

Neglected and Common Areas of Educational Research in Pakistan: A Document Analysis

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Abstract

Educational research plays an important role in development of education. In Pakistan, after the establishment of Higher Education Commission of Pakistan in 2002, there is a paradigm shift in higher education. Number of doctorate students increased very fast in last decade. This study explores the areas which are commonly explored by the researchers and those areas which are neglected by the researchers. The objectives of the study were 1) to find out the trend of educational research in Pakistan, 2) to find out the common areas of educational research in Pakistan, 3) to find out the uncommon area of educational research, and 4) to identify the neglected area of educational research in Pakistan. Document analysis was used as method of analysis. By using universal sampling, 247 theses were selected. It was found that teacher education, psychology and administration were the most common topics while History of Education, Crime education, ECE were the least studied areas. It was concluded that the Pakistani researchers are focusing on some areas and neglecting some other areas.

Keywords: *Educational Research, Aspects of Educational Research, Areas of Educational Research, Neglected Areas of Educational Research, Common Areas of Educational Research*

1. Introduction

Research plays an important role in developing societies, refining cultural values and the improving the social and economic aspects of the nations through investigating into the issues and problems faced by the communities (David, 2009). Without making efforts to have a deep insight into the social issues and finding the remedies to overcome the challenges, it is not possible to expect a healthy society and strong nation. Education is not restricted to one discipline, it is a wide concept which covers all disciplines, and is used as a vehicle to provide guidance and direction to make progress in all walks of life (Bacca, Baldiris, Fabregat, Graf & Kinshuk, 2014). Therefore, the education provided in different

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disciplines of knowledge is instrumental in improving the learning and knowledge sharing processes (Task Force on Higher Education and Society, 2000). The educational research is used as a tool to find the issues, explore the methods to deal with challenges effectively and provide recommendations to improvise on the learning and teaching methodologies (Ary, Jacobs, Sorensen & Walker, 2013).

Educational research in different areas such as pedagogy and curricula development has always been subjected to criticism from critiques. For instance, Moore (1987) commented on the educational research in this way: “a massive volume of amateur, unsystematic and badly designed research producing information of very little value” (Moore, 1987). Panda (1992) analyzed the literature on educational research and concluded that most of the studies are descriptive status with poor methodological footing (Panda, 1992). This criticism was also supported by Saba (2000) who claimed that research in education is directed towards the incoherence and absence of theoretical underpinnings: she further added that research questions are not posed within a theoretical framework or based on its fundamental concepts and constructs. Similarly, Perraton (2000) also agreed to the views of Saba by concluding that current educational research is often theoretical or descriptive in nature.

The era of 21st century is considered as the era where competition has increased to a great extent in education sector (Saba, 2000). The competition is also in educational research with a focus on how to develop educational themes and methodological approaches to conduct useful research endeavors for the improvement of research and education quality.

The developed countries have spent a large amount of money and resources on educational research but in developing countries the situation is entirely different. Due to limited budget, inadequate resources, and lacking in research expertise, developing countries are over-focused on some traditional styles and areas of research (Buchmann & Hannum, 2001). Therefore, it is important to investigate the most common and neglected areas of educational research of educational research (Kogan & Hanney, 2000).

1.1. Statement of the Problem

A sufficient literature underpinning is available that focus on issue and problems related to educational research. In Pakistan the main problem is that most of the research is focusing on some common areas of educational research and neglecting a number of areas which are also of equal importance. In this article, the problem to be investigated is “what are the areas which are neglected by Pakistani researchers in their academic research”

1.2. Objectives of the Study

1. To find out the trend of educational research in Pakistan
2. To find out the common areas of educational research in Pakistan
3. To find out the uncommon area of educational research
4. To identify the neglected area of educational research in Pakistan

1.3. Significance of the Study

Firstly, this study will be significant for researchers to find out the new and uncommon areas of the research. Secondly, the study would be significant for policy makers to device policies for further research. Thirdly, this research will be act as guideline for departments of education to set their direction for future research.

