1-1-1991

Swazi students' attitudes towards geography and their relationship to home background, teacher, previous academic achievement, peer group and gender

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SWAZI STUDENTS' ATTITUDES TOWARDS GEOGRAPHY AND THEIR RELATIONSHIP TO HOME BACKGROUND, TEACHER, PREVIOUS ACADEMIC ACHIEVEMENT, PEER GROUP AND GENDER

BY

DAVID MANYATSI, B.A. Ed. (Sierra Leone), Post-Grad. Dip. Ed. St. (WACAE)

A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of

Master of Education
at the School of Education,
Edith Cowan University

Date of Submission: February, 1991
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
ABSTRACT

This study examined attitudes of Swazi Secondary School Students towards geography and the association of those attitudes with home background, teacher, previous academic achievement, peer group and gender. Attitudes of 435 Swazi students toward geography were assessed in July 1990.

The instrument for the measurement of attitudes toward geography was subdivided into eight factors: Interest in the subject; perceived value of the subject; attitude to the subject teacher; class management; perception of own ability; attitude to other students; perceived teacher attitude to students; and attitude to homework.

Home background was measured in terms of the parents' employment and educational level. Peer group was measured in terms of students' report on their peers whilst the teacher variable was measured in terms of the qualification of the teacher. Students' previous academic achievement was computed from the means of the tests the students had taken from February 1990 to June 1990. Gender was taken as a simple dichotomy, either male or female.
The attitude scales were factor-analysed to gauge the loadings of each item to the eight factors. Except for four items all the other items loaded well into the eight factors identified.

The forty Likert scale items were analysed for means and standard deviations. These were further correlated with the variables of home background, peer group, teacher and students' previous academic achievement.

The results showed that the majority of Swazi students expressed positive attitudes toward geography. However, the intercorrelations among the variables indicated that the variables had a weak correlation with the expressed attitudes.

The conclusions made from this study are:

1. Swazi students had positive attitudes toward geography, but these positive attitudes had low correlations with peer group, home background, teacher qualification and previous academic achievement.
2. Unlike in developed countries where extraneous variables play a major role in the shaping of attitudes, in Swaziland the variables play a lesser role.

3. Previous academic achievement seemed to be more related to attitudes than the other variables.

4. There was no significant difference between male and female attitudes toward geography.
Declaration

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

David Manyatsi

......
ACKNOWLEDGEMENTS

I would like to acknowledge the assistance rendered by the following people to the completion of this study:

The secondary school principals and geography teachers in Swaziland for permission to carry out this study at their schools;

Professor Jim Wicks for the valuable advice and encouragement;

Doctor Sybe Jongeling for the use of computer facilities and the supply of consumables;

Dumisile, my wife; Bheki and Mlungisi, my sons for their support and endurance during the duration of my study.
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CHAPTER I

INTRODUCTION

BACKGROUND TO THE STUDY

The central issues investigated in this study relate to the attitude of Swazi Junior Secondary School students towards Geography. In particular, the study was concerned with assessing the attitudes of students and the possible association between expressed attitudes and exogenous variables such as home background, peer group, teacher, previous academic achievement and gender.

Geography is one of a number of subjects offered at the Junior Certificate level (examined at the end of Year 10) and at School Certificate and General Certificate of Education level (examined at the end of Year 12) of schooling. The Junior Certificate examinations, however, have lost their significance resulting in them being phased out so that students sit examinations only at the end of Year 12. This study assumed that the Junior Certificate examinations no longer exist and students prepared for the School Certificate and General Certificate Examinations from Year 8 of secondary schooling.
To enrol for the School Certificate and General Certificate of Education offered by Cambridge University, a student is required to take a minimum of six subjects including English Language which is a compulsory core subject. The other subjects are selected from five groups of subjects which are grouped under General Subjects, Modern Languages, Mathematics Subjects, Science Subjects, and Practical Subjects. Geography is classified under General Subjects together with History, Religious Studies, Economics, Literature in English and General Paper. The choice of subjects is to be made in such a way that the electives come from at least three groups besides English Language which is a group on its own.

A good pass in the Cambridge School Certificate and General Certificate of Education in the first or second division guarantees a student entry into university, teacher training college or technical college. On entering a tertiary institution students usually prefer to major in those subjects they passed well in their School and General Certificate examinations rather than enrol for new subjects. Since tertiary institutions offer a maximum number of four subjects for their courses students have a wider choice when selecting subjects for their courses. The subjects chosen depend on the
academic programme for which a student enrols. For instance a student who enrols for a B.A. (Humanities) degree is likely to select four subjects from English Language and Literature, African Languages and Literature, French, History, Theology and Religious Studies and Geography for the first year. For the subsequent years the student selects two of those subjects passed in the first year and carries on with them until the fourth year.

Swaziland is the smallest country in Southern Africa with an area of 17 363 square kilometres and a population estimated at 800 000 inhabitants. There are about 500 primary schools catering for about 150 000 pupils, about 130 secondary schools catering for about 40 000 students and, at the tertiary level, three Teacher Training Colleges, one technical college and one university. In addition there are two post-secondary institutions which offer courses in nursing and other health-related courses. The University of Swaziland and the three Teacher Training Colleges offer a variety of courses leading to a teaching qualification. The University of Swaziland, however, in addition to offering degree studies in Primary and Secondary education also offers degrees in Humanities, Law, Agriculture, Science, Social Science and Commerce. Geography is
offered in the Faculties of Education, Science, Social Science and Humanities. Despite the fact that Geography is offered in four of the five faculties of the University, the number of students taking Geography is far less than the number of students taking other subjects such as History, Religious Studies, English Language and Literature. At the individual level it would appear that it is a waste of time and energy for a student to enrol for a subject he has very little prospects of doing at a higher level. In addition the Swaziland Government questions the viability of financing school subjects which do not seem to contribute to the future career prospects of the students.

This study was motivated by some observations made by the researcher over the past ten years and they all relate to the youth making subject choices at school and at the same time preparing for higher education and future employment. Between 1978 and 1986 the researcher was involved in the teaching of Geography and English Language, as well as career guidance and counselling at one high school in Swaziland. The researcher observed that the number of students taking Geography was far less than the number of students taking other subjects and, during career guidance sessions, found that most of the
students seemed to be unaware of the benefits they would reap from the subjects they were taking except to meet the minimum number of subjects required. In some cases students would select their subjects after finding out who the subject teachers were and whether their peers selected the same subjects or not.

In 1987 and 1988 the researcher taught Geography to part-time Diploma-in-Education students and Geography Curriculum to B.A., B.Ed. and B.Sc. students at the University of Swaziland. The researcher found that the number of students taking Geography at both the Diploma and Undergraduate levels was far lower than in other subjects. In the teacher training colleges the situation was the same as in the university, the only difference being that in some cases geography was one of the compulsory subjects for some subject groupings and so students were compelled to take geography as one of their subjects. This trend was of concern not only to the Ministry of Education but also to the Dean of the Faculty of Education who voiced his concern that the time would come when there would be no Geography teachers produced by the University of Swaziland. The following section presents the research problem related to this trend.
STATEMENT OF THE PROBLEM

The principal aim of the study was to investigate the reasons for the apparent avoidance of Geography by students at the tertiary institutions in general and the University of Swaziland in particular. It is assumed that the reasons for the avoidance of Geography are deep-rooted and, because of this, Swazi secondary school students' attitudes towards Geography were assessed and a possible association between expressed attitudes and students' home background, teacher, peer group, and previous academic in Geography were investigated. These four exogenous variables were treated as independent variables and expressed attitude was treated as a dependent or responding variable.

The study was undertaken with the knowledge that very little has been done to investigate students' perceptions of their school subjects. Instead most researchers have had the tendency to 'focus on teachers and their aims', (Lynch 1983:116). This lack of research on students' perceptions is bound to affect the teaching of the subjects and the students' attitudes to their school subjects. The Social
Sciences in general and Geography in particular have suffered more than any other subject area in the field of research on perceptions.

Gilbert (1988) also takes note of the low status accorded the Social Sciences and laments the failure of the Social Sciences to 'demonstrate the ability to foster the kind of citizen they hold as their ideal' (p.12). He continues to challenge Geographical Educators to ask why it is that their subject is not more highly valued. The stated problem was pursued with the following research questions in mind.

RESEARCH QUESTIONS

The primary focus of the investigation was the assessment of Swazi students' attitudes towards Geography and to determine whether there was an association between expressed attitudes and student's home background, peer group, teacher, previous achievement and gender in Geography. More specifically the problem was stated in the following questions:
1. What are the Swazi students' attitudes towards Geography?

2. Is there any association between expressed attitudes to Geography and the students' background, peer group, teacher and previous academic achievement.

3. Is there any significant difference between male and female Swazi students' attitudes towards geography?

SIGNIFICANCE OF THE STUDY

Since Swaziland regained her independence in 1968, the main concern of the Ministry of Education has been to redesign the curricula of both primary and secondary schools so that students learn skills suited to a culture that is undergoing modernization. Coupled with this concern is the fact that qualified teachers are needed to implement the new curricula. In preparation for these tasks the Swaziland Government started sending local educators abroad for training in curriculum development. Within the country, courses were established for training teachers of new subjects as well as traditional subjects such as Geography and History. The task of
conducting the in-service programmes is undertaken by the University of Swaziland and the Teacher Training Colleges in association with the Swaziland Ministry of Education.

