 (31.57%)	10 (26.31%)	16 (42.10%)

(Figures in parentheses are percentages)

III

Policy Prescriptions

The performance of the UGC in regulating and promoting quality of research is mix at best. There are large numbers of areas which need improvement. Policy prescriptions are suggested for making the UGC more effective in regulating and promoting the quality of research. Policy prescriptions are discussed under two heads.

1. **Policy Prescriptions for Improving the Mechanisms of the UGC Schemes**

(i) Organizing Information Dissemination Workshops about the Schemes

The UGC has a large number of schemes relating to research. The information about these schemes is not widely disseminated particlualry in the colleges located in rural areas. With a view to inform all the institutions and teachers about the schemes it is suggested that the UGC

through the networks of its Human Resource Development Centres should organize dissemination workshops about the schemes. Around 57.89% of the respondents have also opined in favour of organizing information dissemination workshops (See Table 12).

(ii) Increasing the Number of Schemes and Amount offered under Schemes

The number of universities and colleges has grown tremendously in India. Moreover higher education has diversified overtime. In the light of these, it is suggested that the UGC should increase both the schemes and funds allocated under scheme. Around 45% of the faculty members opined that the number of schemes be increased. Further 34% also stated that the amount offered under the schemes should be enhanced (See Table 12).

(iii) Making the Application Process User Friendly

The application process under various UGC schemes must be user friendly and disposal of application also be made time-bound, the suggestion made by 65.57% of the respondents (See Table 12). The UGC should also ensure that the process of interaction meetings of applicants with the experts/selection committees be made time-bound. The UGC should also ensure adequate arrangements for the applicants during the interaction meeting. Setting up of help desk for applicants' queries can also be of immense help for the applicants.

(iv) Promoting inter-dsiciplinarity and institutional collaboration under UGC Schemes

Many international funding agencies recognizing the significance of institutional collaborations and inter-disciplinarity have started encouraging the research teams consisting of multiple institutions and being drawn from multiple disciplines. These parameters have a strong bearing on the quality of research. In case of many of the UGC schemes like Major and Minor Research Projects for teachers, inter-disciplinary relevance of the proposal is an integral part under the details of the project proposal. In the objectives of the scheme of Special Assistance Programme (SAP), institutional collaboration is also factored in. The data has found that the respondents have opined that the UGC needs to do more in regard to

promoting inter-disciplinary (60.52%) and multi-institutional (44.73%) collaborations (See Table 12). Some of the respondents during informal discussion have suggested that while subject-specific research is also important, inter-dsiciplinarity and multi-institutional collaborations need to be made the revealing feature of the UGC schemes. For this, the UGC need to assign the number of slots or give special weightage to proposals having strong inter-disciplinary and multi-institutional underpinning in the form of research teams as well as area of research. International collaborations also need to be incentivized under UGC schemes.

(v) Having a Balanced Approach in Promoting Research

It was found during the survey that science disciplines outshine other disciplines in number of schemes and funds allocated to them. For promoting balanced growth of research in higher education, the UGC must provide equal opportunities in a proportionate manner for promotion of research in disciplines other than sciences. Around 58% of the respondents have suggested that the UGC shall follow balanced approach in promoting science as well as humanities, social science and other discipline research (See Table 12). Specially in case of language and emerging disciplines, the respondents have strongly felt the need of introducing more schemes for promotion of research.

(vi) Adopting Quality Assurance Mechanisms

The UGC schemes lack quality assurance mechanisms. Quality of research can be improved by adopting two strategies. First is by devising strong and clearly stated system of monitoring the progress of research under all the schemes as suggested by 65.78% of the faculty members (See Table 12). The procedure shall consist of devising short term goals every six months by the recipients of the schemes in terms of activities to be undertaken in the said period. This is to be followed by time-bound peer review process by the UGC experts. Feedback and corrective measures in case of non-achievement of goals also be suggested by the experts. It is relevant to mention here that the UGC does follow similar system of examining the progress

in many of the schemes. UGC shall adopt this practice in case of all the schemes. Another mechanism namely making dissemination workshops for sharing results with the stakeholders compulsory can also help in improving the quality and relevance of research schemes.

