Students' Perceptions Of Geography Education In Middle And High Schools: The Importance Of Geography Education In The Education Curriculum, Dagana Dzongkhag, Bhutan

Leela Balab Pokhrel¹, Ramesh Kumar Chhetri²

¹Tashiding Lower Secondary School, Dagana, Ministry of Education and Skills Development, Bhutan
²Samtse College of Education, Royal University of Bhutan, Samtse, Bhutan

ABSTRACT

A positive perception of the geography subject is crucial for students' academic success and their interest in learning. The identification of students' perceptions of subjects has been carried out in many educational curricula. However, it is rarely studied in Bhutan. This study explores the students’ performance in middle and higher secondary school and their academic performance in Dagana Dzongkhag (district). To study the students’ perceptions of learning geography, the data were collected from key stages IV and V students using a convergent parallel mixed-methods design from four schools. A total of 282 students, comprising 181 from key stage IV and 101 from key stage V were selected from two middle secondary and two higher secondary schools. The quantitative data were obtained using a survey questionnaire, and the qualitative data were collected from four FGDs (focus group discussions). The findings revealed that the students have positive perceptions of learning geography, irrespective of their stages. There is a significant difference in students’ perception of learning geography between key stages IV and V. The students of key stage V have a comparatively positive perception compared to those in key stage IV. It is evident from this study that students’ perceptions towards the subject would also impact their academic performance. Therefore, to address the research findings, this study recommends the district education office and school management to prioritize geography education and establish proper mechanism to support it through relevant authorities. The study has also opened the way forward for future researchers to explore similar research with a larger population.

1. Introduction

Bhutan is a small country in the eastern Himalayas, located between India in the south and China in the north. The country has an area of 38,394 square kilometers and a population figure of 770,276 (National Statistical Bureau of Bhutan, 2023). The modern education in the country was introduced in the 1960s. Bhutan's formal education system was largely monastic for decades. Until the mid-1980s, the school curriculum was borrowed from India (Paul, 2017). The goal of today's school education policies is to create a dynamic system of schooling that responds to local, national, and international requirements. Geography as a school discipline was adopted into the Bhutanese education system in the 1960s from the Indian syllabus. The introduction of geography into the Bhutanese school system was based on certain philosophical concerns of the curriculum's Gross National Happiness (GNH) values through various learning and teaching approaches. However, it can be understood that geography is considered a less important subject in Bhutan compared with other subjects. It is learned least by the learners because they consider geography not a major subject for them to attain professional success in the future. Bhutan Higher Secondary Examination Certificate (BHSEC) students' performance remains a top priority for the Ministry of Education and the Government. However, the performance in geography has consecutively declined over the years.

The student's motivation to learn geography may depend on various factors and the student's perception of the subject. Students with a positive perception of the subject may perform better than students with a negative perception. Teachers, curriculum designers, and parents may play an important role in sustaining students' interest in learning geography. Hence, it is important to investigate and identify students' perceptions of learning geography. According to (Kubiatico, M., Mrazkova, K., & Janko, 2012) identification of the perceptions of a subject is an essential part of educational researchPerception could lead to the development of interest and a positive attitude, thus leading to achievement and success. A positive perception of the subject would also bring students better performance and interest in the subject to learn (Verma & Deshpande, 2016).
Similarly, perception may play a greater role in determining the student's attitude towards the subjects they learn and perform in the schools of Dagana. Government emphasis on certain important subjects while sidelined other fields like geography and history may impact students' attitudes toward geography. The education policy of considering some subjects as mainstream subjects has also affected students' performance and perception in learning geography.

The lack of jobs for geography graduates is a big challenge for this subject. The curriculum developer of geography developed a "clear and comprehensive" framework for the discipline of geography to make all stakeholders understand the importance and scope of geography education. Royal Education Council (REC) further explains that a high-quality geography education should awaken students' curiosity and fascination with the world and its people.

Correspondingly, a study by (Kubiatko, M., Mrazkova, K., & Janko, 2012) explored the differences in certain dimensions of geography perception between gender and grade level of lower secondary school pupils in Ghanaian Senior High schools. Their study found that students viewed geography as a subject with limited employment opportunities. Further, they stated that students lacked interest in geography concerning their future jobs. On the contrary, a study (Opoku, 2019) revealed that students' interest in geography is partly linked to the perception of geography over other disciplines regarding job availability. He argues that geography is an inclusive subject with multiple disciplines, creating numerous job opportunities in the labor market.

