Perceptions of Geography as a Discipline among Students of Different Academic Levels in Pakistan

Munazza FATIMA¹

The Islamia University Bahawalpur, PAKISTAN

Abstract

Geography is facing the problem of its identity and recognition as a useful academic discipline in Pakistan. This research paper examines the perception about geography as an academic discipline from the students of different academic levels i.e. intermediate, graduate, master and M.Phil. Data were collected through structured questionnaires and a total of 106 students were surveyed, of which 45 were male and 61 were female students. Students’ perceptions were analyzed about the concepts, themes, nature and scope of geography, choice of geography as an academic discipline, major problems they are facing while studying geography and possible career opportunities. Results reveal that students have clear perceptions about the concept, themes, and nature of geography. In terms of significance, intermediate students consider it as a third or the least ranked subject while graduate, master and M.Phil students considered it as a first or second ranked subject. Geography was perceived to be very informative and equally important for both girls and boys. Research, teaching and cartography were considered as major job opportunities by students. As a whole, geography was perceived as an interesting, multidisciplinary, and useful subject. Different levels have different problems; some of them include difficulty in understanding geography, lack of resources, insufficient field work, and inappropriate medium of instruction, lack of jobs for geography graduates and lack of research in geography education.

Keywords

Perceptions, Geography, Education, Academic Levels, Pakistan

¹Lecturer; Department of Geography, Faculty of Science, The Islamia University Bahawalpur, Pakistan. E-mail: munazza.fatima[at]iub.edu.pk
In the Indian subcontinent, geography as a regular subject was introduced by the British in the early part of the twentieth century (Banerjee, 2006). The first department of geography in the subcontinent was started in Aligarh in 1921 (Alizai, 1991). Since the independence of India and Pakistan, geography has gone through various changes and developed with the education system of each country. Geography is a compulsory school subject in India, but in the schools of Pakistan it is merged with the social studies. Common perceptions about geography in India is that ‘it’s boring’, ‘it’s only about remembering names of rivers, hills, mountains’, ‘it’s good for general knowledge’, ‘not really interesting’ etc. Moreover the lack of clarity about the concept of geography was partially responsible for a certain degree of unpopularity of geography among the pupils (Banerjee, 2006).

Similarly, in Pakistan, geography is considered as a less important subject in comparison with other subjects, for adopting as a professional career. A general stereotype exists in young people that instead of geography, other frontline subjects like chemistry, physics, biology, engineering, economics, and business are more favorable for them in attaining professional success. There is an impression shared by the university teachers that geography is chosen by those students who failed to get admission in frontline subjects. The scope of geography in this way is limited to school teaching or to the survey departments of the country. Thus, such an approach exploits the image of geography as an applied field of inquiry. In addition to this, the lack of jobs for geography graduates is another big challenge for this subject. It is observed that most of the geography graduates start to look either for their own private business or for jobs in private firms which have no relation with their subject but can give them better income.

Lack of jobs for geography graduates, deficiency of resources and promotion of research are great challenges which geography is facing in Pakistan (Fatima, Noor, & Shafqat, 2015). Dr. Israr explained that geography lacks identity and recognition, it is considered as a subject only concerned with listing the facts and features of the various parts of the world. Therefore it is thought that geography can be used only as a general knowledge subject and has no other utility (Israr-ud-Din, 1991). Senior Minister Raja Sikander Zaman Khan in his inaugural address at National Seminar on Progress of Geography in Pakistan (1991), said that geography as a science subject must take an account of all the changes going on in the sciences and update the contents of its curricula at the school, college and university level. It is unfortunate that the services of geographers who have special training in surveying, cartography, aerial photography, GIS, remote sensing, resources management, environmental protection and natural hazards, have not been properly utilized. This has, naturally, resulted in the unemployment of a large number of geography graduates (Khan, 1991).