Another problem associated with the nature of the curriculum is that of effecting a good match between job openings and the skills students possessed as they left the school system at the end of years 7 and year 12. In the light of this it is important for the students to develop positive attitudes toward their school subjects if they are to receive the maximum rewards from those subjects. Clearly the availability of information on the attitudes of students to their school subjects is of primary importance to the teachers since they would be in a position to judge the status of their subjects while at the same time evaluating their own teaching effectiveness. The relevance of the school subjects also can be inferred from the students' expressed attitudes.

Since many high school students are usually uncertain of their future educational and/or vocational prospects, any attitude they express towards their subjects would be of relevance to the parents, the teachers, the tertiary institutions and
the Ministry of Education. The parents are the initial agents of socialization, and, in the case of developing countries like Swaziland, the school takes over from the home environment as soon as the child begins schooling. Since all schools, colleges and the University of Swaziland operate under the jurisdiction of the Ministry of Education, if there is any need to mount in-service courses to boost the status of Geography, the Ministry of Education will be in a position to provide the funding for such an exercise. The Swaziland Ministry of Education would also be able to judge the viability of financing the training of Geography teachers. The researcher is of the opinion that the findings on attitudes and their association with educational environments would identify areas for more detailed investigation.

DEFINITION OF TERMS

This section provides operational definitions of the variables used in the study so that they can be translated into more observable operations to avoid ambiguity.
Educational environments

Educational environments referred to the physical and social as well as intellectual forces and conditions that impinge on the individual (Keeves, 1972: 25). The educational environments included home background and peer group. The home background referred to the place where the child lived and included the father and mother (or male and/or female guardian). The occupational status and educational level of the mother and father were taken as measures for the home background.

Peer group referred to Form 2 children of the same class many of whom belonged to the 13 - 15 year-old age group.

Teacher referred to the person who gave instructions in geography to the Form 2 students of each school selected for the investigation. Teacher qualification was used as the criterion for measuring the variable of teacher.

Previous academic achievement referred to the mean of the grades obtained by each pupil in tests taken between February, 1990 and June 1990.
ASSUMPTIONS AND LIMITATIONS OF THE STUDY

In this study it was assumed that the items and measuring instruments used measured what they were intended to measure. It was further assumed that the respondents taking part in the study gave honest and careful responses to the research questionnaire. This assumption was enhanced by ethical considerations such as assuring the subjects that whatever information they provided would not be divulged to any third person.

The study, however, had limitations. Firstly the conceptual model was too simple to define clearly the relationships among the variables. Secondly the questionnaire had been prepared originally for respondents whose first language was English. This meant that some translations had to be made to assist those respondents who could not understand the questionnaire items. The translation to the vernacular language might have rendered some of the items less reliable in measuring what they were supposed to measure. The sampling procedure (cluster sampling) could not be trusted as the best sampling technique as it was not possible to draw up a sample which could be generalised to the whole of Swaziland. The weakness of cluster sampling is seen
in the fact that twelve schools were selected and in each of the twelve schools Form 2 geography students were selected for the investigation. Such a sample could not be considered as a true representation of the Form 2 Swazi population in view of the fact that the researcher might have had some bias in the choice of the sample.

OVERVIEW OF THE STUDY

Chapter II presents a review of the literature associated with attitudes (dependent variable) and the independent variables (home background, teacher, peer group, previous achievement and gender). The literature points to various methods of assessing attitudes which have been used extensively by previous researchers. Even though the association between expressed attitudes and educational environments is difficult to determine the literature does point to some form of link between expressed attitudes and educational environments.

Chapter III presents the methodology which consists of the conceptual framework as well as the research design for the study. The model, adapted from Keeves' (1972) and Schibeci's (1985) conceptual framework for the study of educational environments
of home, school and peer group is used to postulate the association between attitude and educational environments. Chapter IV presents an outline of the design of the study which in turn is followed by a description of the measuring instruments, the sampling procedure, the data collection processes and ethical considerations.

Chapter V contains details of the analysis of the collected data. Patterns of measurement are also described in this chapter as well as the examination and interpretation of associations between the variables. A summary of the study and its findings are discussed in Chapter VI.
CHAPTER II
LITERATURE REVIEW

INTRODUCTION

This chapter presents a select review of the literature associated with definitions of attitude, measurement of attitude, dimensions of attitude, educational environments as well as research findings on the association between attitude and the independent variables, namely, home background, teacher, peer group and previous academic achievement. As already mentioned in Chapter I, very little research has been carried out on attitudes towards the learning of social sciences in general and geography in particular. As a result, in this literature review, an attempt has been made to relate previous findings on attitudes towards other school subjects such as science with attitudes towards geography on the assumption that the findings might apply similarly to geography. The last section of the chapter presents a summary of the literature survey. Attitude, as an element of the affective domain, plays a vital role in teaching and learning, and ultimately in determining the overall achievement of the learners. Learning environments, on the other hand, also play an important role in the educational well-being of the learner.
DEFINITION OF ATTITUDE

The term "attitude" is of considerable interest to both educators and psychologists alike. A review of the literature related to the construct of attitude reveals a plethora of definitions and relates it to other psychological constructs such as beliefs, values and opinions. Allport (in Tajfel and Fraser 1978: 256) defines attitude as a 'mental or neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related'.

Anderson (1981) identified three essential features of attitude from Allport's definition. These are:

1. preparation or readiness for favourable or unfavourable responses,
2. which is organized through experience and
3. which is activated in the presence of all objects and situations with which the attitude is related.
This is further reiterated by Ajzen and Fishbein (1975) and Fishbein and Ajzen (1980) with the addition that the actions resulting from attitude are consistently favourable or unfavourable.

Attitude is closely related to the other variables of the affective domain such as belief, values and opinions. In an attempt to clarify the relationship among these variables Elms (1980) and Deaux and Wrightsman (1988) define values as criteria for judging the worth of things but lacking in specificity of the object or reference point. Such abstract terms as beauty and freedom would be described as values. On the other hand beliefs are described as assumptions about the state of a thing, that the thing possesses certain characteristics or that it is related in certain ways to other objects. Opinions refer to shared attitudes and beliefs of large groups of people and represent a summation of individual attitudes. The relationship among attitudes, values and beliefs is summarised by Elms (1980) as 'feeling about a particular subject (attitude) in terms of its assumed relationship (belief) to a person's criteria for judging the worth of things (values) (p.20).
Components of attitude

Deaux and Wrightsman (1988) proposed that attitude has three components: the cognitive, the affective and the behavioural or conative components. The cognitive component consists of beliefs and ideas a person has about some attitude object. For instance, a person might have a belief that women are more talkative than men. The affective component, on the other hand, refers to feelings a person has about the attitude object or one's dislike for an object. The affective component of attitude embodies the "evaluative" reaction of the person (Schibeci, 1985). If a person says that he likes geography the person is in actual fact evaluating that subject. The third component of attitude, the behavioural or conative component refers to the person's action tendencies in regard to an object. For example, does an individual donate money to the society for the handicapped or does a student join an environmental society because the student likes geography? These three components of attitude are very important since they have a direct bearing on the relationship between attitude and behaviour to which the next subsection refers.
Attitude and behaviour

Among the variables of the affective domain attitude per se has been studied most extensively. In the social sciences the study of attitudes is even more important because one of the main aims of social studies is the teaching of values which have a lot influence on one's behaviour. Elms (1980) propounds three reasons for such an extensive study: attitudes can be measured easily; attitudes are difficult to change, so a study of attitudes rewards the researcher with interesting results; attitudes to some extent can explain or predict a person's behaviour.

The available literature on attitude implies that attitude to a great extent governs a person's behaviour. Payne, in Schibeci, (1985), asserts that attitude can predict a person's behaviour. However, Schibeci refutes this assertion and suggests that a person's expressed attitude often is not always consistent with the person's expressed behaviour. He cites the findings of La Piere's investigation in 1934 on racial prejudice. The investigation showed that attitudes expressed in questionnaire responses by owners of hotels and other establishments at the prospect of Chinese guests were negative. However
these same owners, with one exception, did not reject a Chinese couple who actually asked to use their establishments.

Another study which refutes the assertion that attitude can accurately predict behaviour was carried out by Kutner, Wilkins and Yarrow, in Deaux and Wrightsman (1988). They arranged for a black woman to join two white women seated in a restaurant. This procedure was repeated in eleven restaurants. In all the restaurants the woman was not refused service. However, when telephone bookings for an interracial party were made there were six outright refusals and five half-hearted acceptances of the reservations.

The apparently weak relation between attitude and behaviour as depicted in the above studies can be attributed to the fact that general measures of attitude were used and then an attempt to correlate them with overt behaviours was made. Later studies, however, show that more specific measures of attitude do predict behaviour to some extent. Weigel, Vernon, and Tognacci, in Deaux and Wrightsman (1988) measured people's attitudes toward general issues such as the environment and toward more specific objects such as the Sierra Club, an organization based in California concerned with nature and its relationship to man. Later they gave the subjects the opportunity to volunteer for
activities of the Sierra Club. They found that the relation between the general environmental attitudes and Sierra activities was low but there was a strong relation between the more specific attitudinal measures and actual behaviour.

The link between attitude and behaviour is complex and multidetermined (Deaux and Wrightsman, 1988). An attitude toward an object can, for example, affect some of our behaviour but other factors such as personal habits, social norms and a variety of other possible influences may be at work.

To explain the link between behaviour and attitude Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980) developed the 'theory of reasoned action' which states that most behaviours are carried out for a reason, that people think about the consequences of their actions and make deliberate decisions to achieve some outcomes and avoid others. In this theory an attitude toward an object (personal component) combines with the subjective norm to predict a behavioural intention. The behavioural intention in turn predicts the behaviour itself.

