

Suggested Mechanism for Producing Quality Research at Higher Educational Institutes in Pakistan; System, Structure, Culture and Leadership Issues

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Abstract

Purpose: This research was aimed at providing a mechanism for researchers to demystify the topic of producing a quality research and each person can autocorrect himself/herself.

Design/methodology/approach: The research was divided in two steps. In first step data (primary and secondary) were collected about quality research. In the second phase data about systems, structures and cultures currently prevailing in different universities of Pakistan were collected. The interviews were conducted from different senior professors, research students and librarians from the universities of Pakistani in cities of Islamabad, Rawalpindi and Sargodha. These interviews were both structured and unstructured. The resulting analysis is done qualitatively.

Findings: The findings showed that quality research is not being produced, there are flaws in the existing system, and there is a lack of proper resources and facilities to produce quality research.

Practical Implications: Researchers can benefit from the findings as they will be able to produce better research papers and research institutes can try to give more importance to research facilities for quality research.

Originality: Value: The main value of this paper is to provide evidence for different facilities and removal of flaws in providing quality research.

Keywords: Quality Research, Research System, Research Facilities, Research Culture

Introduction

The word “Research” brings many different thoughts in our minds, such as *hard work, data gathering, analysis, curiosity, studying, etc.* There are many researchers in Pakistan who are doing research in different areas but the problem is with the quality of that research. There might be different reasons or hurdles regarding the process and outcome. There are different views about these hurdles and problems which exist in our systems, structures and cultures.

Pakistan as a nation is not lacking behind any one in any field of life. Then why are Pakistani researchers facing problems in international publications of their research journals and articles? It might be due to limited resources, infrastructure and unavailability of platform. There is a need to develop the culture of research in the country. Most scholars with doctoral degrees leave the country and use their abilities elsewhere because there hard work and achievements are not always properly recognized in Pakistan. Furthermore, there is few or no proper infrastructure and facilities for conducting thorough research that can be competitive across the globe. The effort is done to pinpoint the problems in existing systems and propose solutions.

Another major problem is mission and the topic. The students do not always know what to do regarding research. Most students don't have proper guidelines to follow. They don't know what scientific society wants to know. Sometimes they just download papers, validate it, change the parameters or add new parameters and then try to publish it. They spend their money and time on papers which no one wants to read. When they see their research has no impact they don't like to spend more money and time, like this the vicious circle continues.

When a researcher starts research, he/she does not have proper guidelines to be followed. There is no proper mechanism for doing research in our academic culture. Even some people consider research just as waste of time. A new scholar gets frustrated when he/she does not find any black and white rules to be followed. From the selection of topic to the submission of thesis, he/she faces difficulties at each level. Ultimately researchers are discouraged and they just want to get rid of thesis as soon as possible.

Every research student wants to come at par with many of the other great researchers, for this they need to put in effort, work hard and study. For example MS students came into research field by choice without knowing that this is a deep sea where one has to learn to swim on one's own. The MS students found it difficult at first to cope with the requirements as teachers in postgraduate are qualified and experienced, it is a view that students find research boring and tedious because they do not get proper guidance from supervisors and mentors although they are very motivated initially when they opt for a research degree but this motivation fades away when they start the degree.

There are several reasons, foremost reason which we felt as research students in this regard is the lack of research culture, unavailability of pre-defined system and people do not bother asking questions and they accept is the status quo. Secondly, students get confused while choosing their research topics as every other issue is of interest or they do not find related articles on which they want to do research on. Thirdly, finding research topic is difficult as they aren't guided well as research is not just a trial and error process because of heavy resource of time spent on it; so research has to be a well-thought plan. Fourth, students need to be persistent and patient; carrying out a full blown research requires consistency.

The purpose of this paper is to explore and highlight those reasons/hurdles and propose key recommendations that how MS and PhD scholars in particular and research scholars in general, can bring quality in their research work.

Literature Review

The literature talks about the interest and inclination of the researcher as the primary step in producing quality research. The more the investigator becomes enthusiastic about the topic better the chances are that he will try to investigate it deeply and thoroughly (Marshall and Reason, 2007). On the other hand the place the researcher is in is important as well. In Pakistan research is considered as the low priority area (Mehmood and Shafique, 2009). In Pakistan there is no proper system and culture developed for conducting research (Haider and Mehmood, 2007).