Geography is the field of knowledge that studies the relationship between the earth and its people (International, 1982). It is the study of spatial variations on the earth surface and of human relations with their environment (Americana, 1994). “Geography . . . increasingly is seen and valued as a ‘bridge discipline’—one that can connect the study of human and natural systems and one that is capable of intellectual
In addition, geography is also seen as the natural home for learning about sustainability (Gess-Newsome, 1999). Geography has no obvious place in the traditional classification of the sciences by faculty. “Some parts of geography have their strongest affiliations with mathematics and natural sciences, others with history, philosophy and social sciences. Many sciences study distinctive types of phenomena: geologists study rocks, botanists plants, sociologists social groups, and so on. The work of geographers involves several types of phenomena, each already studied by another science”. Basically, the object of geography is the earth or earth surface. However, a glance on the nature of the science of geography reveals that geography recognizes several epistemological approaches. Some geographers understand geography as a science aiming at comprehending the world; for others geography aims at describing and measuring the world; some geographers consider the world itself to be the object of the discipline (physical geography), whereas others think that geography concerns the relationships between humans and space (human geography) (Reinfried & Hertig, 2011). Geography is the science which seeks to explain the character of places, the distribution of people, features and events, and the way they occur and develop over the surface of the earth. Geography is concerned with human-environment interactions in the context of specific places and locations (Reinfried & Hertig, 2011).

The nature of geography has been always debatable that either it is a science subject or social science subject. But in fact, geography has a unique position; it is standing between social and science subjects (Kubiatto, Mrazkova, & Janko, 2012). Huntington defines geography as a science of relationship, having two main divisions, first physical geography which treats the various factors of the environment pointing out the way in which they are related to man or society; the second, social geography (human geography), which considers the same geographic relationship but from a different point of view, namely that of humans, their distribution, social activities and cultural accomplishments (Huntington, 1928). Since geography comprises multiple aspects, it contributes towards planning, utilization of natural resources, environmental management and the carrying out of special analysis. As we use remote sensing and communication technology for creating databases about earth and the environment we would understand the importance of geography (Chorley, Hagget, 1970).

From the development of geography as a science during the Greek classical period and until the early nineteenth century, geography consisted mainly of cartography, astronomy and the description of natural phenomena and local or regional features of the earth surface. Today geography is a “human-environment-society science” (Weichhart, 2003) characterized by an integrative approach that makes use of modern spatial and statistical techniques as well as modern technologies. Such technologies are Geographic Information Systems (GIS), the Global Positioning System (GPS) and Remote Sensing (RS). They help us to understand the complexity of the earth’s system. Geographical education is infused with several key concepts of geography, for example the concept of scale, the impact of humans on the environment, the impact of the environment on humans and change over time and space (Reinfried, Hertig, 2011). At its core, geography has evolved to be a discipline that actively pursues a diverse range
of inquiries related to space, to place, and to interactions, especially the dynamics of interaction within and across spaces and places (Baerwald, 2010). While it is important to sort any issue based on political, social and economic backgrounds, it is also important sort it out geographically. Thus, geography is the connecting point between social science and physical science. Baerwald (2010), while explaining the interdisciplinary nature of geography states that ‘if disciplines are tribes with distinctive cultures, geographers are a breed inclined to wandering, exploring; and working together with others’ (Baerwald, 2010).

Arrowsmith et al. (2011) examine the implications of employability for the design of curricula, learning and teaching practice in Geography focused mainly on two questions, namely ‘What knowledge, technical competencies and attributes make an employable geography graduate?’ and, ‘What are the consequences for geography curricula and learning practices?’ In fact, it is the sum of geographical knowledge, technical competencies and personal attributes, assembled in appropriate ways, that define a graduate’s ‘employment capability’ which can be attained by integrating employability skills into curricula, extending opportunities for work related learning, employer involvement in curricula and professional career readiness (Arrowsmith, Bagoly-Simó, Finchum, Oda, & Pawson, 2011).