The study of attitudes has, to a great extent, been stimulated by the notion that knowledge of a person's attitudes can help predict that person's
behaviour. In geography education this is not stated clearly but this can be inferred from the aims and objectives of most geography curricula.

THE GEOGRAPHY CURRICULUM AND ATTITUDES

The nature of Geography makes information on attitudes vital in three ways:

First of all the fact that interest in a subject is essential to efficient learning makes information on attitudes vital.

Secondly, the teacher ought to have feedback on whether such aims as stimulating interest, awareness, appreciation and involvement have been achieved to some degree.

Thirdly, positive attitudes toward something may have more predictive validity than success in a written paper that is regarded by the pupil as his final commitment to a subject area (Marsden, 1976: 246).

Clearly this means that the aims and objectives in geography curricula must be stated explicitly and should take into account the affective domain. However, as Marsden (1976) points out, few attempts have been made to apply these to a geographical
context. Irwin (1983) also reiterates the importance of attitude objectives in subject syllabi, noting with concern, however, the fact that even though knowledge and skills objectives are clearly spelt out in geography syllabi, attitude objectives are limited. He states 'the attitude objectives need broadening to take account of the recognition of the subjective factors in the study of Geography' (p.192).

Heikkinen (1973) also points out that attitudes to school subjects decline during the year and so any course which can sustain initial favourable attitudes during the school year would be making further advances in the affective aspect of classroom learning. The apparent decline in attitude toward school and school subjects has led to some educators advocating the inclusion of attitude objectives in subject curriculums. Simonson (1979) is one of the main advocates for the inclusion of attitude objectives and points out that:

While the strength of the relationship between attitude and achievement is unclear, it seems logical that students are more likely to remember information, seek new ideas and continue studying when they react favourably to instructional activity or like a content area (p.34).
Carswell (1970) made an attempt to apply the Krathwohl/Bloom (1964) affective domain to geography. Carswell's application of the Krathwohl/Bloom taxonomy of the affective domain can be summarised in five main topics:

- Receiving, which includes awareness of geography as a discipline, acceptance of the importance of geography, as well as controlled or selected attention to geographical news.
- Responding, which encompasses willingness to read geographical literature as well as getting satisfaction from geographical arguments.
- Valuing, dealing mainly with acceptance preference of and commitment to a value.
- Organization, involves development of a rationale about the role of geography as well as formation of judgements reflecting beliefs that geography provides a system of enquiry that helps to understand and solve world problems.
- Characterization by a value or value complex, which deals with the viewing of problems primarily from a geographic point of view. This also includes the formulation of a philosophy of life consonant with geographic theory and practice.

Carswell's application of the Krathwohl/Bloom taxonomy of the affective domain to geography was successful in establishing the relationship between attitudes to geography and geographical attitudes in that it provided a linkage between the students' attitudes toward geography and those attitudes which can be described as concrete, that is the geographical attitudes put into practical use. Receiving and responding refer to attitudes towards geography, that is like or dislike of geography, whilst the other three, valuing, organisation and
characterization refer to geographical attitudes, that is the outcome of the like or dislike of geography.

The nature of geography as a bridging subject between the social and natural sciences makes affective education more important as Raw (1989) points out:

While no one would deny that scientific method, with its hypotheses, models, theories and statistical analyses, has had a beneficial and lasting impression on geography, we acknowledge that an understanding of major issues such as world poverty, and environmental pollution is only possible through the study of the values, beliefs and attitudes of decision makers (pp. 18-25).

Traditionally the aims of geography can be summarised as knowledge, understanding, skills and values. The first three are traditional areas of learning whilst the last forms an integral part of geography since geography, though a science subject, also deals with topics which do not always lend themselves to scientific investigation. A study of such topics entails looking beyond the cognitive realm of science (knowledge, understanding and skills) towards the affective realm of human feelings, emotions, experiences and values (Raw, 1989).

McGill (1986) reiterates the importance of the affective component (attitudes, values and beliefs) of geography education by pointing out that
individuals, groups and societies perceive and react to environmental conditions differently. A pulp and paper mill could be a symbol of wealth to an industrialist while it would be a symbol of pollution to one who is environmentally conscious. In the light of these seemingly discordant stances taken by human beings towards similar geographical phenomena the task of the geographer is to describe rigourously and account accurately for different mental images, beliefs, likes and dislikes of different people.

Despite the importance of the affective component of geography education, however, most educators hesitate to use the affective domain for education purposes. One of the reasons for this, Newton (1981) points out, is the deeper philosophical notion that one's beliefs, attitudes, values and personality characteristics are regarded as private matters whilst achievement and productivity are regarded as public matters. Other reasons for the failure to use affective education in geography are given by Marsden (1976) as intangibility of affective categories as well as the difficulty of measuring and interpreting them compared to those of the cognitive domain.
Despite the failure of educators to use effectively the affective domain in geography education, some curriculums do include affective objectives, albeit in a disguised form. The Swaziland Junior Certificate Geography syllabus, for instance, does not refer to affective objectives among its objectives, but in the content section of the syllabus there is reference to the study of means of existence in relation to the environment, and also people's responses to natural hardships. In the Swaziland O-Level Geography syllabus one of the aims is given as 'to allow the candidate to obtain a knowledge and understanding of major problems of a geographical nature arising from man's relationship with his environment'. Most Australian geography syllabi also have affective objectives such as 'awareness of and sympathetic attitudes towards other peoples and communities, appreciation and understanding of other people's problems, appreciation of the concept of interdependence of peoples and the need for co-operation'.
Besides stating affective objectives in the curriculum Marsden (1976) also points out that a conscientious teacher should be able to observe manifestations of positive attitudes by students. Such manifestations include an interest in activities which take place in geography lessons, paying attention to activities learners show a liking for, such as writing projects, pupils' attitudes towards the world outside especially as judged from their participation in discussions concerning world issues. These manifestations may, however, be deceptive since some pupils may have a strong desire to please the teacher rather than an intrinsic love of geography. As mentioned earlier, overt behaviour is not necessarily an indication of an attitude. Indirect methods of measuring attitudes are usually employed. These are discussed in the next section.

MEASUREMENT OF ATTITUDE

As mentioned previously, affective education is a very important component of geography. Among the affective variables, attitude plays the most important role in education because it, to some extent, helps in the prediction of a person's behaviour as well as influencing a student's achievement (Schibeci, 1984).
Furthermore, Schibeci (1984) asserts that promotion of positive student attitudes towards school and learning is one of the most important goals of education. This assertion is even more relevant when the fact that attitudes lead to action is taken into consideration. The linkage between attitude and action is further probed by Watson (1977) who proposed that geography education should be linked inextricably with the study of attitudes since most events of geographical interest are a result of either positive or negative attitudes. Such events as racial discrimination on the grounds of colour of the skin, civil wars, mass relocations of populations result from attitudes of one section of a population towards another. In the light of this it is imperative that geography teachers make an attempt to assess the attitudes of their students towards geography since the phenomena mentioned change the geographical outlook of a place. Mass relocations of populations, for example change the density of population of a place.

Attempts to assess attitude fall into one of three categories. All such attempts require the making of inferences about attitude from some observable indicator. Anderson (1981) enumerates the three categories as scaling techniques, making inferences from individuals' overt behaviours, and making use of individuals' physiological responses.
The latter two methods, known as projectiles, require an individual to respond to a number of questions. Expert analysis of the responses makes the inferring of attitude possible. However, these techniques are rarely employed in educational research because they are not easy to score and as such they will not be discussed in this literature review.

The scaling techniques falling within the first of the three categories mentioned above consist of methods that enable inferences to be made based on individuals' responses to a series of sentences, adjectives or pictures. These sentences, adjectives or pictures, known as scales, fall into Thurstone, Likert, Guttman and semantic differentials (SD). The most widely used among these are the Likert and Semantic Differential scales. These are discussed in some detail in the following sub-sections.

Likert scales

Likert scales are named after Likert, the man who introduced them in 1932. They consist of a series of statements all of which are related to a person's attitude toward a single subject, for example, attitude toward school and learning. Two types of statements appear on Likert scales. The first type includes statements whose endorsement
indicates a positive or favourable attitude toward the object of interest. The statement 'I like Geography' is an example of a positive statement known as 'favourable' statement. The second type consists of statements whose endorsement indicates a negative or unfavourable attitude toward the object. The statement 'Geography lessons bore me' is an example of a negative or unfavourable statement. The subject is asked to indicate whether he or she strongly agrees (SA), agrees (A), disagrees (D), or strongly disagrees (SD) with the statement. The response may then be scored 4, 3, 2, 1 respectively if the statement is negative or vice versa if the statement is positive. After a numerical value has been assigned to each response made by a particular individual, the numerical values can be summed to produce a total score. Some researchers have five responses for each scale, with the third response (3) standing for neutrality or indecision. However, the researcher is of the opinion that if the respondents are given the option of expressing neutrality or indecision they may be tempted to select that option without thinking. As a result only four options would be given for each response in any questionnaire used by the researcher.

Likert scales have been used extensively to assess attitudes to various aspects of education. Keeves (1972) and Schibeci (1985) used Likert scales

One main advantage of Likert scales is that they can be adapted to a wide variety of attitudes, objects, situations and settings (Schibeci, 1984). They can also be used to assess both direction and intensity of attitude.