The performance of UGC schemes also be linked with the quality outcome of the research work. This is necessary for ensuring value for money as millions of rupees are spent by UGC through schemes. Even during the application process, the quality and winnability of the research proposal if linked with proposed outcome in the form of publishing of research in high impact factor/H indexed/blind peer-reviewed journals of repute and patents will go a long way in selecting good research proposal. 52.62% of the respondents have supported this view (See Table 12).

(vii) Timely Disbursal of Grants

Majority of the respondents (71.05%) have suggested that the UGC needs to ensure timely disbursal of grants offered under various schemes (See Table 12). The UGC needs to make efficient use of e-governance mechanisms for disbursal of grants. This will not only ensure timely release of the grants but will also provide those associated with the schemes necessary financial support to undertake the research activities in a more organized and productive manner.

(viii) Granting Adequate Financial Autonomy to Principal Investigators/ Coordinators

One of the coordinators of UGC schemes during the survey complained about lack of adequate financial autonomy granted to those responsible for utilizing grants under UGC schemes (See Table 12). The UGC under the schemes sanctions fixed amount to be utilized under one budgetary head. The rigid rules formulated by the UGC undermines the financial autonomy of the Principal Investigators/ Coordinators as many a times they face situations in which in one budgetary head the amount is found to be inadequate and in the other budgetary head being surplus. The Coordinator stated, “the UGC needs to provide greater flexibility to

Principal Investigators/ Coordinators to re-appropriate budget from one head to another". This practice will help in optimal utilization of finances offered under the UGC schemes.

Table 12
Policy Prescriptions for Improving the Mechanisms of UGC Schemes in Regulating and Promoting Quality Research

Sr. No.	Suggestions	Number of Respondents
i.	Organizing information dissemination workshop about the schemes	22 (57.89%)
ii.	Making the application process user friendly	25 (65.57%)
iii.	Increasing the number of schemes	17 (44.73%)
iv.	Increasing the amount offered in schemes	13 (34.21%)
v.	Adopting measureable quality assurance mechanism in the form of publishing of research in high impact factor/H indexed/blind peer-reviewed journals of repute and patents as outcomes of research	20 (52.63%)
vi.	Strong and clearly stated system of monitoring the progress of research	25 (65.78%)
vii.	Promoting institutional collaboration in schemes	17 (44.73%)
viii.	Promoting inter-disciplinary approach in schemes	23 (60.52%)
ix.	Having a balanced approach in promoting science as well as humanities, social science and other discipline research	22 (57.89%)
x.	Timely disbursal of grants	27 (71.05%)
xi.	Financial Autonomy to the Principal Investigators/ Coordinators	1 (2.63%)

(Figures in parentheses are percentages)

2. Policy Prescriptions for Strengthening UGC Regulations, 2009 and 2016

(i) Factoring in Research Aptitude in the Admission Process

The faculty members and research students opined that the admission processes is inadequate in gauging the research aptitude of aspirants seeking admission in M.Phil/PhD programmes. The UGC must evolve mechanism in admission process to ascertain research aptitude of the

student by including research methodology subject in the entrance examination syllabus for M.Phil/Ph.D. Around 53% of the faculty members and 26% of the research students supported this view. The UGC Regulations, 2009 also permits direct entry to those having qualified NET, JRF, GATE and other similar test. These tests also need to include portions on research methodology. Another policy prescription of submitting a research proposal to the institute along with application will help a long way in determining the research aptitude of aspirants as suggested by 44.73% faculty members and 30.38% research students (See Table 13). The University has recently taken a policy decision and has started following the practice of research proposals to be submitted by the aspirants seeking admission. By incorporating these, the admission process will be able to attract and retain talented researchers.