The Purpose of Study

Pakistan is sadly lacking empirical research in the field of geography education, hence this study aims to partially fill this research dearth. Identification of the perceptions of a subject is an essential part of educational research (Kubiakto, et al., 2012). Perceptions of geography among students of various academic levels has been analyzed in various countries, but in Pakistan it has not been investigated. As has been described earlier that geography is considered as a less important subject in comparison with others and lacks identity and recognition in Pakistan hence, the primary purpose of this study is to investigate the perception of geography students of different academic levels about the concept, themes, nature and scope of geography. It also explains their perception about the choice of geography as an academic discipline. In addition, it investigates students’ views about the major problems they are facing and career opportunities they perceive to have as a geography graduate. Ultimately, such results can be used to improve geography education in academia of country. It can also provide a base for comparative research on national and international level.

Method

Research Design

Geography is not an independent and separate entity in the secondary school curriculum; it is only in the intermediate/higher secondary and graduate level that geography is offered as optional subject (Fatima, et al., 2015). Aimed at the objectives of the study, a questionnaire survey was conducted during the working days of March 2013 for the annual research project taken by students studying at the department of Geography, The Islamia University Bahawalpur, Pakistan. Some of the main institutions
of Bahawalpur City where geography is being taught as a subject were visited and surveyed, including three higher secondary schools (Sadiq Public School Bahawalpur, Canal High School Bahawalpur, and Government Sadiq Dane High School Bahawalpur), two colleges (Government Sadiq Egerton College Bahawalpur and Government Degree College for Women Dubai Mahal Bahawalpur) and a university (Department of Geography, The Islamia University Bahawalpur). The target group was geography students studying at different academic levels. Nearly all the students who were present on the day of visit of the surveyors were surveyed. A total of 106 students were surveyed, constituting intermediate (29 students), graduate (34 students), master (36 students) and master of philosophy in geography (7 students). In terms of gender, 45 male and 61 female students were surveyed (Table 1). The questionnaire was composed of 13 questions relating to the perception of students about the concept, themes, nature and scope of geography, choice of geography as an academic discipline, major problems they are facing while studying geography and possible career opportunities (Appendix 1). The major limitation of the study was the absence of many of the students from the intermediate level because of an upcoming examination.

Table 1
Number of Geography Students Surveyed

<table>
<thead>
<tr>
<th>Academic Level</th>
<th>Number of Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Intermediate (FA and F.Sc)</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Graduate (BA, BSc, and BS)</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>M.Sc</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>M.Phil</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>61</td>
</tr>
</tbody>
</table>

Findings

Findings about students’ perceptions relating to the objectives of the study are discussed below.

The Concept of Geography

Two definitions of geography were used to judge the student’s perception of the concept of geography. Statement A describes the historical definition of geography i.e. ‘Geography is the study of earth features and their regional variations’, whereas statement B explain the modern and more explanatory definition i.e. ‘Geography is the study of man-environment relationship; it also deals with spatial and temporal variations of physical and human aspects on earth’. Results show that most of the students have clarity about the concept of geography yet few still believe that it is just the study of earth features and their regional variations.
Theme of Geography

Adopted in 1984 by the Association of American Geographers, the five themes of geography published in the NCGE/AAG publication Guidelines for Geographic Education, Elementary, and Secondary Schools are location, place, human-environment interaction, movement, and region. Based on these themes, a question was designed to ask for the students’ perceptions of whether geography is the study of humans, the environment or both.

Results show that almost 10 percent of Intermediate students said that Geography studies humans, 5 percent said it is just the study of the environment and the remaining 80 percent identify it as the study of both humans and environment. Similarly 5 percent of graduate students consider geography as the study of the environment while the rest of the graduate, master and M.Phil students perceived it rightly as both (Figure 2).
**Nature of Geography**

Geography is a theoretical as well as applied academic discipline. In order to determine student perceptions of its nature, students were asked to mark it as a theoretical subject, practical subject or as both theoretical and practical. Results show that most of the students considered it as a theoretical as well as practical subject while 11 percent of intermediate and 17 percent of graduate students considered it just theoretical, and 11 percent of intermediate along with 9 percent graduate students perceived it just a practical subject (Figure 3).