A major criticism of Likert scales is that different response patterns can produce the same score. For instance two respondents can have three items to which one responds with strongly agree (SA) which is given the numerical value of 4, agree (A) with the numerical value of 3 and disagree (D) with the numerical value of 2. The total score would be 9. Another respondent can respond with agree to all three items and get the same total score of 9. This renders Likert scales less sensitive to assessing attitude change than other measures like Semantic Differential scales (Anderson, 1981). Another shortcoming of Likert scales lies in the difficulty of developing new Likert scales. This requires lengthy procedures which involve refinement
of an initial large pool of items until a set of reliable, valid items remains (Schibeci, 1984). This shortcoming can be sidestepped by the researcher using previously validated Likert scales which would need only to be checked for suitability if the sample to be tested differs significantly from the sample on which the validity data were gathered (Schibeci, 1984). Most researchers, however, would be working with samples quite different from those used in the validated Likert scales and the need for lengthy validation and reliability procedures would occur often.

**Semantic differential scales**

Like Likert scales, Semantic Differential scales are widely used in assessing attitude. Schibeci (1977) used Semantic Differential scales in assessing students' attitudes to eight science concepts in Western Australia. Hoste (1981) employed Semantic Differential scales to evaluate three different types of courses in teacher education.

Developed by Charles Osgood and his associates in the 1950s Semantic Differential scales are basically a method of observing and measuring the psychological meaning of concepts. They consist of seven-point bipolar scales and a set of concepts. Each concept can either be a word, a short phrase or
a picture. A typical format of the semantic differential scale consists of a concept at the top of a printed page with a set of scales below it. Respondents are asked to provide reactions to the concepts by means of a set of bipolar pairs such as GOOD--BAD; FAIR--UNFAIR. The respondents are instructed to put a tick mark towards the extremes of each scale if a concept is related to one of the bipolar adjectives and towards the middle if a concept is only slightly related. The midpoint of each scale means that the concept is neutral or the scale is irrelevant.

Semantic Differential scales have the advantage of providing an unusual economy in data collection. A Semantic Differential instrument consisting of 30 concepts and 12 scales administered to 50 subjects generates in an hour $30 \times 12 \times 50 = 18,000$ data points (Kerlinger, 1973). Osgood and Snider (1969) also mention the robustness and ease of replication of the Semantic Differential scales in assessing attitudes.

A major criticism of Semantic Differential scales, according to Kerlinger (1973), is the fact that the midpoint of each scale is believed to stand for ambivalence. This points up a conceptual difficulty since a concept can either be good or bad to some extent but not neutral. Schibeci (1984) also questions the sensitivity of Semantic Differential
scales. Because of their format, that is responding to single adjectives, Semantic Differential scales are less overt while Likert scales more clearly indicate their content because the subjects have to respond to a whole sentence.

Schibeci (1984) concludes by pointing out that the Semantic Differential format allows an assessment of general attitudes to concepts such as 'school' whilst Likert scales allow a more fine-grained assessment of specific attitudes. In this study Likert scales have been used because a validated battery of Likert scales from the Research Branch of the W.A. Ministry of Education was obtained and adapted for the purposes of the study. These scales, it is assumed, possess a reasonably high degree of face validity. Also because they are more suitable for examining specific aspects of attitudes toward geography.

The assessment of attitudes is not undertaken in a vacuum. Several variables that might have an effect on attitudes are considered when assessing attitudes. These exogenous variables include the educational environment (home background, school, peer group and teacher), as well as previous academic achievement. The next section deals with the possible effects of the exogenous variables on students' attitudes.
Research findings have shown that a person's behaviour can, to some extent, be inferred from a knowledge of that person's attitude. Although educators do not state this explicitly, research literature shows that there is a major trend toward the use of attitude research findings to explain educational phenomena. Ferguson and Francis (1979) recognized this trend and stated that in addition to giving credit for cognitive skills, educators are required to record qualities of the affective domain such as attitude and motivation. These qualities play an important role in teaching and learning and hence in determining overall achievement.

As early as 1941 Jordan, in Ferguson and Francis (1979), carried out an attitude survey on five school subjects, music, English, history, arithmetic and geography. The survey revealed a correlation of +0.25 between attainment and attitude to English Language. Other researchers who conducted attitude surveys on different school subjects are Marjoribanks (1976), Choppin (1974), Yamamoto, Thomas and Karns,
(1969) and Walberg (1973). These research findings found an association between attitude and educational environments such as home background, school, teacher and peer group.

Keeves (1972) identified three powerful dimensions of the educational environment components of the home, the school and the peer group. These are the structural dimension, the attitudinal dimension and the process dimension. The relationship of these dimensions with the attitudes and achievements of students is discussed in the following subsections.

**Home background**

The home background can be divided into structural, attitudinal and process dimensions. The structural dimension refers to, among others, the occupational status, the educational level and income of the household head and size of the family. Keeves (1972) found that there was a significant correlation between achievement test scores obtained by Form 1 students in Australia and the occupation of their father. Likewise studies carried out by Campbell (1970) and Morrison and McIntyre (1971) in
Australia and England respectively revealed that the attitude and emotional status of the parents contributed in varying degrees to the attitudes of students to school and school subjects.

The above findings, however, contrast with research findings from third world countries. Twoli and Power (1987) and Lockheed, Fuller and Njirongo (1989) carried out studies on the influence of the home on attitude and achievement in Kenya and Malawi respectively and found that the home background (the education level and socioeconomic status) of the parents had very little to do with the students' expressed attitudes to school. These findings have led some researchers to conclude that Third World schools are more effective than schools in developed countries in inculcating positive attitudes and providing routes for social mobility. The disparity between the research findings from developed countries and developing countries seems to indicate that in developed countries the home background supersedes the school in influencing the attitudes of students toward their school subjects. May be this results from the fact that children in developing countries usually leave their homes to attend schools which are far from their homes whilst in developed countries children normally stay with their parents.
The attitudinal dimension of the home comprises the objectives of the parents, as well as attitudes and ambitions held by the parents for their child. The attitudinal dimension of the home can only be assessed by obtaining information on expressed attitudes, ambitions and aspirations of the parents for their child. As is the case with the structural dimension, research findings on the effects of the parents' attitudes on the attitudes of their child differ from country to country and according to the development status of the country in question. In Third World countries parents like their children to get formal education which in turn would help the child achieve success in the modern world. The parent's ambition for the child makes the child develop more positive attitudes toward school and school subjects. This assertion was made by Grindal (1972) in the findings of his study undertaken in Ghana.

Regrettably, however, the positive attitudes shown by students in the developing world are not translated into high achievement. This finding was reiterated by Mickelson (1990) in a study of Black American youths who came from economically disadvantaged homes. The youths expressed highly positive attitudes towards school and their school subjects. The academic performance of such students, on the contrary, remained extremely poor. Mickelson
contrasted his findings on Black American youths with the findings on White American youths. White Americans expressed positive attitudes that resulted in higher achievements.

The process dimension refers to things done by parents, teachers and friends to which the child attends or reacts and which influence the child's educational performance. These include, among others, help with school work, use of library books, private study facilities, reciprocal interaction of the school with the child's individual classroom practices and the activities of peers. These activities could include amount of participation by the parents in school-related activities and clubs.

In Swaziland very few parents are likely to help their children with school work because they are in most cases semi-literate. Likewise there are very few homes with private study facilities. However, teachers and friends play an important role since teachers are the most educated people in the rural communities of Swaziland.
The peer group

Peer group refers to persons of the same age, which is a fitting definition since all schools are graded according to age. As mentioned elsewhere, the home environment and the school exercise influence in shaping the attitudes of students. However, the peer group seems to exert a more enduring influence on the adolescent. Adolescents are at the stage in which they are fighting for recognition by their peers. To gain recognition and acceptance by their peers they have to behave like them. The extent to which the peer group influences attitude, however, is difficult to determine because it is not always easy to distinguish peer group influence from other influences. Thus any attempts to assess the influence of the peer group on attitudes have been beset with methodological problems because of the failure to control for the influence of other factors such as family background, characteristics of the community and the social composition of the school (Harnqvist, 1985: 4622-4630).

Hallinan and Williams (1990: 122-132) studied students' characteristics and the peer influence process and concluded that peers do affect the formation of attitudes and opinions of their colleagues either intentionally or unintentionally.
The fact that students need information to adapt to and interact in their particular situations makes them even more vulnerable to peer influence.

Hallinan and Williams also pointed out that the need for information forms the primary condition for influence. At the beginning of the academic year students face decisions about the courses in which to enrol. To make these decisions they need information about the difficulty of the courses, the work load, the teacher's popularity with the students, and the teacher's grading procedures. For the students to interact with and provide information to one another, there has to be an element of mutual trust which makes parents and teachers irrelevant because even though they can be relied upon for counselling they cannot be as trusted as the members of the peer group.

Earlier, Campbell and McSweeny (1970) had pointed out that peer groups are next to parents, and distinctly ahead of teachers, in the influence which they exert upon children and adolescents. Their findings were based on an earlier study by Connell (1957) in which adolescents were asked to nominate
the two persons who had most influence upon them. An overwhelming majority had mother and father followed by girlfriend or boyfriend and teacher in that order.