(ii). Rejuvenating Course Work for Training Researchers

Course work as a mechanism can act as a good capacity building measure for transforming research students into future potential quality researchers. The institutes are more at fault than the UGC for failing this mechanism to train students in undertaking quality research as the findings suggests that course work classes are not organized as per the philosophy of the course work i.e. laying down the foundations for undertaking good quality work as is the practice in advanced countries. Around 45% of the faculty members and 38.12% of the research students have suggested improving the quality of course work (See Table 13). The Panjab University has recently extended the duration of course work from one semester (six months) to one year. Along with the duration, the quality of course work classes also needs improvement.

Overall the emphasis of compulsory course on research methodology should be on training research students about Research Methodology and writing quality research term papers/synopsis/papers/thesis etc, the view point put forward by 65.57% and 63.53% of the faculty members and research students respectively (See Table 13).

For making course work classes more productive, the course content, teaching pedagogy, evaluation and examination need to be revamped.

Further research is a continuous process. One time course work is not enough for providing good quality results. The research students should be encouraged from time to time to attend short-term research methodology capacity building programmes conducted by various institutes and agencies.

(iii) Incentivising Students to Undertake Research having Contemporary Relevance

Around 58% of the faculty members and 47% of the research students opined that research students be encouraged to undertake research having contemporary and social relevance (See Table 13). Neither the UGC Regulations nor the institutes have evolved mechanisms discouraging repetitive research. The UGC Regulations should issue guidelines for institutes discouraging repetitive research. Research students after admission into MPhil/PhD are required to submit the tentative title of the research to the Departmental Committees. The UGC Regulations, 2016 provides for the constitution of Research Advisory Committee for submitting research topics. During the survey, the respondents suggested that the Departmental committee before approving the topic must ensure that whether there is any scope left for undertaking research on the proposed topic. For ascertaining this, the Committee can take help from online repository namely '*Shodhganaga'* of the UGC containing submitted PhD thesis across institutions and from online available journal databases. This process will not be time-consuming as well. This practice can be only followed religiously if the UGC institutionalize this through provisions under the regulations. By doing this, UGC will be able to make the research undertaken in M.Phil/PhD programme contemporarily and socially relevant.

(iv). Making the Process of Approval of Synopsis Meticulous

3

A major segment of respondents comprising 57.89% faculty members and 46.96% of the research students suggested making the process of approval of synopsis meticulous by having thorough discussion about the synopsis among faculty members and research scholars (See Table 13). The institutions are more responsible for adopting this practice rather the UGC. Panjab University has taken some commendable steps in the form of prescribing tentative format of the synopsis in the faculty of Arts (social sciences) and also sharing the examples of how to formulate hypotheses/research questions.

(v). Monitoring of the Progress and Quality of Ph.D.

The UGC Regulations, 2009 lacks strong mechanisms for regularly examining the progress and quality of Ph.D. However in case of UGC Regulations, 2016 a provision under clause 8 (8.1.3) dealing with the constitution of Research Advisory Committee (RAC) has been made. The clause dealing with functions of the RAC states that as one of the functions the RAC shall have the responsibility of "to periodically review and assist in the progress of the research work of the research scholar". The Regulations provides for six monthly presentations of progress reports before RAC by the researchers. The Regulations also stipulates, "in case the progress of the research scholar is unsatisfactory, the Research Advisory Committee shall record the reasons for the same and suggest corrective measures. If the research scholar fails to implement these corrective measures, the Research Advisory Committee may recommend to the Institution/College with specific reasons for cancellation of the registration of the research scholar". It also provide for necessary action to be taken in case the progress is not found satisfactory. Thus the UGC Regulations, 2016 has already fulfilled two policy prescriptions suggested by faculty members and research students monitoring of the progress and quality of Ph.D. through bi-annually presentations and taking action if the progress is not found satisfactory (See Table 13).

The UGC has done its part by institutionalizing the mechanism for examining the progress and now the onus is more on institutions in religiously implementing these provisions.