Learning geography requires sufficient instructional time and field excursions. In contrast, we have the least periods allotted for learning geography. Teaching geography employing the traditional lecture method, which requires students to remain passive, may make learners dislike the subject and develop negative perceptions. Similarly, the study (Al-Notli, 2010; Fatuma, 2016) identified challenges students face in geography. They found that although students spend most of their time in the classroom, they desire to apply what they learn there. They also revealed issues with inadequate teaching materials and limited instructional hours allotted, which are challenges they face when studying geography. Teaching geography employing the traditional lecture method, which requires students to remain passive, may make learners dislike the subject and develop negative perceptions. In geography education, learner-centered approaches may supplement a portion of traditional lectures. Learning may be more effective if students participate in activities more actively than the teacher. (Mitu, 2014) In his examination of learner-centered teaching in Tanzania, it was observed that when teaching geography, teachers' efficacy in the instructional process was determined by students' achievement and performance in meeting the prescribed instructional objectives outlined in the syllabus guidelines. However, it was not contingent upon the student's ability to assimilate and integrate their life experiences into the knowledge-construction process. This underscores the significant impact of teaching methodologies on students' learning perception and academic performance.

Numerous investigations have also demonstrated that parental engagement significantly influences children's academic achievements, as it plays a crucial role in shaping their learning trajectories. Active parental participation has been recognized as a key factor in positive outcomes in children's educational endeavors (Jeynes, 2011). In the same way, Students who receive effective guidance from their teachers and parents tend to excel in examinations. Furthermore, the combined guidance provided by teachers and parents significantly influences students' attitudes toward learning. (Hussain, 2006) also stated that the guidance from the parents and the teachers indirectly affects the students' performance.

The attitude of students towards a school subject, its scope in higher education, and its profession may also determine a learner's performance in the subject. A positive attitude towards Geography may make a difference in performance. It can be asserted that the difference between success and failure in the subject is due to learners' attitudes towards the subject. According to (Walker & Myrick, 2006) students who are in a good mood, love what they are doing, and have a positive attitude receive higher grades in subject matter. The study in Nigeria (Eze, 2020) further revealed that students' poor attitude toward the subject is one of the factors responsible for the failure in Geography.

It is evident from the various literature that different factors influence the students' perception of learning geography in school. It is found that factors such as parents' and teachers' motivation, curriculum content, teaching pedagogy, students' attitude towards the subject, and the treatment the subject receives were reported to be the most dominating factors in impacting students' perception of learning in schools. However, little research has been conducted on students' perception of learning geography and its relationship with academic performance.

Hence, the study attempts to construe the relationship between students' perception and status of geography education in the middle and higher secondary schools of Dagana Dzongkhag. Further, this study examines how school students perceive geography education as a discipline among different academic levels and their performance in Geography. It is envisaged that the findings from this study may inspire teachers to explore
new strategies to foster students' positive perceptions. The findings will also help the teachers address poor performance in Dagana Dzongkhag's secondary schools.

2. Method

2.1. Research Approach and Design

To gain an in-depth understanding of the topic, this study employed a mixed-methods approach using the convergent parallel designs as presented in Figure 1.

Figure 1. Convergent Parallel Mixed Method Design
Source: Adapted from (Creswell, J. W., & Clark, 2011)

The researcher used a mixed technique approach with the hope that the qualitative method would balance any inherent flaws in the quantitative method. A convergent parallel design was used in this research. In this research, the researcher collected and analyzed two independent quantitative and qualitative data strands in a single phase. Finally, the researcher merged the results for comparison.

The researcher used a mixed technique approach, hoping that the qualitative method would compensate for any flaws in the quantitative method. One of its main advantages is that the mixed approach draws a conclusion based on verified evidence. Thus, by employing a variety of data collection and analysis techniques, the researcher can confirm, cross-validate, and verify qualitative evidence with quantitative evidence.

2.2. Sampling Approach and Frame

This study used convenience sampling techniques to collect a sample from the target population of students in classes IX and XII (Key stages IV and V). Purposive sampling was used to draw the participants for the Focus Group Discussions. Two groups, each consisting of 6 students from key stages IV and V, participated in the semi-structured FGD.

Based on (Krejcie & Morgan, 1970) table for determining sample size at a 95% confidence level with a 5% margin of error: 306 students participated in this study for a given population. The sample size of 282 students represented the population responding to the survey questionnaire, and 24 students participated in FGDs.