The influence of the peer group on the attitudes of adolescents is, however, insulated by what Klausmeier (1985) refers to as the 'double personality' of adolescents. Klausmeier explains that adolescents will behave differently when they are with their peers from the way they behave when they are with adults. In the researcher's personal observations adolescents have been observed trying to imitate behaviour patterns of their peers, especially if the peers happen to have a more imposing personality than their fellow peers. In most instances those students who come from well-to-families wield more influence over their fellow-peers. The discrepancy between child behaviour when with peers and when with adults emerged when the researcher discussed academic matters with the parents of the children. It became apparent that the parents often had a completely different picture of their child from that of the teacher, an indication that the children behaved differently when with their peers or the teacher than when they were with their parents.
The overwhelming influence the peer group exerts over its members was also observed by Welch (1985) and Schibeci (1985) when they assessed students' attitudes towards science. Both point out that the social experiences a student has in class with his or her classmates, and more importantly with the teacher, are powerful influences on the attitude a student carries away from class. Welch (1985) also points out the marked differences in classroom climate across subject areas, age groups and teacher. For example the same student might behave differently when doing history from the way he/she would behave when doing mathematics.

Schmuck and Schmuck (1975) also reiterate the fact that peers exert a significant amount of influence on their counterparts by directly influencing one another's information and attitudes toward success, power, prestige, respect and ways of affiliating with others (p.3). This assertion is further supported by research findings carried out by Alexander and Campbell, in Schmuck and Schmuck (1975) who found that students are more likely to aspire to higher education and actually attend college if their best friend also plans to go to college. Schmuck and Schmuck also distinguish attitude (an individual's predisposition to think, feel and act in certain specific ways) from norms (an individual's attitudes that are shared in a group). When a norm is present,
most group participants know that their attitude is also held by others and that the others expect them to have the attitude and behave accordingly.

The findings of Schmuck and Schmuck have a direct bearing on students' attitudes toward their school subjects. It could be deduced that a student might elect a subject simply because of the fear of being rejected by the peer group members. However, as Shmuck and Schmuck (p.119) point out, an individual student's attitudes will be influenced when the individual wilfully accepts group norms. But some individuals are so adamant that they are influenced very little by interpersonal pressures. Thus one would not expect all members of a class to have the same attitude toward their school subjects. The degree to which a student personally holds an attitude which corresponds to the norm of the group, known as correspondence of norms, leads to class cohesiveness which is further enhanced by situational and psychological forces acting on students and teacher to make them feel that they are a part of the classroom group (Schmuck and Schmuck, p. 156). The sharing of negative attitudes about academic learning in a cohesive class would lead to low achievement whilst students with positive norms for learning would attain higher achievement if they increased in cohesiveness.
Swazi children are likely to be more susceptible to peer influence in their attitudes towards their subjects because most of the Swazi parents are semi-literate and so are less likely to wield much educational influence on their children. In a cursory survey of the literacy level of Swazi parents, as reported by their children, the researcher found that an overwhelming majority of the parents are semi-literate. This finding prompted the researcher to discard a section of the questionnaire that had been prepared for the parents. In a Swazi situation this preliminary finding leaves the teacher as a most likely influential figure in the shaping of students' attitudes to their subjects. The following sub-section deals with the literature on teacher's influence on the students' attitudes.

The teacher

In most developing countries the teacher wields considerable influence on his or her students by virtue of being the most highly educated individual in the vicinity of the school. This makes the teacher, together with the peer group, the most likely individual to influence students' attitudes to their subjects. In a study of the relationship between teacher and students in Ghana Grindal (1972) found that the teacher assumes rigid authority over the students thus stifling the students' free
expression and creativity. This, however, does not render the teacher ineffectual in contributing to the attitudes of the students to their school subjects since the teacher and the students are part of a larger sociocultural system which reinforces the prevalent learning and interaction patterns.

Research evidence shows that teachers influence students' attitudes not only after they have taught the students but as early as the stage of the selection of the subjects in a case where there are electives. Marsh (1985) points out that information about teaching effectiveness plays a big role in students' selection of their school subjects and pupils who select on the basis of information about teaching effectiveness are more satisfied with the quality of teaching than students who indicate other reasons.

The initial attitudes developed by students affect their ability to achieve. Good, Biddle and Brophy (1975) point out that the teacher plays the part of reinforcing success or failure, thus initiating a reciprocal pattern of confidence and achievement. Once established, these initial patterns are difficult to change. Other teacher variables which affect students' attitudes, according to Good et al, are teacher indirectness and praise,
critical teacher statements about students' work and behaviour, teacher qualification and teacher's preferred learning and teaching methods.

Rosenshine (in Good et al, 1975) report a positive correlation between teacher indirectness and praise on the one hand, and student attitude on the other. Critical teacher statements about students' work and behaviour, however, were negatively correlated with student attitudes. This assertion is supported by Dunkin and Biddle (1974).

Brophy (1982), in contrast to Rosenshine, pointed out that praise can have either positive or negative repercussions. Students may, for instance, exhibit confidence, sociability, and extroversion which make them attractive as individuals and effective in eliciting praise from adults, including teachers. Since praise may backfire praise 'requires time, concentrated attention, and individualization of remarks according to the student and the situation' (pp. 45-54).

The findings on teacher praise and its correlation to attitude are, however, inconsistent as Soar and Brophy, and Evertson, in Dunkin and Biddle (1974) point out. They state that too much or too little praise is ineffective in promoting cognitive and affective achievement. To promote both cognitive
and affective growth moderate and appropriate use of praise is recommended. In addition, Barry and King (1988) stated that praise should be used in cases of genuine observable progress which may not be realised by pupils. Such praise should be directed at pupils who respond well to praise.

Jongeling (1973) points out that teachers find themselves in difficulty when they initially meet with students. In the high school the students would have developed attitudes towards a particular subject earlier on in life. The teacher then has to try and change the already entrenched attitudes. This situation is made worse by the fact that the teacher enters the teaching service with their own likes and dislikes for the subject and then find themselves in a situation where they have to instil favourable attitudes to the subject they teach.

Jongeling (1973) undertook his investigation in Western Australia. The findings of the investigation are not necessarily applicable to Swaziland, a developing country since the two places have different living standards. Students' attitudes to their school subjects are most likely to change as they progress with their schooling and are get more exposed to educational facilities and experiences.
In most likelihood the attitudes that Swazi students develop from their homes get superseded by attitudes developed at school.

Coupled with the teacher's biases in affecting students' attitudes is the students' previous academic achievement in the subject. This may either encourage a student to like the subject in question or develop a negative attitude. The next section deals with the effects of students' previous academic achievement on the students' attitudes towards school subjects.

**Previous academic achievement**

Students' previous academic achievement in their school subjects has a big influence on the students' attitudes towards their subjects. If students repeatedly fail their subjects they are very likely to avoid those subjects as much as possible and thus express negative attitudes towards the subject. On the other hand repeated good performance in the subject is likely to cause the student to have a positive attitude towards that subject. The relationship between attitude and achievement, however, is not as easy and straightforward as one may assume. In the first instance, as Harnqvist (1985) points out, achievement has to be strongly related to the process of self-selection in
however, is not as easy and straightforward as one may assume. In the first instance, as Harnqvist (1985) points out, achievement has to be strongly related to the process of self-selection in comprehensive, elective systems in which students have to select from a pool of subjects. But school marks are also more influenced by parents' and teachers' expectations and thus derive some of their predictive power from psychosocial sources rather than from attainment. The liking for school in general and for different subjects which in turn interact with achievement and with reactions to achievement by parents, teachers, peers and other persons who are important to the individual, have a big effect on students' preferences.

Barry and King (1988) pointed out that the drive and energy pupils bring to schoolwork in a desire to make progress in their learning and achievement (referred to as classroom achievement motivation) has an important bearing on the pupil's progress. The teacher's skills and teaching strategies would be fruitless if the pupil's nature and level of achievement motivation are not taken into account.

Covington, (1984) explained achievement motivation using the self-worth theory. The self-worth theory of achievement motivation is based on the assumption that students will always protect
themselves by approaching success and avoiding failure. Failure, it is acknowledged, causes a sense of worthlessness and social disapproval. Success, on the other hand, generates a feeling of worth and leads one to reap the personal and social benefits.

In an attempt to shield themselves from the negative effects of failure and maintain a sense of self-worth, students use a variety of strategies such as procrastination or not trying (Barry and King, 1988: 262). This means that if students have a choice to drop school subjects which they have repeatedly failed those students would opt to stop taking that subject.

Mickelson (1990:44-61) explains the paradox that Black American adolescents consistently have favourable attitudes towards their school subjects but these favourable attitudes are not translated into high achievement. This can be attributed to the failure of attitude measures to identify abstract from concrete attitudes. Abstract attitudes view schooling as a vehicle for success and upward mobility while concrete attitudes reflect the diverse empirical realities that people experience with respect to returns on education from the opportunity structure. Researchers and examiners traditionally
examine abstract attitudes in relation to students' performance in school rather than examine concrete attitudes.

The relationship between attitude and achievement was also probed by Comber and Keeves (1973). In their International Evaluation of Achievement (IEA) they found that the correlation between science achievement on the one hand and science interests and activities on the other ranged between +0.04 for ten-year-olds to +0.27 for 14-year-olds and +0.40 for final year secondary school students. They also reported a wide range of correlations across countries. In conclusion they stated that the positive correlation between attitude and achievement is low to moderate and is also affected by variables such as age, school system and country.

Covington's (1984) self-worth theory may be used to explain the discrepancy between the positive attitudes shown by students of developing countries towards their education in general and school achievement. From personal observations it would seem that students in developing countries have highly positive attitudes towards their school subjects. This emanates, in part, from the students' view of education as a key to the attainment of future goals. Students in developing countries are
naturally optimistic, albeit naively, that if they get higher education life would be easier for them. On numerous occasions, however, the very same optimistic students would perform poorly in achievement tests. The learners have high aspirations to achieve and so put a lot of effort into their academic tasks. However, the majority of them lack ability, thus resulting in poor performance and lack of self-esteem.