As in the current study, researchers are investigating quality research done by the researchers, the research environment also affects a researcher. The day he/she is inducted and at the very beginning what he/she observes, the vistas and corridors of alma mater do they reek of research? The research student enters in an institution with the frame of mind i.e. his/her own interests and inclinations and if they are matched equally with the environment he/she is in, would definitely produce a great result.

Research scholars are facing problems in financial perspective (Mehmood et al., 2009). It also affects the quality of research. If a researcher grows his/her interest in this side there are many other problems also waiting, e.g. emotional and psychological problems (Buttery, Richter and Filho, 2005), less acceptance to society (Haider et al 2007), restricted access to digital libraries (Mahmood et al., 2009), lack of confidence (Buttery et al., 2005), unfamiliarity of supervisor to the topic/field (Buttery et al., 2005), non co-operative attitude of supervisor (Dann, 2008) misjudgment during viva (Grabbe, 2003) etc.

These days in Pakistani institutions and universities (thanks to the random policies made by the Higher Education Commission) much attention is highlighted on “research” without specifying what quality research is. Such policies have led the administration to be preoccupied by the numbers which might not mean production of quality in the end. The essence of research is finding the hidden and a quest for truth which the numbers beguile (Frey and Rost, 2008).

The culture of research means that the students ask questions about everything and are inquisitive. But when this type of culture evolves society does not accept it (Mahmood et al., 2009). They can begin with the simple questions like how can we improve quality of learning at our institution? Why some of the days sky is more visible? What is the demand of mobile phones in Pakistan and how is it going to change? Indeed an inquisitive mind seeks answers through research (Denzin and Lincoln, 2005). But in the Pakistani culture it seems to be considered unnecessary to conduct research on this type of topics. Re-inventing the wheel is liked here (Haider et al., 2007).

The other important variable present in the literature is the policies of government and institutions which can also enhance the proliferation of quality research. In their detailed paper, entitled “*Quality enhancement in doctoral education*,” James Guthrie and Ruth Newman (2000) talked about the importance of quality supervision which they consider to be the responsibility of the institution. Thus much onus lies with the university and place of study as well to give students better directions and dimensions about the research work and facilitate them in all respects.

Vilkinas (2008) has given a new idea about supervisors. She said that role of supervisors at academic levels is becoming more complex with the passage of time. She stated that the role of supervisor is parallel to that of manager. There are some differences just like the autonomy, monetary dependency, short term engagement and less formal authority. Further she says that a supervisor should be visionary (who can see the wood for the trees so to speak); creative in the supervisory process; has the ability to acquire the necessary resources; able to motivate the student to produce; direct the work of students; check on and coordinate the various activities that need to be undertaken in activities that need to be undertaken in the

research journey, monitoring the student's progress; nurture, create capabilities; and be able to foster growth of individuals (Vilkinas, 2008).

The first important aspect of the facilities is the quality training and the interest of staff for guidance at all levels (Clegg, 1997). Research supervision and training programs can act as a real boost to the quality enhancement activity. When such a program is present it can look further for the establishment of on-line data access and departmental magazine, thus a research culture ensues in which research workshops, research showcase, social events, student's liaison committee meetings and participation of research students in research committee meetings would take place.