2. Review of Literature

Neville (2005) posits that research is a systematic study of a subject matter of adding information. Gruber (1995) defines the research as systematic process of identifying the issues, developing and validating approaches to address the issues and reporting the findings to the scholars and policy-makers in the relevant field of investigation. Hence, educational research is the scientific method of solving educational problems in educational context and settings. It is the source of identifying past practices, current trends and future interventions and new inventions (Shami, 2008).

Anderson and Arsenault (1998) outlined ten aspects of educational research, which involve 1) attempting to solve a problem, 2) gathering new data from primary or first-hand sources or using existing data for a new purpose, 3) observing/recording experience or empirical evidence, 4) ensuring accuracy in observations/descriptions, 5) employing carefully designed procedures and rigorous analysis, 6) emphasizing the development of generalizations, principles or theories that will help in understanding, prediction and/or control, 7) requiring expertise-familiarity with the field of study, 8) attempting to identify and validate the procedures used to warrant the unbiased solutions. (Gay, Mills & Airasian, 2011) reported that educational research can be classified in three basic ways: qualitative, quantitative, and mixed methods.

Some examples of educational research topics are teaching methods, school administration, classroom environment, school finance, etc. Studies can also be classified according to whether they are exploratory or confirmatory. An exploratory study is undertaken in a situation where there is lack of theoretical understanding about the phenomena being investigated. On the other hand, a confirmatory study is employed when the researcher generates a theoretical model based on theory, previous research findings or detailed observation that

needs to be tested through the collection and analysis of field data. A widely applied way of classifying educational research studies is to define the various types of research according to the information (Gay, 2009).

3. Research Methodology

This study used document analysis as a method of analysis which is a form of qualitative research method (Bowen, 2009). The document analysis is carried out using coding and theme development approach applied in thematic analysis. O’Leary (2014) reported that a researcher must consider the following issues during document analysis: gathering texts, annotating documents, assessing authenticity of documents, exploring background information/contents, and selecting the complete and precise data.

Bowen (2009) views that document analysis is a useful tool for contextualizing research in historical perspective, tracking useful data which are no longer accessible from the human subjects. The Educational Research Theses Form ERTF (Goktas, Hasancebi, Varisoglu, Akcay, Bayrak, Baran & Sozbilir, 2012) was used as tool which is reliable and applied to conduct document analysis in education field.

3.1. Population

The doctoral theses produced by Departments of Education or faculties of education or institutes of educational research in Pakistan between 2000 and 2012 were the documents of the study. The theses of following public universities were documents of this study: 1) University of Karachi, 2) University of Punjab, 3) University of Arid Agriculture Rawalpindi, 4) National University of Modern Languages, Islamabad 5) International Islamic University Islamabad, 6) Allama Iqbal Open University Islamabad, 7) Bahauddin Zikrya University, Multan, 8) Gomal University, D.I Khan, 9) University of Sargodha, 10) University of Sindh Jamshoro, and 11) University of Education, Lahore.

Table 1 Public Sector Universities awarded PhD degrees year wise (2000-2012)

Year	University of Karachi	University of Punjab	UAAR	NUML	IUUI	AIOU	BZU	Gomal University	UOS	University of Sindh	UE Lahore
2000	0	0	0	0	0	0	1	0	0	0	0
2001	0	0	4	1	0	2	1	0	0	0	0
2002	1	0	9	0	0	3	0	0	0	0	0
2003	1	3	0	1	0	3	0	0	0	0	0

2004	2	2	14	1	0	1	2	0	0	0	0
2005	0	2	16	0	0	3	0	1	1	1	0
2006	1	0	0	2	0	0	0	0	0	1	0
2007	0	1	3	1	0	1	0	0	0	0	0
2008	1	1	6	1	2	2	0	1	0	1	0
2009	0	0	4	6	0	7	0	0	0	2	0
2010	3	8	6	3	2	5	0	1	0	0	2
2011	0	18	0	0	14	1	0	1	0	0	2
2012	3	9	0	2	3	1	1	3	0	0	2
Grand Total											210

Source: Higher Education Commission of Pakistan (eprints.hec.gov.pk).