Gender

In general, documented research shows that girls express more positive attitudes toward their school subjects, are more compliant and more consistent with general academic expectations than boys (Braun, 1976). Braun accounts for the differences between boys' and girls' attitudes by pointing out that teachers spend relatively more cognitive time with girls in reading and boys in mathematics and other science subjects. As a quasi-science subject, geography is more likely to appeal to boys than girls as Welch (1985) pointed out. Welch noted a consistent positive attitude between gender and attitudes. Males were noted for taking more science courses and showing more interest, especially in physical and earth sciences.
The discrepancy between the attitudes of boys and girls toward their school subjects was also noted by Bank (1985) who states that boys are more likely than girls to express negative attitudes toward school and teachers. However, Bank further points out that teachers play a relatively minor role in the process of sex-role socialization. Such an assertion is in support of that of Welch who pointed out that interest in school subjects develops early in life and the age of thirteen a pupil would have developed some attitude irrespective of gender.

In an investigation comparing the attitudes and achievement of boys and girls Jongeling (1973) found that boys showed higher scores than girls in mathematics. Girls, however, showed more interest than boys with boys tending to view mathematics as having an important value in society.

In the case of Swaziland one can only speculate on the probable variance between the genders' attitudes toward geography. From personal experience it would seem that boys are likely to be more inclined toward geography because of the outdoor activities which characterize geography. Swaziland is not an egalitarian society and the two sexes have clearly defined responsibilities. Generally males engage in outdoor activities like tending cattle whilst females engage in indoor activities.
CONCLUSION

The foregoing literature survey focussed on the operational definitions of attitude as an emotion of moderate intensity predisposing one to react either favourably or unfavourably toward objects, people, situations or ideas. The literature also showed that to some degree, attitude affects a person's behaviour. As an element of the affective domain, attitude is very important in education and learning, more especially in geography which espouses values as one of the main aims. Several methods can be employed to measure attitude, but the most prevalent methods are Likert and Semantic Differential scales both of which require the subject to respond to sentences, words or pictures. Because of their adaptability Likert scales are more favoured for this study than Semantic Differential scales.

The possible associations between students' attitudes and independent variables such as peer group, teacher, home background, previous academic achievement and gender forms the major focus of the study. Research findings point to some association between these variables, but they state that attitude results from a complicated interplay of these variables. The next chapter presents a conceptual model which relates the variables mentioned in this review.
CHAPTER III

THEORETICAL FRAMEWORK FOR THE STUDY

CONCEPTUAL FRAMEWORK

Educational environments such as the home, the school and peer group are known to play a pivotal role in learning and cognitive development. Likewise the teacher, the learner's previous academic achievement and gender are widely acknowledged to be important factors in the learning process. However, very little research work has been undertaken to investigate the associations between the educational environments of home, and peer group as well as the teacher and the students' previous academic achievement and their influence on the attitudes of the child to school subjects. Studies carried out by Keeves (1972) and Schibeci (1985) have shown that educational environments to a great extent determine the achievement and attitude of students to their school subjects.

Most attitude studies have been directed at science (Schibeci, 1985 and Welch, 1985) and Mathematics (Keeves, 1972). Very little research has been conducted on students' attitudes to geography.
Inevitably a study on attitudes to geography has to be exploratory without a clearly formulated theoretical framework.

Nevertheless, this study on the associations among the educational environments (home, and peer group) and, teacher and previous academic achievement is an attempt to examine the effects of the variables on the attitudes of Swazi students to geography and to probe the extent to which the variables influence the students' attitudes. Keeves (1972) developed a conceptual framework for the study of the influence of three educational variables (home, school and peer group) on attitudes and achievement in science and mathematics. This framework was adapted by Schibeci (1985) for a study of attitudes to science in Perth, Western Australia. These two models, shown in Figures 1 and 2 form the basis for a model for the present study.

A MODEL FOR THE STUDY

The conceptual model for this study included a conceptual framework in which interrelations between variables were detailed in a hypothetical model. Keeves (1985) emphasizes the importance of a model by stating:
the value of the model lies in part in its abstractness, so that it can be given many interpretations thereby reveal unexpected similarities. (p.338).

Keeves further pointed out that to be useful a model should, inter alia, contain structural rather than associative relationships, lead to prediction of consequences that can be verified by observation and become an aid to imagination in the formulation of new concepts and new relationships and thus to extension of inquiry.

The model, according to Black and Champion, (1976) should be as simple as possible while still depicting the relationships of the elements. They stated:

a model is nothing more than a simplified systematic conceptualization of interrelated elements in some systematic form (p.68).

The oversimplification of a model was, however, opposed by Kaplan (1964), as the oversimplification usually led to the neglect of some important aspects of an investigation. Kaplan compared the oversimplification of a model to a 'drunkard's search' in the sense that a drunkard will search for his lost key under a lit lamp-post when he knows that he lost the key somewhere else. Thus researchers are cautioned not to oversimplify the model as this might not produce the desired results.
The model for this study has been partly adapted from Keeves' (1972) model for the study of educational environments (shown in Figure 1) and Schibeci's (1985) model for the study of attitudes to science and the effects of educational environments (shown in Figure 2). Keeves' model reiterated the fact that changes in educational outcomes are a function of the type of environment, and the dimensions of the environment in which the student learns. The model postulates that school, home and peer group influence student performance and attitudes. Schibeci (1985: 33) made mention of a number of assumptions made by Keeves in developing the conceptual framework for the study of educational environments. These assumptions are cited below:

i. The subjects of the study are individuals and not groups of persons.

ii. At every moment the individual is located within a unique environment and the behaviour of the individual is influenced by that environment.

iii. The behaviour of the individual may be attributed to factors that are internal to the person.
Prior performance: Level of educational achievement general ability interests and attitudes to school

Society: Characterized by cultural patterns, historical conditions and economic circumstances

Home

Classroom

Peer Group

Social Class
Income
Parents Attitudes and Ambitions
Processess of the Home

Type of School
Class Size
Goals and Objectives of School
Classroom Practices

Social Class
Ethnicity
Educational and Occupational Aspirations
Activities of Peers

Integration of different environmental components
Resolution of conflict between components

Final Performance: Level of educational achievement interests and attitudes at school

Figure 1

Keeves' (1972) Conceptual Framework for the Study of Educational Environments
Figure 2
Schibeci's (1985) Model
Figure 3
A Model for the Present Study
iv. An educational environment contains human actors who interact with and influence the behaviour of an individual in that environment.

v. An educational environment is related to the characteristics of the society in which it is set.

vi. The characteristics of an educational environment are influenced in part by its unique location in society.

vii. The characteristics of an educational environment are related to characteristics of the principal actors in that environment.

viii. Educational environments are characterized by some degree of constancy.

ix. Educational environments are distinguishable from each other and differences between them can be observed in terms of specific characteristics.

x. Educational environments may be effectively characterized by a limited number of components.

xi. Educational environments may be classified in terms of observable characteristics using both qualitative and quantitative information.
xii. The effects of a given educational environment on an individual cannot in principle be predicted with certainty.

xiii. Earlier events influence later events and not vice versa.

Keeves' (1972) assumptions, according to Schibeci (1985) were quite reasonable, especially assumption xi which stated that both qualitative and quantitative data may be used to characterize educational environments. The use of different research methods (known as triangulation) ensured that more reliable and valid data were collected and the researcher was disentangled from the reliance on one data collection technique (Cohen and Manion, 1980). Schibeci's (1985) modification of Keeves' (1972) model shown in Figure 2 separated the home environment from the other two educational environments because the home environment influenced entry characteristics, as well as the intermediate and final outcomes. The school and peer group variables, however, could not influence students' entry characteristics as they were taken to begin operating later in the life of the student. Other features of Schibeci's model were that sex influenced a student's entry behaviour, which in turn influenced intermediate outcomes which
in turn) influenced final outcomes. The educational environment of the home influenced entry behaviours, intermediate outcomes and final outcomes directly. In addition, there was the indirect influence of the home on final outcomes through entry behaviours and intermediate outcomes. The school and peer group educational environments influenced directly both intermediate outcomes and final outcomes (Schibeci, 1985: 41).

The model for the present study was concerned with Swazi students' attitudes towards geography and the possible association of expressed attitudes with educational environments of the home, and peer group as well as the teacher and the student's previous academic achievement. Attitude was the dependent variable whilst home, peer group, teacher and previous academic achievement were the independent variables. The model for the study differed significantly from either Keeves' (1972) or Schibeci's (1985) models. First the duration for the data collection was only six weeks as opposed to ten or more months in the case of either Keeves or Schibeci. Consequently a longitudinal investigation was not possible.
Secondly, in addition to the different durations for the data collection process the present study included in the model two more variables, teacher and previous academic achievement which might have an influence on attitude. As mentioned in Chapter II teachers wield considerable influence on their students by virtue of being the most highly educated individuals in the vicinity of the school. Consequently the inclusion of the teacher as one of the independent variables in the model was appropriate. Likewise previous academic achievement of the student was considered an important factor in the development of attitudes since previous research has proved that repeated failure in a subject affects the learner negatively (Covington, 1984). Like Keeves' (1972), but unlike Schibeci's (1985) models, this study used a random sample of Year 9 Swazi students selected from schools across the whole of Swaziland. This random sampling was assumed to be more representative of the Swazi situation where there were urban co-educational schools, rural co-educational schools as well as single gender schools.