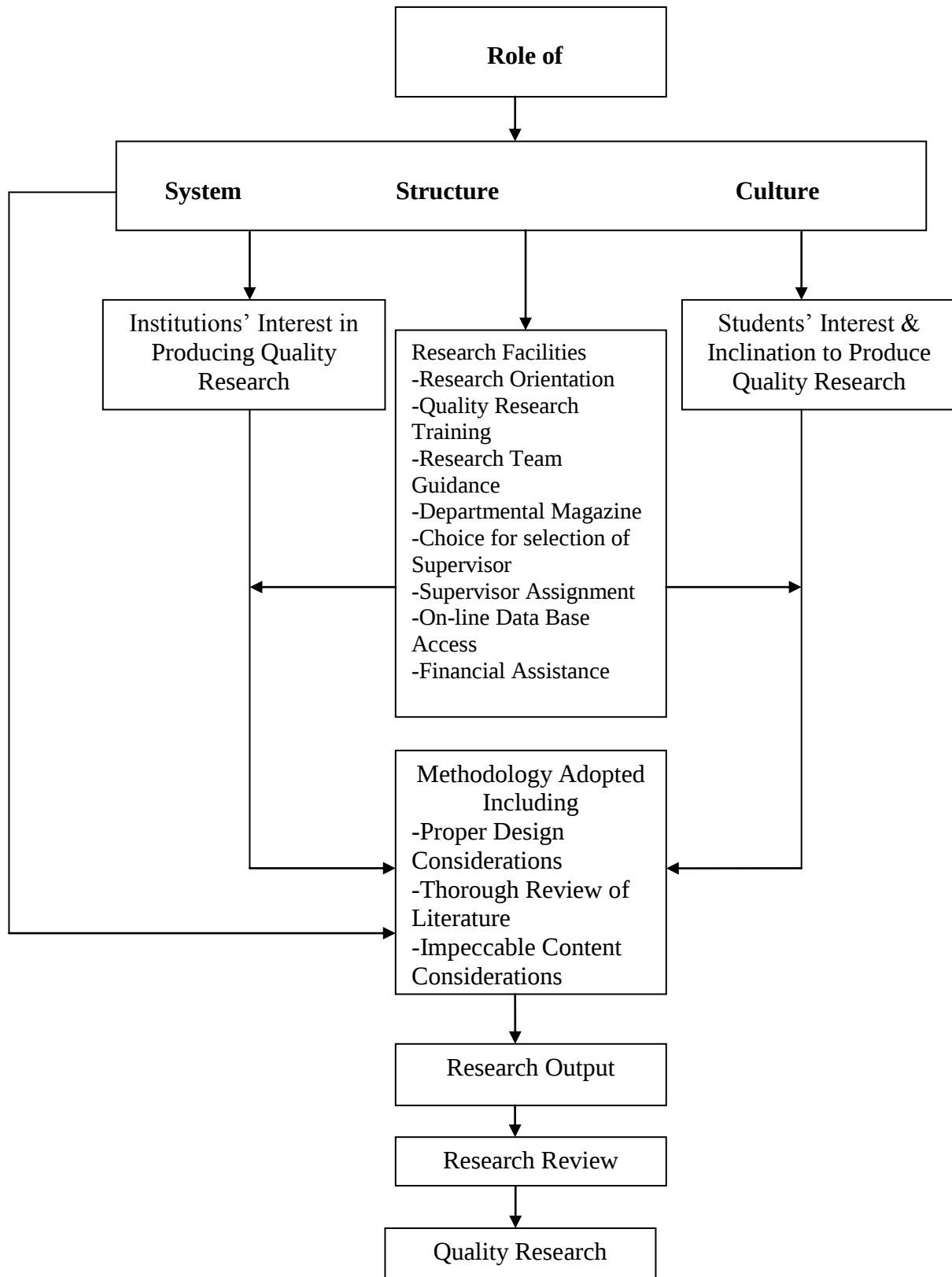
In 1994, Zuber Skerritt identified some problems in supervision, that are, lack of experience, commitment and time, at the supervisor's end, while lack of confidence of students in completing their theses, lack of understanding between the two, and student's inexperience in research are some of the hurdles in supervision effectiveness.

The universities have tried to address this issue in three ways, by research supervisors' training, student training, and changing the supervisory system from single supervision to group supervision (GS). In group supervision, a number of supervisory practice models are presented, including: Workshop model: in which rules and regulations, and theses standards are communicated through workshops. Coursework model: seminars and tutorials are held for problem discussion and research methods. Methodology model: peers share their research problems with each other (Buttery et al., 2005).

These steps would lead to a research with relevant and appropriate processes such as relevant supervisor selection, correct methodology, importance given to design and coursework and thorough study of literature in the field. This would all work towards the correct completion of the research cycle (Cepeda and Martin, 2005) and would give a required research output. Now to ensure that the research thus performed has a national and international impact, a departmental review committee should be established whose role should be to quantify and qualify the research output, select the papers and send them to national and international journals of repute. Finally, the cycle would be complete and the researcher would feel satisfied with his/her research output (Todd, Smith and Bannister, 2006).