![Figure 2. Students’ perception about themes of geography](image)

![Figure 3. Students’ perception about the nature of geography](image)
The nature of geography has been always debatable that either it is a science subject or social science subject. But in fact, geography has a unique position; it is standing between social and science subjects (Kubiatko, et al., 2012). The same situation is revealed by the results of this study, showing that some student perceptions were of geography as a mixed discipline at all academic levels, but the majority considered it as a subject of social science (Figure 4).

![Figure 4. Students’ perception about the nature of geography](image)

**Choice of Geography**

A structured question was asked from the students as to why they chose geography among other optional subjects. Two reasons primarily recur: ‘it is helpful for the future’; and second, ‘it is a marks gaining subject’. Some students said that it is easier, or they are good at it, or it is their academic choice.
When students were asked whether they will choose geography for their higher education, the data reveal very interesting and useful results. Intermediate students seemed completely reluctant to choose geography for their academic levels to come. The main reason given by those to not choose geography for their higher study were that they want to be something else other than a geographer, like a doctor, engineer etc. or they do not have interest in geography. On the other hand a few students said that they will choose geography for higher studies because it is informative, they have a personal interest, and it is a marks-gaining subject. More than 60 percent of graduate students said that they will acquire geography for higher studies because they want to be a geographer, they had a deep interest, it is a career building subject, geography has great scope, this subject is helpful for the future and some said they are inspired by their teachers. Thirty eight percent of graduate students said that they are not interested in geography as it is boring and difficult or they have an interest in some other subject, hence they will not continue to study geography. Master and M.Phil students appear to be very sure that they will choose it for higher studies, a reason for which is that they are already studying geography and need higher studies for their career promotion but most of all they have no other option (Figure 6).
The Significance of Geography as an Academic Discipline

Four questions or statements were posed to reflect students’ perceptions about the significance of geography as an academic subject. First, “Geography should be a compulsory subject at which level (primary, secondary, intermediate, graduation or at all levels)?”; second, “which rank (first, second, third, or last) do you give to the subject of geography?”; third, “what do you think — geography is important for girls, boys or both?”; and a fourth question based on the students opinion on a Five Point Likert scale (strongly agreed, agreed, partially agreed, disagreed and strongly disagreed) of the statement, “it is a source of information, which is not provided by other subjects”.

Most of the students (50 percent) were of the view that geography must be a compulsory subject at primary level (Figure 7), 17.25 percent thought at secondary, 11.5 percent thought at intermediate, 10.25 percent thought at graduate, while 11.25 gave opinion that it should be compulsory at all academic levels. The same perspectives were observed within academic groups under study.
In Pakistan, geography is considered as a less important subject in comparison with other subjects, as the majority of students are of the view that other frontline subjects like biology, business, chemistry, economics, engineering, mathematics, physics etc. are more favorable for them in attaining professional success (Fatima, et al., 2015). Therefore, when students were asked to rank geography, most of the intermediate students consider it as a second, third or last rank subject whereas the majority of graduate, master and M.phil students considered it as a first rank subject because they know the importance and scope of geography as compared to students at the intermediate level (Figure 8).
When exploring perceptions about the gender segregation of the subject, almost all students were of the view that geography is necessary for both girls and boys (Figure 9).

Most of the students strongly agreed or agreed with the statement that “Geography is the source of information, which is not provided by another subject”, whereas few disagreed or strongly disagreed with it (Figure 10).
Employability of Geography

There have been very limited job options for geography graduates in Pakistan (Israr-ud-Din, 1991). Keeping in view this statement, students were asked in the questionnaire to choose the career options given to them. Results reveals that three major career options were rated highly, those are ‘researcher’, ‘teacher’ and cartographer’. Among others, planners, guide, armed forces, scientists and decision maker were also significantly selected by students (Figure 11).
General Comments about Geography as a Subject

When students were asked ‘what is your opinion about geography as a subject?’ the following are the most common responses:

- Geography is an important subject
- Geography provide information about the world
- Geography is very vast subject, covering almost every field of physical and social science
- It is very interesting and informative
- Geography is a career building subject
- Geography is multidisciplinary
- Geography has a wide research scope
- Geography is very useful subject
- Geography has got so many applications
- Geographical knowledge helps in national development
- Geography is a very essential subject for planning