From the above table it is clear that UAAR produced the highest number of PhDs which is 62. From these 62 graduates, 30 (Almost 50 %) were produced in 2004 and 2005 and 13 were produced in 2001 and 2002. It needs further investigation why 43 out of 62 (69.3 %) were produced in these four years. Punjab University produced 44 and 18 of them are in 2011, similarly IIUI produced 21 and 14 of them in 2011. AIOU produced 29 and are after 2007. UE produced 6 graduates and during 2010-2012, the number of graduates produced per year were 2, which is another interesting fact.

The theses of following private universities in Pakistan were the document of this study: 1) Hamdard University, Karachi 2) Qurtaba University of Science and Technology Peshawar, 3) Sarhad University of Science and Technology, Peshawar, 4) Jinnah University of Women Karachi, 5) Foundation University Islamabad, and 6) Preston University, Kohat

Table 2 Private Sector Universities awarded PhD degrees year wise (2000-2012)

Year	Hamdard University Karachi	Qurtaba University of S & IT Peshawar	Jinnah University for Women Karachi	Foundation University Islamabad	Sarhad University of S & IT Peshawar	Preston University, Kohat
2000	3	0	0	0	0	0
2001	1	0	0	0	0	0
2002	5	0	0	0	0	0
2003	2	0	0	0	0	0
2004	2	0	0	0	0	0
2005	3	0	0	0	0	0
2006	1	0	0	0	0	0
2007	1	0	0	0	0	0
2008	2	0	0	0	0	0
2009	0	2	0	0	0	0

2010	0	0	2	1	0	0
2011	0	1	2	3	2	0
2012	0	0	0	3	0	1
Total	20	3	4	7	2	1
Grand Total						37

Public+ Private, 210 + 37= 247

Source: Higher Education Commission of Pakistan, March, 2014 (eprints.hec.gov.pk).

The above table showed that Hamdard University produced maximum number of PhDs. Most of them are before or up to 2008 and then in next four years no PhD was produced. Interestingly the other universities did not produce any PhD up to 2009.

3.2. Sample of the Study

Sample was selected through universal sampling technique; from 11 public sector universities and 6 private sector universities 247 theses were selected (Table 1 & 2).

3.3. Instruments for Data Collection

The collection of data was started in June 2014 and completed in July 2016. Following instruments were used to collect the data from the sample population chosen for this study: document analysis and the in-depth interviews (Table 3).

Table 3 Instrument for Collecting Data

Document Analysis	Educational Research Theses Form (ERTF) from doctoral theses about research trends in education according to the topics and methods
Interview	From the experts of education about trends and SWOT analysis of educational research

The Educational Research Theses Form (ERTF) was designed as a part of document analysis for the collection of data which is a modified version of “Educational Research Papers Classification Form” tested and validated by Goktas et al (2012). ERTF contained multiple choice questions and was divided into the following four sections: (1) research topics with general / specific area; (2) gender of researcher; (3) research methodology; and (4) data analysis method(s)

Interviews represent the typical method associated with qualitative research. “Interviews are often said to 'reach the parts which other methods cannot reach’” and “interviewing allows a researcher to investigate and prompt things that we cannot observe (Bowen, 2009).

4. Data Analysis

The collected data were analyzed by using percentage and ranking order.

Table 4 Research trends of the use of ‘research by themes in education at the Departments of Education at Pakistani public and private universities during 2000-2012

Research type	F	Total	%	Rank
Descriptive research	12	247	5	3
Survey	220	247	89	1
Case Study	3	247	2	4
Content Analysis	2	247	0.8	1
Experimental Research	62	247	25	2
Research & Development	3	247	1	5

This table shows that survey research and experimental research are considered the most common research, while content analysis, case studies, and Research and Development are the least used methods.