(vi) Ensuring Full Compliance of the Regulations, 2009 and 2016

Table shows 5 shows variation in implementing various provisions of the UGC Regulations, 2009 such as allocation of supervisors, mentioning of seats in the advertisement for admission and conducting public presentation of PhD thesis before submission. 26.31% of the faculty members and 20.99% of the research students expressed that the UGC needs to ensure that institutes do comply with all the provisions of the UGC Regulations, 2009 (See Table 13). The survey finds that the respondents have specifically mentioned to ensure full compliance of regulations in case of two provisions i.e. allocation of supervisors (36.84% faculty members and 29.28% research students) and public presentation of the major findings of the thesis/dissertation before submission (36.84% faculty members and 34.80% research students) (See Table 13).

(vii) Dissemination of Information to the Researchers about the Regulations, 2009 and 2016

The analysis the data has revealed high percentage among faculty members and research students are aware about the UGC Regulations, 2009 and 2016 but still 39.47% of the faculty members and 25.41% of the research students have favoured dissemination of information to the researchers about the Regulations, 2009 and 2016 by distributing copies of the same at the time of admissions (See Table 13).

(viii) Ensuring Uniform and Effective Implementation of Anti-Plagiarism Software.

Though the practice of applying anti-plagiarism software specially in case of PhD thesis is followed in the University, its effective implementation is need of the hour as revealed by 50% of the faculty members and 31.49% of the research students (See Table 13). While the UGC Regulations, 2016 has included the guideline of advising the institute to use anti-

plagiarism software but it lack holistic policy in terms of using the software and interpreting the results. To clear the air, the UGC and the institutes also need to come up with a policy defining clearly the process of applying the plagiarism software along with guidelines on the permissible limits for similarity of content.

(ix) Setting up Grievance Redressal Machinery to Look after Complaints of Researchers

The UGC Regulations, 2009 and 2016 are silent on prescribing grievance rederessal mechanism for resolving the complaints of research students. Though the University has mechanisms for dealing with the complaints of research students, yet the constitution of specific machinery is missing. 34.31% of the faulty members and 41.43% of the research students has suggested that the UGC needs to ensure that the institute set up special grievance rederessal cell for research students to dispose their complaints (See Table 13).

Table 13
Policy Prescriptions for Strengthening UGC Regulations, 2009 and 2016 in Regulating and Promoting Quality Research

Sr. No.	Suggestions	Faculty members	Research Students
i.	Evolving mechanism in admission process to ascertain research aptitude of the student by including research methodology subject in the entrance examination syllabus for M.Phil/Ph.D	20 (52.63%)	47 (25.96%)
ii.	Submitting a research proposal to the institute along with application	17 (44.73%)	55 (30.38%)
iii.	Ensuring regularity and sincerity in holding course work classes	17 (44.73%)	69 (38.12%)
iv.	Rigorous training about Research Methodology and writing quality research term papers/synopsis/papers/thesis etc during the course work.	25 (65.57%)	115 (63.53%)
v.	Strictly adhering to procedure mentioned in Regulation 2009 and 2016 for allocation of supervisor	14 (36.84%)	53 (29.28%)

vi.	Encouraging students to undertake research having contemporary and social relevance	22 (57.89%)	85 (46.96%)
vii.	Making the process of approval of synopsis meticulous by having thorough discussion about the synopsis among faculty members and research scholars	19 (50%)	57 (31.49%)
viii.	Monitoring of the progress and quality of Ph.D. through bi-annually presentations	21 (55.26%)	45 (24.86%)
ix.	Mid-term review of the Progress of Ph.D. thesis by outside experts	17 (44.73%)	65 (35.91%)
x.	Taking action if the progress is not found satisfactory	19 (50%)	39 (21.54%)
xi.	Public presentation of the major findings of the thesis/dissertation before submission	14 (36.84%)	63 (34.80%)
xii.	Ensuring full compliance of the Regulations, 2009 and 2016	10 (26.31%)	38 (20.99%)
xiii.	Dissemination of information to the researchers about the Regulations, 2009 and 2016 by distributing copies of the same at the time of admissions	15 (39.47%)	46 (25.41%)
xiv.	Uniform and effective implementation of anti-slagiarism Software	19 (50%)	57 (31.49%)
xv.	Setting up grievance redressal machinery to look after complaints of researchers	13 (34.21%)	75 (41.43%)

(Figures in parentheses are percentages)

References

Bhattacharya, Alok (2014), "Excellence in Universities", *Proc Indian Natn Sci Acad*, Vol. 80, No.2. pp.185-86

British Council (2014), *Understanding India: The future of higher education and opportunities for international cooperation,* British Council India, New Delhi.