As Figure 3 depicts, some of the important features of the model are, first, the educational environments of home and peer group, are expected to influence students' attitudes. These environments of the home and the peer group have
their origins in the society, interact with each other, and after interaction, influence attitude to schooling and school subjects (Keeves, 1972: 38). The home, however, could also have a direct influence on the school and peer group in that the socioeconomic status of the home is very likely to determine the school the child goes to and the peers with whom the child plays and studies with. Previous academic achievement is also expected to affect the attitudes of students. In a longitudinal study the attitude of students could also affect subsequent academic achievement. Likewise the teacher could have a direct influence on the attitude of students.

In conclusion the model for this study shows that the total educational environment is complex with the component parts forming a net of interacting relationships (Keeves, 1972: 40). In addition, the teacher, as a person who is a "human model to be imitated" (DuBey, Edem and Thakur, 1979: 33) is bound to have an indelible influence on the students' attitudes. In this model an assumption was made that the independent variables were constant but they influenced different individuals in different ways in determining the attitudes of the individuals towards their school subjects. The next chapter gives the design of the study.
CHAPTER IV

DESIGN AND METHODOLOGY OF THE STUDY

OVERVIEW

In Chapter III a theoretical framework for the study of the educational environments of home background and peer group, and the variables of teacher and previous academic achievement and their association with attitude was presented. This chapter presents the design adopted and methodology used for this study. Following a general discussion about the design, the chapter deals with the sampling procedures, the kinds of data collected and the phases of the study which include the piloting of the instruments and the final data collection.

DESIGN OF THE STUDY

The general aim of the investigation was to study the attitudes of Swazi students towards geography and the extent to which the educational environments of home, and peer group as well as teacher and previous academic achievement influenced the expressed attitudes. As stated in Chapter I the primary focus of the investigation was to answer the following questions:
1. What are the Swazi students' attitudes toward geography?

2. Is there any association between expressed attitudes toward geography and the students' home background, peer group, teacher and and previous academic achievement?

3. Is there any significant difference between male and female Swazi students' towards geography?

Most investigations into relationships between attitudes and educational environments have been longitudinal (Keeves, 1972; Jongeling, 1973 and Schibeci, 1985). Such investigations looked at developmental changes in individuals over a period of time or looked at the effects of events on such changes. Longitudinal designs according to Cohen and Manion (1985: 68-93) enable the researcher to identify patterns of development and to reveal factors operating on those samples which elude other research designs. In addition, Moore (1983) stated that longitudinal designs eliminate any potential error related to nonequivalent groups since the same subjects are retested over time.

Despite the advantages enumerated, longitudinal designs also have shortcomings such as the length of time required to undertake them, normally six months.
or more. This forces the researcher to wait for growth data to accumulate. Another disadvantage identified by Cohen and Manion (1985: 71) was 'sample mortality'. In the process of the study some members of the sample might drop out or refuse further cooperation. This makes it less likely that those who remained in the study were as representative of the population as the sample that was originally drawn. In addition repeated questioning and interviewing of the subjects are likely to affect the subjects, sometimes sensitizing them to matters that might have passed unnoticed at the beginning. Since the subjects for investigation are normally pupils and/or teaching staff, continuous staff turn-over and changes in teaching methods are bound to make it unlikely that a longitudinal study would be completed in the way that it was originally planned.

The time constraints precluded the adoption of the longitudinal research design for this study. Hence the survey research design was adopted. The most important feature of the design adopted was that the measurements were obtained at a particular time and place. Oppenheim (1966: 6) defined survey research design as:

a form of planned collection of data for the purpose of description or prediction as — a guide to action or for the purpose of analyzing the relationships between certain variables. (p.6)
Compared to longitudinal design, survey design was less expensive, produced findings more quickly and was more likely to secure the co-operation of the respondents since the questioning was done at one instance. Survey design also had the advantage of enabling the researcher to deal with a fraction of the total population and generalize the findings to the whole population.

However, survey design fails to show a causal connection, except to indicate associations or correlates. Hence Oppenheim (1966) pointed out that the researcher had to be careful when interpreting the results. If, for instance, the results suggested that A caused B the researcher had to allow for the possibility that B caused (or preceded) A or that A and B were the results of C, a third variable that might have affected them. Cohen and Manion (1985) also pointed out that if a researcher's concern was to identify individual variations in growth, survey design was likely to be less effective. Nevertheless survey design was adopted for this study because the purpose of the investigation was to explore the association rather than the causation between the educational environments of home background and peer and the variables of teacher and previous academic
achievement and the expressed attitudes. Moore (1983) stated that only experimental or quasi-experimental designs could establish causation.

According to Black and Champion (1976) the quality of survey research depends on the number of people one is able to obtain for the study, their typicalness in relation to the population from which they are selected, and the reliability of the data collected from them. This assertion mainly concerns the sampling procedure for the study. The next section deals with sampling.

THE SAMPLE

The sample for the present study was drawn from Form 2 (Year 9) Swazi students from schools in rural and urban Swaziland. There are only two major urban centres in Swaziland, Mbabane the capital and Manzini, the commercial centre. Each of the two centres has a metropolitan population of over 60 000 people. The other urban centres are small settlements with populations of between two thousand and ten thousand people. These centres, however, were not selected for the data collection since none of them could be classified as urban in the strictest sense of the word. The rural schools selected for the sample were scattered across Swaziland.
The homogeneity of the population of Swaziland made it easier to select the sample since language was not a major factor. The population of Swaziland is made up of one main ethnic group known as Swazis, closely related to the Zulus and making up over 97 per cent of the population. Most of the other groups are composed of white descendants of settlers and immigrants from neighbouring South Africa and Mozambique. English is the official language used for school instruction and is widely understood by most of the learners by the time they reach secondary school. Most of the people, however, speak SiSwati, the mother language and use English only for official purposes. In the selection of the sample, language was not considered as a significant factor since the researcher was to conduct the administration in person and translate any difficult concepts into the vernacular, that is SiSwati.

The sampling technique used for the collection of data was cluster sampling. This sampling technique was deemed appropriate since it involved selection of the number of schools in which the questionnaire was to be administered. The total number of questionnaires distributed was 450. Some questionnaires were rejected, however, because they had not been completed properly.
The majority of the Form 2 students were in the 13 to 15 age range. Form 2 was selected as the ideal year for the investigation because the students had a full year and six months of secondary schooling. This period was considered to be long enough for the students to have developed certain attitudes toward their school subjects and also to have made friends among their peers.

Permission had to be sought from the geography teachers through the principal in each school. In seeking for permission to administer the questionnaire the teachers were asked to propose the most appropriate day and time for the administration of the instrument. The teachers were also asked to provide information on the number of students in their classes so that an adequate number of copies could be taken along.

KINDS OF DATA COLLECTED

In this section the operational definitions of variables are provided to help translate the theoretical concepts into directly observable operations and make them possible to measure. Attempts were made to adopt previously validated scales to measure the variables. When it was not possible to obtain previously validated scales the researcher developed measuring instruments which were
presumed to be valid and reliable for investigation. In some cases slight variations were made to previously validated scales to suit the conditions of the investigation.

Attitude

As discussed in Chapter II, attitude was considered as an element of the affective domain that prepared one to respond either favourably or unfavourably to objects and situations with which the attitude was related. The fact that attitude, to some extent, affects a person's behaviour makes the assessment of attitudes a very important exercise in education.

For this study the attitudes of Swazi students toward geography were assessed using the baseline questionnaire developed by the Research Branch of the West Australian Ministry of Education. This questionnaire was adopted because it consisted of forty Likert type items which had already been validated. The researcher further tested the validity of the questionnaire items for Swazi students by conducting a pilot administration which produced results of reasonable validity. This exercise was undertaken in February, 1990. Even though the baseline package was constructed for measuring attitudes to mathematics, English, social
studies and science, the questionnaire items were identical in both format and item meaning and could be adapted to measure attitudes to any other school subjects with the insertion of 'geography' where subject name was required.

The baseline questionnaire contained two important features. First, the eight factors forming the basis of the package each had five items. These items were not grouped together, but were cycled through at intervals of eight. Secondly positive and negative items were included. These two design features were intended to encourage students to think a little more when responding to the items and also to break a repetitive mode of responding. The eight factors and item numbers are listed in Table I:
### TABLE I
The Factors of the Questionnaire and the item numbers.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Item Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interest in the subject</td>
<td>1, 9, 17, 25 and 33</td>
</tr>
<tr>
<td>2. Perceived value of the subject</td>
<td>2, 10, 18, 26 and 34</td>
</tr>
<tr>
<td>3. Attitude to subject teacher</td>
<td>3, 11, 19, 27 and 35</td>
</tr>
<tr>
<td>4. Class management</td>
<td>4, 12, 20, 28 and 36</td>
</tr>
<tr>
<td>5. Perception of own ability</td>
<td>5, 13, 21, 29 and 37</td>
</tr>
<tr>
<td>6. Attitude to other students</td>
<td>6, 14, 22, 30 and 38</td>
</tr>
<tr>
<td>7. Perceived teacher attitude to students</td>
<td>7, 15, 23, 31 and 39</td>
</tr>
<tr>
<td>8. Attitude to homework</td>
<td>8, 16, 24, 32 and 40</td>
</tr>
</tbody>
</table>
Home Background

Most social researchers consider parents' occupation and level of educational attainment as the best indicators for the socio-economic status of the home (Keeves, 1972 and Currie, 1980). For the present study the levels of educational attainment for the father (or male and female guardian) were recorded on a 9 point scale as used by Keeves (1972) and Currie (1979). The 9 categories referred to the number of years of formal education completed. These 9 categories can be listed as:

<table>
<thead>
<tr>
<th>Category</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>University degree</td>
<td>9</td>
</tr>
<tr>
<td>Tertiary diploma</td>
<td>8</td>
</tr>
<tr>
<td>Tertiary or sub-tertiary studies</td>
<td>7</td>
</tr>
<tr>
<td>5 or 6 years secondary schooling</td>
<td>6</td>
</tr>
<tr>
<td>Technical trade certificate or other special training</td>
<td>5</td>
</tr>
<tr>
<td>4 years secondary schooling</td>
<td>4</td>
</tr>
<tr>
<td>Less than 4 years secondary schooling</td>
<td>3</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>2</td>
</tr>
<tr>
<td>Some primary schooling</td>
<td>1</td>
</tr>
</tbody>
</table>
For the occupational status of both the father and mother (or male and female guardian) an adaptation of Broom, Jones and Zubryzycki's (1965) and Currie's (1980) set of occupational categories were used. These categories were collapsed to 9 instead of 10 as for Currie's. This inventory was also used by Boyle, (1986). (See Appendix B).