Overall, the purpose and objective of this study is to identify the problems in existing system, structure and culture that hinder quality research (done by MS & PhD scholars). And, another objective is to identify the steps leaders should take to improve the research quality in Pakistan. Finally, the authors want to investigate the queries and questions for a research and change students' attitude towards the production of quality research.

The Framework for Research Leaders' Role



In light of the existing literature and theoretical framework, the authors have developed the following hypotheses:

- H1: There exist flaws in the academic research system of Pakistan.

- H2: Quality research is not being produced in Pakistan.
- H3: Facilities are not enough to produce quality research.
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Research Methodology

Population and Sampling: The population for the current study is the librarians, PhD scholars, MS students and general academic researchers of Higher Education Commission (HEC) recognized universities of Pakistan. This research study focuses on the existing facilities available to the students and the flaws in the system. The sample of 5 librarians, 10 PhD scholars, 50 MS students, and 5 research associates was selected for data collection. These respondents were selected from 5 universities in Islamabad, 1 from Rawalpindi and 1 from Sargodha. Officials of Higher Education Commission (HEC) of Pakistan were also contacted, out of which 1 agreed for an interview. This data was gathered through structured and unstructured interviews conducted with senior faculty members and research students of different universities in Pakistan. Open ended questions were asked from each category of respondents. The interviews conducted were based on the main elements of theoretical framework. The results are qualitatively analyzed for the acceptance or rejection of the hypotheses.

Data Analysis

Keeping in view the qualitative data collected from our respondents, authors come across the following analysis. Carrying out quality research is a complete and ongoing process. It starts from the selection of idea/field/topic and ends with the submission of thesis or publishing of papers in some national/international journals. From this published research or submitted thesis to universities, new ideas evolve, which open the doors for further research, thereby becoming an ongoing cycle or process.

While carrying out research, a researcher faces so many problems. As discussed in literature review, academic research appears to be a low priority area in Pakistan. If we start discussing all the problems facing researchers during their work, it will take several pages. Here authors would like to analyze some flaws discussed by faculty members and research students of different universities in Pakistan.

When a student comes in the field of research, first of all he/she has to select a topic. Because he/she has no proper guidelines to be followed, no one is there to be consulted (as students of SZABIST and COMSATS discussed). But in some universities the scenario is changing slowly, e.g. Allama Iqbal Open University (AIU). Students at this stage need an orientation session so that they can have a vision of their work and field. Supervisors should be assigned at the very beginning of course. This will lead to an increased level of confidence and relatively good coordination between supervisor and supervisee (Buttery et al., 2005).

There is no proper culture, system and structure for academic research at MS and PhD levels. Furthermore the education system is not research oriented. The teaching system is stereotype; students rely on notes given by professors. Some professors follow the same old notes every time and do not update it. This results in confusion of students about their research topics as there is no proper guidance or system to help them think of research gaps. Students are not aware of the supervisor at the beginning of the semester due to which problems arise as the interests of students do not match with the expertise of supervisor. The students select topics without consulting their supervisors. Even supervisors are not familiar with the system, structure and the procedure of research.

Keeping in view the above discussion, it can be stated that Hypothesis 1 has got sufficient support for acceptance.

In 1999, the Quality Assurance Agency (QAA) in UK published a code of practice in relation to quality and standards in postgraduate research degrees. In that document it was stated that postgraduate research assessment process should be communicated “clearly and fully to students and supervisors” and should be “operated rigorously, fairly, reliably and consistently” (Denicolo, 2003).

Business Dictionaries define system as a set of detailed methods, procedures, and routines established or formulated to carry out an activity, perform a duty, or solve a problem. If we have a proper system for this particular activity then most problems can automatically be solved. Sometimes choice for the selection of supervisor is completely given to the students (as practiced in AIOU and University of Sargodha); it creates problems for the researchers as well as institutions. Because there can arise biases and the university repeatedly contact the supervisor. This will lead to breakage of system because AIOU has given choice to its students that they can select a supervisor relevant to their field through out the Pakistan (Dr. Bakht, AIOU).