Problems of Geography Education

Students gave the following statements when they were asked to describe the major problems they are facing while studying geography;
Intermediate level.
- Maps are difficult to study
- Names and figures are hard to memorize
- Lots of encyclopedic knowledge
- It is tough and difficult to study geography

Graduation level.
- More theoretical and less practical
- Students take less interest
- Unawareness about the scope of subject
- Lack of GIS laboratory
- Insufficient equipment e.g. for surveying and cartography
- Lack of material and human resources, e.g. no separate building for geography classes and lack of qualified teachers
- Lack of time to understand subject because of semester system
- Lack of computer literacy

Master level.
- Medium of instruction is English (as compared to intermediate and graduation where it is in Urdu) which is hard to cope
- Lack of field tours makes it difficult to understand most of physical geography
- People discouraged us when they heard that we are studying geography
- Lack of tools and instruments

M.Phil level.
- Lack of GIS expertise
- Lack of infrastructure
- Lack of modern research techniques in geography
- Job deficiency for geography graduates
- Lack of development in geography education

Conclusion and Discussion

Geography is facing the problem of its identity and recognition as a useful academic discipline in Pakistan. This paper dealt with the perceptions of geography of students from different academic levels (intermediate, graduate, master and M.Phil). The results revealed that students perceive geography as the study of man-environment relationships along with the spatial and temporal variation of physical and human aspects. The nature of geography is perceived by students as a social science subject, which signals the generally low esteem the students hold for the subject. Similarly, most of them thought that geography is a theoretical subject, which showed that the scientific and applied aspects of the subject are being ignored in the teaching and learning geography. Moreover, they said that they chose geography because it is ‘marks-gaining’, ‘helpful for future’ and ‘easier than others’. But variations in answers were observed among different levels, when they were asked whether they will choose geography for further studies or not.
Intermediate students were unwilling to opt for geography for their higher studies as they want to study other subjects or were interested in other professions, showing their lack of interest at this level. On the other hand, most of the graduate, Master and M.Phil students showed their deep interest in choosing geography for their higher studies. Main statements for choosing geography for higher studies given by them includes; ‘it is informative’, ‘we have personal interest’, ‘it has great scope’, and ‘we want it for our career promotion’. With regard to the significance of geography, the majority of students were of the view that it must be compulsory at primary level, while some said at all levels. Most of the Intermediate students rate geography as a third or last ranked subject while graduate, Master and M.Phil students rate it as a first or second rank subject. Almost all students consider it equally essential for boys and girls to study geography. A high number of students strongly agreed with the statement that geography provides more information compared with other subjects.

Researcher, teacher, planner and cartographer were some of the main jobs students perceive they can do as geography graduates. The general comments recorded by students about geography include that it is multidisciplinary, informative, interesting, vast, useful and a theoretical subject. In addition, they were of the view that geography can be helpful for the future development and planning of the country. Finally, the problems in studying geography as explained by students vary according to their academic level. Intermediate students thought it is a tough and encyclopedic subject while graduate students thought lack of material resources, insufficient time, and unawareness about scope of subject are their major problem. Master and M.Phil students were of the view that unemployment, lack of modern research techniques, infrequent field tours, and lack of research and evaluation in the field of geography education are some major problems geography is facing in Pakistan.