2.3. Data Collection Procedures

The quantitative data on students’ perceptions of geography education in school was collected using a survey questionnaire. The survey questionnaire with 6 Likert scales was administered personally by the researcher to the respondents to ensure full and prompt responses. Semi-structured interview questions were employed to collect data on how students perceive geography education in schools. Focus group discussion was conducted with four groups of students to supplement the data collected from survey questionnaire responses.

Data analysis involves the process of refining, coding, and validating collected data (Malhotra, N.K., and Birks, 2006). Information obtained from participants via a structured questionnaire underwent scrutiny, categorization, and arrangement into tables for systematic examination. The analysis included calculating frequency, percentage, mean, and standard deviation to extract insights from the dataset. Quantitative data analysis was conducted using the Statistical Package for the Social Sciences (SPSS version 22). The quantitative data were analyzed using descriptive statistics interpretation, and to further understand the correlation and significance of different variables, inferential statistics were used per the research objectives and questions.
2.4. Data Analysis Procedures

Figure 2. Flowchart showing data analysis procedure

The qualitative data from focus group interviews were transcribed and analyzed around the predetermined survey themes and emerged themes from FGDs. A 6-step thematic analysis was used to analyze the qualitative data. Finally, the quantitative and qualitative results were triangulated for discussion (Braun & Clarke, 2006). This study was guided by a convergent parallel mixed method design (figure 2). Convenience sampling was used to select a sample size from two middle and two higher secondary schools of Dagana for quantitative data collection.

3. Results and Discussion

This section outlines the findings derived from examining both quantitative and qualitative data. The quantitative data underwent analysis employing descriptive statistics (Mean and Standard deviation) and inferential statistics (Independent-Sample T-Test and Spearman’s coefficient correlation) to address the primary research inquiries. Concurrently, qualitative data obtained from focus group interviews were transcribed and scrutinized based on the primary and secondary themes identified.

The major themes like “Students’ perception of geography discipline, Difference in perceptions of learning geography between the key stages IV and V and Relationship between students’ perception and performance” are analyzed based on both quantitative and qualitative data.

3.1. Students’ Perception of Geography Discipline

In the school, geography is taught as both a theoretical and an applied academic subject. The fundamental principles of geography, namely location, place, human-environment interaction, movement, and region, form the cornerstone of the discipline. Considering the thematic focus, relevance, significance, and breadth of geography, inquiries were formulated to gauge students’ perspectives on learning geography within educational settings.

A survey was conducted for students of key stages IV and V. An overview of middle and higher secondary students’ perceptions of geography education is given below to determine students. The overall item analysis of their perceptions of geography education is presented in Table 1.
The findings of a study conducted by Rilwani, M. L., Akahomen, D. O., & Gbakeji, 2014 (Al-Nofli, 2010) suggest that students’ favorable attitudes toward geography were associated with the engaging content of geography topics. This positive perception among students indicates a general satisfaction with the lessons, curriculum content, and the acquisition of subject-specific skills in their geography classes. The result also resonates with an earlier study (Ballantyne, 1996). A researcher in Australia conducted a study involving 343 students and discovered that most of them exhibited a strong interest in geography. This interest was attributed to the captivating nature of natural hazards, environmental issues, and global warming.

Geography was perceived as a very informative and important subject by both the key stages in Dagana Dzongkhag. One hundred eighty-six participants found geography enjoyable and helpful to learn about countries, maps, natural disasters, the world, and lifestyles. Similarly, most FGD participants shared that they consider geography an easy and interesting subject because many geographical concepts and knowledge are available around them in the community. It deals with the geology of the earth or some of the human or anthropogenic activities that threaten the earth. They learn about the earth and its features and methods of conserving the environment through geography education.

The finding on students’ perception of geography as a school discipline reveals that most students have a positive perception of learning geography. Most participants agreed (4.01-5.00) on the Likert scale, with an overall mean of 4.50 indicating a positive perception towards geography. This result agrees with the earlier study by (Rilwani, M. L., Akahomen, D. O., & Gbakeji, 2014) In Turkey and Nigeria, separate studies suggested that students’ favorable attitudes toward geography were associated with the engaging content of geography topics. This positive perception among students indicates a general satisfaction with the lessons, curriculum content, and the acquisition of subject-specific skills in their geography classes. The result also resonates with an earlier study (Ballantyne, 1996). A researcher in Australia conducted a study involving 343 students and discovered that most of them exhibited a strong interest in geography. This interest was attributed to the captivating nature of natural hazards, environmental issues, and global warming.

As evident from Table 1, the overall item analysis of the quantitative data under the theme of students’ perception of geography education reveals that most respondents agreed on the Likert scale with an overall mean of 4.50. It indicates that most students positively perceive learning geography and consider geography an important discipline in schools. Despite the lack of parents’ support and influence in learning geography, the students are enthusiastic about learning it.