Culture is typically defined as the shared attitudes, values, goals, and practices that characterizes an institution, organization or group. In relevance to the stated definition, if we have a “bird eye” view on the existing culture of our society with reference to research, masses will be shocked to know how the research is being conducted in our institutions. There is no existence of a helping and encouraging culture. No one is there to motivate and guide students. There are few incentives for a good researcher. His/her work is not being valued. Peers don’t recognizes and value good research (Haider et al 2007). All these indicators lead to a poor culture for research activities.

Business Dictionaries define structure as the arrangement of parts in a complex entity and the way in which parts are put together to form a whole. In accordance with this definition, can we imagine a pre-defined structure for carrying out quality research. In Pakistan students do not have open access to digital libraries. Traditional libraries are lacking current literature. Most students don’t know about the pure usage of libraries. There are no sufficient funding for scholars (Students at SZABIST & COMSATS, Mehmood et al., 2009, Haider, 2007).

Final step in the process of thesis submission is that of facing oral examination. This is very important phase of research and it shows the originality of work done by the researcher (Grabbe, 2003). In some universities, viva has become just as a fashion. It is predefined that whose thesis is going to be accepted and whose will be rejected (Dr Zahid Iqbal COMSATS).

After analyzing these entire issues one can see how these problems can be minimized and who are responsible for it. Here arises the role of a leader. A leader is a person who influences people towards the achievement of a goal. The leader has to be practical, yet must talk the language of the visionary and the idealist ((Cepeda & Martin, 2005)Hoffer, 2010). So a leader or the administrator has the most important role to play. Higher Education Commission (HEC) in Pakistan is also the most authorized body to solve these paradoxes (Mehmood et al., 2009, Grabbe, 2003)

Keeping in mind the above discussion, it can be stated that Hypothesis 2 has got sufficient support for acceptance.

There is unequal allocation of research students to supervisors. This causes hassle, frustration and confusion among all parties. Supervisors do not give proper time and guidance to researchers due to lack of interest and expertise in specific areas which ultimately effects research quality. There is no proper communication channel to guide students. Supervisors don’t co-operate properly. Sometimes supervisors don’t know the current findings in the field because they are not an active researcher. Sometimes supervisors of irrelevant fields are assigned to students. Supervisors who are not well familiar with the field may still supervise

just for the sake of monetary benefits. Sometimes supervisors don't know about important issues relevant to the field. That's why they are not able to guide.

Sometimes area of interest of supervisor and supervisee does not match. Students' do not know whom to consult for discussing their ideas, issues and feedback for research. There is wastage of time and energy, as the whole infrastructure is not supportive enough for producing quality research. There is no proper documentation, written procedures and deadlines for submission, system works through verbal cues. The entire system is working slow as it takes much time on approvals of proposals and theses. In some cases supervisors ask for unnecessary multiple use of complex statistical tests which may reduce students' motivation and interest in research and further extension of research at higher level. Libraries are a key source for provision of research data, it act as a supporting tool for doing research but students do not know how to utilize them. Unfortunately libraries are not fulfilling their true purpose of facilitating research. Librarians are unaware of their job of facilitating researchers; there is no proper culture, awareness and training.

There are ample data sources available in libraries but scholars are not properly guided about the availability of data and its access. Access to the digital libraries is not provided to students from their homes. Most of the research papers and articles are available but libraries are not getting local data or work done by local researchers. There is lack of leadership to build a supportive culture for research. There is no proper mentoring, encouragement and direction for researchers. There also exist lack of commitment, resources (funds) and leadership from top management. Financial problem is one of the major barriers in the way of quality research. Unequal distribution of resources (scholarships) is another aspect of the same issue. HEC is not playing its role especially in case of financial aid.

Meetings of BASAR (Board of Advance Studies in Academic Research) are not held regularly. BASAR does not have the representatives from each department of university. Unhealthy critique of members of BASAR leads to de-motivation. A large span of time of a researcher is being wasted by BASAR. After the completion of thesis, a student faces many problems during viva. Unhealthy critique of members of viva committee leads to much wasted time. Delay in the final result announcement (accept/reject) is another major issue in motivation of young researchers.