Downing, Kevin and Ganotice, Fraide A Jr (2017), *Word University Rankings and the Future of Higher Education*, IGI Global Press, Pennsylvania.

Ghuman, B.S. (2013), "Time for a Quality Check: India Losing out in Race for Quality Education", *The Tribune,* September 24. Online available at http://www.tribuneindia.com/2013/20130924/edit.htm#4, accessed on June 08, 2017.

Government of India (2008), *Report of the Committee to Advise on Renovation and Rejuvenation of Higher Education,* Department of Higher Education, Ministry of Human Resource and Development, New Delhi 1st March.

Government of India (2009), *Report to the Nation 2006 – 2009*, National Knowledge Commission, New Delhi, March.

Government of India (2016), *International Comparative Performance of India's Research Base (2009-14): A Bibliometric Analysis*, Department of Science and Technology, Ministry of Science and Technology, Government of India, New Delhi.

Kumar, M. J. (2015), "Global University Rankings: What should India do?", *IETE Technical Review*, Vol.32, No.2.

Palshikar, Suhas (2010), "Quality in Higher Education: Complex Issues, Superficial Solutions", *Economic and Political Weekly*, Vol. 45, No. 20.

Panjab University (2014), *NAAC Re-Accreditation 2014 Self Study Report Volume I*, Panjab University, Chandigarh.

Salem, Mohamed Imam (2014), "The Role of Universities in Building a Knowledge-Based Economy in Saudi Arabia", *International Business & Economics Research Journal*, Vol. 13, No. 5, pp. 1047-1056.

Thakur Ramesh (2006), "The quality of India's higher education", *The Hindu*, December 09. Online available at http://www.thehindu.com/todays-paper/tp-opinion/the-quality-of-indias-higher-education/article3031530.ece, accessed on June 08, 2017.

The Guardian (2013), "World university rankings: how much influence do they really have?", *The Guardian*, September 2013. Online available at https://www.theguardian.com/higher-education-network/blog/2013/sep/10/university-rankings-influence-government-policy, accessed on June 08, 2017.

The Guardian (2014), "Why does Switzerland do so well in university rankings?", *The Guardian*, October 01. Online accessible at https://www.theguardian.com/higher-education-network/blog/2014/oct/01/switzerland-university-rankings-invest-research-science, accessed on June 08, 2017.

The Hindu (2013), "Research in India happens in a few elite institutions", *The Hindu*, November 13. Online available at http://www.thehindu.com/opinion/interview/research-in-india-happens-in-a-few-elite-institutions/article5347654.ece, accessed on June 08, 2017.

The Hindustan Times (2013), "World rankings: Poor research pushes India's grades down", *The Hindustan Times*, October 30. Online available at http://www.hindustantimes.com/education/world-rankings-poor-research-pushes-india-s-grades-down/story-y83ALqilD8YEzsFRk4ky1L.html, accessed on June 08, 2017.

The Indian Express (2014), "Poor marks for research", *The Indian Express*, October 11. Online available at http://indianexpress.com/article/opinion/columns/poor-marks-for-research/, accessed on June 08, 2017.

Thorat, Sukhdeo and Verma, Samar (2017), *Social Science Research in India: Status, Issues and Policies*, Oxford University Press, New Delhi.

Woods, David D. (2007), "Understanding Rigor in Information Analysis" in K. Mosier and U. Fischer (eds.), *Proceedings of the Eighth International Naturalistic Decision Making (NDM) Conference*, Pacific Grove, CA.