Similarly, most FGD participants shared that they consider geography an easy and interesting subject because many geographical concepts and knowledge are available around them in the community. It deals with the geology of the earth or some of the human or anthropogenic activities that threaten the earth. They learn about the earth and its features and methods of conserving the environment through geography education.

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The study (Weeden, 2007) suggests that students’ attitudes toward a particular subject are partly influenced by their perception of its utility and significance. The findings of a study conducted by (Al-Nofli, 2010) in a study involving sixth and tenth-grade students aimed at examining their views on various aspects of geography, it was observed that students generally held favorable opinions about the subject. The research findings indicated that students found geography enjoyable and beneficial for gaining insights into countries, weather patterns, natural calamities, global affairs, and diverse lifestyles.
This result may give an understanding that teaching geography plays a key role in helping students to understand the world and the environment around them. (Haubrich, 2000) The argument posits that forthcoming generations will require a geographical education emphasizing essential skills and enjoyable learning experiences to achieve personal fulfillment and sustainable global development. Geography is pivotal in empowering students to contribute towards building a better world.

3.2. Difference in Perceptions of Learning Geography Between the Key Stages IV and V

The notion is that the student's perception of learning geography varies between middle and higher secondary school students. Students of Key Stage IV are said to have a comparatively negative perception of learning geography compared to that of Key Stage V. Nevertheless, there was no concrete evidence to support the differences in their perception. To prove whether such contention is valid in Dagana Dzongkhag, this study compared students’ perceptions of the two key stages in middle and higher secondary students. The Independent-Sample T-test was conducted against the Key stages IV and V, as presented in Table 2.

<table>
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<th>Table 2. Perception of learning geography between key stages IV and V</th>
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<td>Class</td>
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<tr>
<td>Students' perception of learning geography of Key stages IV</td>
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The result in Table 2 revealed that there is a significant difference in perception of learning geography in Key stages IV and V. It is statically significant with t (280) = -5.049, p< 0.05 and M=4.4; SD=0.4 and M=4.7; SD=0.5 respectively for key stage IV and V.

Correspondingly, the participants of FGDs from Key Stage IV and Key Stage V have shared different views on geography education in the school. Students from key stage V who learn geography as a major subject consider it an important subject. As stated below:

“…Geography is an important subject because it is a mandatory subject for Arts students and some of us wanted to be employed with a geography background…” (FGD1 and FGD2).

Conversely, the FGD participants from key stage IV expressed that geography is not a major subject, as many aspire to learn science subjects in their higher studies. Participants from key stage IV indicated the least interest in learning learning as they consider geography an important subject in school. For example, participants of FGD3 and FGD4 shared:

“…Most of us may not study geography in our higher education because we want to study Science and Mathematics. Geography is not considered a major subject and there is less scope of geography, less competition, as most competent will take other subjects and less bright would be given geography subject…” (FGD3 and FGD4).

The result revealed a statically significant difference in perception of learning geography in key stage IV and Key stage V with t (280) = -5.049, p< 0.05 and M=4.4; SD=0.4 and M=4.7; SD=0.5 respectively for key stage IV and V. The Independent-Sample T-Test for the perception of learning geography found that there was a significant difference in perception of learning geography in Middle Secondary and Higher Secondary School students. Students from Key Stage V have a greater interest and have a positive perception of learning geography compared to the students of Key Stage IV.

This result aligns with the attitude of senior secondary school students towards learning geography in Nsukka Local Government Area of Enugu State conducted by (Onuoha, J. C., & Eze, 2013). Their study found that the senior secondary school geography students had a positive attitude toward learning the subject irrespective of gender. The findings revealed that students generally have a positive attitude towards learning geography.

Similarly (Nadire, 2020) the study revealed that 11th-grade students exhibited more favorable attitudes towards the geography course than 9th-grade students. Analysis of student perspectives on achievement motivation in geography lessons showed significant differences based on grade levels. This divergence in
perception between grades may apply to learners in Key Stages IV and V of schools in Dagana Dzongkhag. Students in grades 9 and 10 typically study general subjects without a specific focus, possibly resulting in less interest in geography as they advance. Conversely, students in Key Stage V, pursuing the Arts stream, view geography as a compulsory subject, leading to a more positive attitude towards learning it.