Table 5 Classification of thesis according to research areas

Subject areas	Subject Sub-areas	%	Rank	Overall Research Trends
Islamic Education	Islam Education	1	1	Highly explored areas: Islamic Education Mediumly explored areas: Moral Education Least researched area: Mystical education
	Mystical Education	0.40	3	
	Moral Education	0.80	2	
Miscellaneous subjects	Educational Psychology	10	2	Highly explored areas: Comparative studies, Educational Psychology, Special Edu., DNFE Mediumly explored areas: Economic Edu, Gender studies Least researched area: Crime Edu, Adult Edu,
	Comparative Studies	13	1	
	Special Education	4	3	
	Distance & Non-formal Education (DNFE)	3	4	
	Education Sociology	1	6	
	Economics Education	2	5	
	Gender studies	2	5	
	Crime education	0.40	8	
	Sports Education	0.80	7	
Adult Education	0.8	7		

				Crime Edu
Teacher Education	Teacher training and Development	6	2.5	Highly explored areas: Teacher training and development, Teacher-student interaction
	Teacher-Student interaction	6	2.5	
	Quality assurance/Education	2	1	Least researched area: Quality assurance education
Science Education	Math	4	1	Highly explored areas: Pedagogical concepts in Math
	Biology	2	3	
	Chemistry	3	2	Mediumly explored areas: Pedagogical concepts in Chemistry
	Physics	0.4	4	Least researched area: Pedagogical concepts in Biology and Physics
Different Levels of Education	Primary Education	8	3	Highly explored areas: Secondary Education, Higher Education
	Early childhood Education	1	5	
	Elementary Education	3	4	Mediumly explored areas: Primary Education
	Secondary Education	28	1	
	Higher Education	17	2	Least researched area: Elementary Edu, Early Child Education (ECE)
Education Administration	Leadership	3	1	Highly explored areas: Leadership Education
	Management	2	2	Mediumly explored areas: Management Education
	Planning	1	3	Least researched area: Planning education

5. Findings

1. The first objective was to find out the research trends in Pakistan. In this regard, it was found that;
 - 1.1 Most of the research which was carried out in Pakistan is survey. Almost 90% of the researches fall in this area.

- 1.2 Survey is followed by experimental research and descriptive research (25 and 4% respectively. Although it is a difficult to carry out experimental research, but many scholars adopt this.
- 1.3 Case study and R&D research was less used by the researchers (1%)
- 1.4 Content analysis was found as the least used method (0.8%) followed by Case Studies and Research and Development
2. The second objective was to identify the most common topics and least common topics. In this regard it was found that;
 - 2.1 Islamic Education is less common area (2%). The most common area in Islamic education is Role of Islam in education and the less common areas are Mystical Education and Moral Education
 - 2.2 Regarding Miscellaneous subjects (36%) it was found that Comparative education is the most common area (13%) , followed by Educational Psychology (10%), Special education (4%), DNFE (3%), Economics of Education and Gender studies (2%) and educational Sociology respectively.
 - 2.3 Teacher Education (15%) was found as another important area. Within the domain of teacher education, teacher training and development and teacher student interaction.
 - 2.4 Science education (9%) was another common area. In this area most of the studies were conducted on Mathematics Education, followed by Chemistry, Biology and Physics respectively.
 - 2.5 Regarding educational administration, it was found that Leadership is the most common area of research (3%) followed by Management and Planning
 - 2.6 Regarding different levels of education, it was found that most of the research (28%) was related to secondary education, followed by Higher education (17%), primary education (8%), Elementary Education (3%).
 - 2.7 Regarding uncommon areas of educational research it was quality assurance (1%) and ECE (1%).
 - 2.8 It was further found that Crime education, sports education, Adult education are neglected areas selected by educational researchers (Less than 1%).

6. Discussion

This study is important in the sense of highlighting the neglected areas in the education where there was no empirical research was conducted. Moreover, this study is first of its kind attempting to indicate the grey areas in the education research in which the problems still exist. The findings of this study showed that most of the research conducted at PhD level at departments of Education in

Pakistani universities was survey, followed by experimental and descriptive research approaches. This finding was in consistent with research trends published by many researchers in other countries (Ary, Jacobs, Irvine & Walker, 2018; Sadlak & Altbach, 1997), showing that survey is the predominant mode of research internationally. The experimental research is found to be less common in educational PhD level theses between 2000 and 2012, which might be the popular notion that the experimental research is the main form of research approach in natural sciences (Lee, Wu & Tsai, 2009). However, Tsai and Lydia Wen (2005) suggested that if the experimental research is promoted in educational research, the problems in real scenario can be solved with greater efficiency.