In the light of students’ perceptions about different aspects of geography as an academic discipline, many recommendations can be suggested to enhance the identity of geography. Geography should be taught as an independent subject from primary level up to higher secondary level as it will provide strong base to the students for the levels to come. Moreover, all geography students should be counselled about the scope and importance of geography along with the career counselling. Unlike the existing condition, the medium of instruction should be uniform throughout all academic levels. Butt stated that while considering the future security of geography education we must be mindful of the nature of the modern learner and of the demands of modern societies (Butt, 2008). A very important role can be therefore played by GIS and virtual globes and world maps, which are able to produce a stimulating and entertaining way of teaching and learning geography and to encourage original and socially useful research (De Vecchis, D’allegra, & Pesaresi, 2011). Artvinli also encouraged to use GIS in lessons as it makes the students active learners. (Artvinli, 2010). Therefore, curriculum should be revised, it should be more practical than theoretical. Material resources, e.g. surveying equipment, computers, and GIS software should be provided by governing authorities. Field surveys should be designated as compulsory for relevant courses, e.g. geomorphology, oceanography, arid land geography, etc. Modern research techniques should be taught to the students at higher academic levels to enhance their expertise in
the subject. Governments should maximize job opportunities for geography graduates. As Pauw and Beneker (2015) suggested that teachers need to unlearn conventional, teacher centered techniques and become more responsive with their high quality (geography) input, guidance and support (Pauw & Béneker, 2015), hence geography teachers in Pakistan also need to update their teaching techniques. Gudmundsdottir was of the view that within universities geography as a discipline should be used in the development of critical intellects that can be employed creativity in constructing new knowledge (Gudmundsdottir, 1990). Hence, university faculty should improve teaching and research in innovative way. Moreover, Pakistani geographers should play vital role in upholding geography, for example geographers in Australia have realized the importance of promoting geography in general education evidence of which include; a range of publications; school competitions; media release; development of viable professional associations; the promotion of educational supplements, and the preparation of media broadcasts (Gerber, 1990).

Finally, more research is needed about different aspects of geography education in Pakistan so that it can develop in a progressive way. However, one limitation of this study is that it has focused on the geography students of one city of Pakistan. It is possible that geography students in other cities might hold rather different perceptions. If the same research were to be conducted across the country it might provide a sound base for the future development of geography education in Pakistan.

References


Biographical Statement

Munazza FATIMA is lecturer of Geography at The Islamia University Bahawalpur Pakistan. She recently completed her M.Phil in geography. Her field of research is Geography education and Medical geography. She had attended various, yet influential national and international conferences and presented quality research papers about those subjects. She is passionate to work for the promotion of geography as a discipline in her country.

Appendix

Questionnaire

Name: ___________________________ Gender: Male/Female

Class: Primary, Secondary, Intermediate, B.A/B.Sc, M.A/M.Sc, M.Phil, Ph.D
F. M. / Perceptions of Geography as a Discipline among Students of Different Institute: ______________________

1) Geography is a science that studies;
   a) Humans   b) Environment   c) Human and Environment

2) What type of subject geography is?
   a) Theoretical   b) Applied   c) Both

3) Which statement explains the scope of Geography?
   a) Geography is the study of earth’s feature and their regional variations
   b) Geography is the study of man environment relationship; it also deals with spatial and temporal variations of physical and human aspects on earth.

4) In your opinion Geography belongs to which group
   a) Physical science   b) Social science   c) Arts and Humanities   d) Others

5) What do you think geography should be a compulsory subject at____level?
   a) Primary   b) Secondary   c) Intermediate   d) B.A/B.Sc

6) Geography is important for
   a) Boys   b) Girls   c) Both

7) Why you choose geography as an academic discipline?
   a) Easier than others   b) Marks gaining subject   c) Academic choice   d) Good at it   e) Helpful for future   f) Any other   e) Undecided   f) Any other

8) Do you want to opt. Geography for higher studies?
   a) Yes   b) No
   If yes then why ___________________
   If no then why ___________________

9) What sort of jobs do you think geography would be useful for (tick as many as you like)
   a) Teacher   b) Researcher   c) Planner   d) Arm forces
   e) Banker   f) Cartographer   g) Navigator   h) Decision maker
   i) Police   j) Engineer   k) Innovator   l) Guide for tour
   m) Scientist   n) Any other ___________________

10) While considering an academic discipline, which rank you give to the subject geography?
    a) First   b) Second   c) Third   d) Last

11) Geography subject is the source of information that is not provided by other disciplines.
    a) Strongly agree   b) Partially agree   c) Agree   d) Disagreed
    e) Strongly disagree

12) As a geography student, what is your opinion about geography as a subject?
    __________________________________________________________
    __________________________________________________________

13) Enlist problem you face while studying geography;

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