Consequently, the participants of FGDs from Key Stage IV and Key Stage V have shared different views on geography education in the school. Students from key stage V who learn geography as a major subject consider it a blatant subject for them as it is mandatory for the Arts students. Similarly, the FGD participants from key stage IV expressed that geography is not a major subject, as many aspire to learn science subjects in their higher studies.

On the contrary, the previous study conducted in Czech Middle Secondary Schools on student attitudes towards geography by (Kubiatko, M., Mrazkova, K., & Janko, 2012) found that grade level plays a crucial role in shaping students' attitudes toward geography learning. It was observed that Czech lower-secondary students' attitudes and student demographics varied depending on their grade level. Specifically, their appreciation for geography decreased as students progressed to higher school grades.

It can, therefore, be assumed that every student may perceive geography differently depending on their interest and grade level. This finding provides an insight into the difference in students' perceptions of geography in key stages IV and V. It is perhaps understood that the key stage IV students consider other front-line subjects as major subjects to make their career. On the other hand, the key stage V students consider geography their major subject since they are in the Arts stream. Thus, it can be concluded that there is a difference in students' perception of geography in key stages IV and V. The finding revealed that the key stage V students have better perceptions than the key stage IV students. The data were collected from only four schools (2 MSS and 2 HSS) of Daganin thereof; therefore, a credit credible result could be carried out with more schools in the future.

3.3. Relationship Between Students’ Perception and Performance

The relationship between students' perceptions and performance was sought to get an insight into perception and its influence on students' performance under Dagana Dzongkhag. Spearman's correlation was performed to determine the relationship between students' perceptions of performance.

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<th>Variables</th>
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<tr>
<td>1. Students' perception of learning geography</td>
<td>1.000</td>
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<tr>
<td>2. The last exam marks obtained</td>
<td>.231**</td>
<td>1.000</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows a positive low correlation at \( r = 0.231 \) and \( p < 0.05 \) for students’ perception and last exam marks obtained. This illustrated a fairly moderate effect on students' perception of students performance in geography. The result indicated that the relationship between students' perceptions and academic performance is not very strong but not very strong.

The finding on the relationship between students' perception and performance indicated a statistically significant positive low correlation at \( r = 0.231 \) and \( p < 0.05 \). The result illustrates a fairly moderate effect of perception on students' performance. This result agrees with the previous study on factors influencing students' poor performance in geography subjects in Tanzania (Mwesiga, 2017). According to his findings, some students were not interested in geography because they felt that certain subjects and sub-themes of geography required applied mathematics and drawing skills, and their proficiency in these skills was low. However, besides their challenges, most students were interested in geography and had a positive view while studying. Further, (Mwesiga, 2017) stated that the teaching environment should be conducive for students to practice their ideas and interests, which can lead to good academic performance. This could help improve students' attitudes in their subjects and thereby improve geography performance. Perhaps a positive attitude towards geography would improve students' academic performance in geography.

Further, the study by (Ahmed et al., 2018) in Sudan on students' perceptions of the perception of students learning environment and its correlation with their study year and academic performance revealed that students with higher academic achievement tended to hold more positive perceptions of their education. Conversely,
students with lower academic performance displayed more negative perceptions. However, the study found little disparity between students’ perception of learning geography and academic performance. Thus, it can be inferred that there is minimal impact on students’ perception of performing geography on their academic performance in the schools of Dagana Dzongkhag.

Therefore, it may be concluded that understanding a student's perspective on the development of interest and positive attitude in learning geography and Thu leads to movement in academic performance. The findings revealed that students have a positive perception towards learning geography in the schools in Dagana. The study also helps the Dzongkhag Education Sector and the teachers understand the perception of learning geography and its influence on academic performance. There is a lack of research on the relationship between students’ perceptions of performance in geography. Consequently, the result is discussed based on similar findings and researchers’ views. researchers'.

4. Conclusion

The results revealed that most of the students in the middle and higher secondary schools in Dagana have a positive perception of learning geography despite the challenges they face in learning geography in schools. The findings on the difference in students’ perception between the key stages IV and V revealed a statistically significant difference in perception of learning geography. The relationship between students’ perception and performance level indicated a significant positive low correlation. This can be understood that the student’s perception of learning geography can equally impact their academic performance. However, there is no vast difference in students’ perception of learning geography and their academic performance in Dagana. The findings established from this study may not be generalized for the entire population since the study area was limited to one district. Moreover, the study has been conducted based on data collected at only one time rather than collecting data at different periods. The finding was based on data collected from students only. Future researchers can also consider teachers’ perceptions of geography education in schools. The absence of relevant references to validate the findings in the Bhutanese context was another limitation of this study.

References


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