Recommendations

Based on what we have seen and observed and the data gathered through primary and secondary sources, some recommendations are offered which would help bring in an attitudinal change in the students vis-à-vis producing quality research. The recommendations are for all groups concerned i.e. students, faculty, institutions and the government:

- Research should be the main priority at each level throughout the country.
- At post-graduate level research should be a co-creation of supervisee and supervisor. So active involvement of both ends is necessary.
- Students forget that they cannot do quality research without their own interest and inclination. It is the personal interest of the student which keeps on the midnight oil burning. The quest to find out is a basic instinct which keeps on the wheel of research turning. As pointed out by our respondents, some students try to find out scapegoats in the system. But authors do not agree with them. You create your own environment and systems, therefore if you try to find out a research question you will try to find out some way for it.
- Although there exists lack of facilities and resources, available resources can be utilized in an effective manner. Researchers must always inquire about resources and facilities at public libraries or other institutions.

- Institution should take a proactive stance towards the production of quality research. They should offer quality research training at the setup, give full guidance to the students, assign a cooperative supervisor at the very beginning as the role of mentor and hold, seminars, workshops, symposiums to showcase research output.
- A university should have its own departmental magazine where prominent articles can be quarterly or biannually published.
- Recommendations discussed will ensure that students have grounded their work in theory and have adopted a correct methodology; ultimately they will be able to remove literary and academic flaws from their work.
- This would have a trickledown effect if the foundation is correct student can gather some output as result of research activity in the form of a good thesis and manuscript.
- The students writing their thesis should be directed to produce it in the form of a presentable paper as well.
- This paper would be presented in seminars, conferences, symposiums, and would ultimately be published in a journal or in the departmental magazine.
- The staff can show them on university website and make a library database of them.
- There should be regular meeting sessions between research scholars and professors so that issues can be resolved and new ideas may be welcomed.
- Students should know their area of interest. Supervisors can help them in screening their ideas.
- Researchers must be allocated to concerned supervisors in the beginning of the program.
- Template of proposal and thesis with proper deadlines and details should be given in the beginning to save time.
- Top management involvement in the research process is necessary.
- Electronic databases and E-library, which provides scholars electronic thesis databases, is a good step towards access to quality research.
- Every scholar should be given access to key journals and articles (digital library).
- To build a strong system and structure for research, there is a need to develop a research culture from primary level education.
- Students from beginning should be encouraged to do some research.
- Come out of notes phobia and develop curiosity and explore new ways of doing things.
- There is a need to change the education system. It should be more research-oriented and meaningful, through which students can learn and develop interest in research and explore new ideas and concepts.
- If conventional supervision is not proving successful, penal/group supervision should be offered.
- Both supervisor and supervisee should be provided training before starting research work e.g. orientation sessions.
- Supervisors should be assigned those students who are relevant to their field.
- Supervisors themselves should be active researchers.
- Supervisors should be friendly, helpful and co-operative to students. It will build confidence and motivate students.
- Supervisor should be member of final viva committee so that he/she can guide the student in a better way.
- HEC should hire foreign faculties in case local faculty is not sufficient for the number of students.
- Institutions should give more attention to the Faculty Development Program (FDP)
- Seniors should encourage their juniors and help them when needed.
- Research topics should be more relevant to the current problems.

- HEC should form a committee which collaborates internationally with other libraries and research journals of high grading.
- Overall image of Pakistani researchers should be enhanced.
- Students need to be persistent and patient; carrying out a full blown research requires consistency and hard work.

Summary

In the current changing world of knowledge, academic research is one of the major parameters for the development of any country. Academic research can also boost the economy of a country. In Pakistan unfortunately quality academic research is at low priority of the academicians and institutions. Focus of the current study is to finalize a mechanism for producing quality research at higher education institutes of Pakistan. In Pakistan there are many problems related to system, structure, culture and leadership while producing quality research.

Academic research must be given top priority at every level. Students face many problems while conducting academic research which must be eradicated by focusing on the suggestions and recommendations discussed earlier. If the culture of research is developed and proper guidance and leadership provided, producing quality research is not a dream in a country like Pakistan.

Current study is helpful for all type of stakeholders of research i.e. academicians, researchers practitioners. Current research opens new horizons especially for the new entrants in the field so that they can be benefitted and insist at here level to be granted with the proper research facilitations.

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