Furthermore, this study revealed that case study and R&D research are the less focused methods. Many other studies reported differently, for instance, Carr and Kemmis (2003) reported that case study is the most popular approach as it focuses on single issues relating to specific social phenomenon. In Pakistani context, the case study approach can solve many problems associated to various academic institutions working in different social contexts and with different administrative portfolio. Taken together, there is a need for researchers, supervisors, and research planners to foster the research practices involving case study, and R&D research, so that particular and case related issues can be identified and solutions based on the empirical research findings can be suggested by the researchers in Departments of Education in Pakistani universities.

Another interesting findings revealed by this study that Islamic education, crime education, sports education and comparative education were found be neglected areas of research at the PhD level in department of Education in Pakistani universities. It is surprising that being an Islamic country, the Islamic education was expected to be more focused to streamline the curricula, and teachings and delivery of contents to the students not only studying at the department of Islamic institutions in Pakistani universities, but also at the Madrassas (Durkin, Islam, Hasan & Zaman, 1994; Anzar, 2003). Due to alarming crime rates in Pakistan, the research on crime education should be linchpin of any educational system. However, the neglect and dereliction on crime education is reflective of increasing crimes in Pakistani due to less awareness of the crimes on the health of society.

Elementary child education, primary education, and science education could not draw the attention of most of researchers conducting PhD level in departments of education. The children are backbone of future generation in any society (Durkin et al., 1994). Similarly, science education is compulsory to make

advances in the technological and scientific knowledge and developments (Chang, Chang & Tseng, 2010). Neglect of such key areas in PhD level research may indicate some flaws in the curricula development in the fields of science, child and elementary education (Gutek, 2006). Consequently, these flaws may damage the credibility, effectiveness and efficacy of the science, child and elementary education (Baernstein, Liss, Carney & Elmore, 2007).

Taken together, the policy makers, research experts need to develop comprehensive strategy not only to promote the research areas in crime, education, sports education, elementary child education and science education, but also there is a need to set up a quality strategy to monitor the effectiveness of research proposals. As a result of such steps, research on practical issues will help solve a plethora of problems in the relevant fields such as designing the effective curricula, delivery of curricular contents, and assessment of students in the neglected fields of education.

7. Conclusions

On the basis of above findings, the following conclusions are drawn;

1. In Pakistan, survey research is the methodology which was adopted by most of the researchers followed by Experimental research. Other types of researches like case studies, R&D, content analysis was least common. In other words, it may be concluded that Pakistani researches are more focused towards quantitative research and qualitative research is rare.
2. It was further concluded that regarding areas of research, teacher education was found to be most common area of research that include teacher training and development, teacher interaction and quality of teacher education programs.
3. Teacher education is followed by science education. In science education most of the researches were conducted on mathematics, followed by biology and physics respectively.
4. The focus of the Pakistani researchers is not confined to one area. It was concluded that there is variety of areas focused by researchers.
5. Crime Education, sports education and adult education are the least researched areas while comparative education is the most common area in miscellaneous areas.
6. Educational administration is also an area of focus and most of the research in administration is related to leadership, followed by management and planning.
7. It was also concluded that secondary education is more focused by the researchers, followed by higher education primary education, elementary education and uncommon areas were ECE quality assurance respectively.

8. Recommendations

The potential researchers may be encouraged to develop research proposals and perform research in the least researched areas such as sports education, crime education and adult education. From the perspective of methodological approaches, the mixed method research approach was least, therefore, the mixed methods should be promoted to increase reliability and validity. Using the strengths of the overly researched areas, the findings of the existing manuscript should be used to inform policies and development of the relevant areas. The future research need to explore the factors and conditions leading to the over-emphasis on certain areas of research and ignoring the 'least researched' areas. In addition to this, quality assurance departments in universities should revisit their priorities to the research areas with respect to developmental needs of Pakistan in education.

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