Peer group

As mentioned in Chapter II, peer group referred to persons of the same age. This was particularly significant in school situations since all schools were graded according to age. To measure the influence of the peer group variable the students were instructed to state the extent to which their three best friends had influenced the choice of geography as a subject. The students had to record their responses on a 3 point scale as follows:

To a great extent (3)
To some extent (2)
Not at all (1)
As a validity check the students were asked to nominate their three best friends in the same class as in Keeves (1972) and Schibeci (1985). Although this was not going to be included in the final analysis, it was however, deemed necessary to encourage the students to be honest when responding to the questionnaire.

The teacher

Many variables such as class management, effectiveness, competences, indirectness and praise can be used in studying the teacher. However in this study teacher qualification was used as a measure of the teacher's effect on students' attitudes. Teacher qualification is considered very important in developing countries in view of the fact that these countries are trying to upgrade their teacher training programmes. In order for the teacher-training programmes to be considered viable, one of the most important exercises was the assessment of the effect of teacher qualification on the attitudes of students toward the teacher's subject. Whilst in most developed countries the majority of senior high school teachers held full university degrees and a sizable percentage of primary school teachers had university degrees, in
developing countries the percentage of degree holders for both high and primary schools is quite low. In Swaziland, for instance only about 50 per cent of the high school teachers have university degrees and only 1 per cent of the primary school teachers hold university degrees.

The scales for the quantification were based on Hoyle's' (1985) categorisation of teacher qualifications using the length of time the teachers took for their training. This categorisation (shown below) was adopted by the Swaziland Government with the addition of one more category to cater for those teachers who joined the teaching service without any form of training (temporary relief teachers). This categorisation presumed, on the basis of the importance developing countries attach to teacher training, that highly qualified teachers are most likely to inculcate in students' positive attitudes toward their school subjects.

Hoyle's classification was as follows:

(a) University degree course followed by teacher training;
(b) A degree course in education in a university or college with concurrent training;
(c) A certificate course in education in a teacher's college with concurrent training.
The Swaziland Government classification is as follows:

(a) University degree with a professional teaching qualification;
(b) University degree without a professional teaching qualification;
(c) Certificate or diploma course in education after completing high school (normally done in two or
    (d) High school certificate with no training (temporary relief teacher).

The categories listed above for the qualifications of teachers in Swaziland were coded by the researcher so that category (a) was assigned the numeral 4 through to (d) in descending order. This was necessary to facilitate the coding of the data for analysis.

Previous Academic Achievement

To operationalize this variable the teacher was asked to provide the mean score of all the tests written by the students from the beginning of the 1990 school year to the end of June 1990. These mean scores were used in their raw state.
Gender

The respondents were expected to fill their gender, with males ticking 1 and females ticking 2. These were considered as interval rather than numerical scales.

The fact that most of the items had already been used and evaluated previously contributed to a confidence that any measurements obtained would be valid and reliable. In addition the researcher personally conducted the data collection and briefed the subjects before the administration of the instruments and this would have helped augment the confidence in the measuring instruments.

PHASES OF THE STUDY

This section describes the main phases of the study which include the pilot study and the data collection phases. The pilot study was undertaken in February, 1990 whilst the data collection was undertaken in July 1990.

Pilot Study Phase

A pilot administration of the instrument was necessary to determine its suitability. However, only the Likert scales component of the instrument
could be piloted because of the intervening distance between Australia and Swaziland where the data collection was to take place. Moreover the researcher thought that the Likert scales rather than the whole questionnaire needed to be piloted since the other sections of the questionnaire were straightforward and could be easily understood by the respondents. A total of 77 students in two schools in Swaziland formed the pilot group at the beginning of February, 1990. One of the schools was situated in an urban location whilst the other one was situated in a rural setting. The pilot exercise served three purposes. First, any difficulties in interpreting the wording or structure of the items could be detected. Secondly the estimated time required to complete the questionnaire (40 minutes or one period) could be checked. Since only part of the instrument was to be piloted the respondents were expected to take far less than the estimated 40 minutes. Third, an insight into the likely variability of responses on individual items could be obtained.

Since the Likert scales had been prepared for Australian students (most of whom spoke English as their first language) some problems of interpretation on the part of the respondents were reasonably expected.
Before administering the Likert scale component of the instrument, the researcher spoke to the respondents for about ten minutes, assuring them about the confidentiality of the information they would provide as well as outlining the purpose of the session. The respondents were also permitted to ask questions in the vernacular SiSwati language if they felt that they could not express themselves confidently in English. The value and importance of the feedback the respondents were to give were also explained to them.

The researcher recorded in writing all questions asked and difficulties encountered by the students. After the respondents completed the exercise an informal session lasting for about ten minutes followed. The purpose of the session was to gauge the opinions of the students about the Likert scales. Most of the students showed keen interest in the questionnaire and even requested that a feedback on their responses could be given back to them. This, however, could not be guaranteed because the promise of anonymity and confidentiality might have been breached.
Analysis of the pilot group administration

All the respondents in the pilot groups completed the instrument in less than twenty minutes. This fitted well in the school time tables since each period was normally forty minutes long. Slightly over forty minutes was considered adequate for briefing the students and administering the questionnaire to the final sample.

Some students, however, had problems with the interpretation of the negatively-worded items in the Likert scales. This was easily solved by the researcher advising the respondents that for a negatively-worded item where they would normally respond in the strong affirmative they had to respond in the strong negative and vice versa. In the main data collection phase the respondents were carefully guided through the questionnaire before the actual administration. More emphasis was placed on the negatively-worded items. A suggestion had been made that the negatively-worded items be converted to positive but the researcher felt that this might tamper with the validity of the items.

Most items in the instruments produced measures with satisfactory reliability coefficients except items 3, 8, 19, 32 and 40 (see Appendix A). Each of these items produced low reliability coefficients of
between 0.004 and 0.057. This could be attributed to
the wording of the items which could have been
misunderstood by the respondents. Items 3, 19, 32
and 40 were negatively worded, which may have caused
confusion to the respondents. The summary statistics
of the eight variables (see Table II) shows that most
of the variables have high reliability coefficients
except variables 3, 4 and 8 which have reliability
coefficients below 0.298. These variables each had at
least three of the four items negatively worded.
This could have caused problems to the respondents.
Nevertheless the researcher felt that changing the
items would affect their validity and decided to
leave them intact. This meant that more detailed
explanation was imperative during the final
administration of the instrument.

The means of the items were biased toward the
higher end of the scale, showing that most of the
students on average expressed positive attitudes
toward geography. Only 11 out of the 40 items
produced means below 3.00. Most of the low means
were produced by items related to the geography
teacher, a clear indication that the majority of the
students expressed negative attitudes toward their
geography teachers.
## Summary statistics for Student Responses to Pilot Group Questionnaire

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Variance</th>
<th>Rel. Coeff.</th>
<th>S.E.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interest in the Subject</td>
<td>15.753</td>
<td>2.165</td>
<td>4.688</td>
<td>0.647</td>
<td>1.286</td>
</tr>
<tr>
<td>2. Perceived value of subject.</td>
<td>16.403</td>
<td>2.358</td>
<td>5.559</td>
<td>0.682</td>
<td>1.330</td>
</tr>
<tr>
<td>3. Attitude to subject teacher</td>
<td>14.117</td>
<td>2.090</td>
<td>4.368</td>
<td>0.129</td>
<td>1.951</td>
</tr>
<tr>
<td>4. Class management</td>
<td>15.584</td>
<td>1.772</td>
<td>3.141</td>
<td>0.166</td>
<td>1.616</td>
</tr>
<tr>
<td>5. Perception of own ability</td>
<td>15.299</td>
<td>2.171</td>
<td>4.712</td>
<td>0.591</td>
<td>1.388</td>
</tr>
<tr>
<td>6. Attitude to other students</td>
<td>15.117</td>
<td>2.045</td>
<td>4.184</td>
<td>0.298</td>
<td>1.714</td>
</tr>
<tr>
<td>7. Perceived teacher attitude to students</td>
<td>14.870</td>
<td>2.214</td>
<td>4.904</td>
<td>0.435</td>
<td>1.665</td>
</tr>
<tr>
<td>8. Attitude to homework</td>
<td>14.883</td>
<td>1.912</td>
<td>3.657</td>
<td>0.152</td>
<td>1.762</td>
</tr>
</tbody>
</table>

M .................. Mean  
SD .................. Standard Deviation  
Rel. Coeff....... Reliability Coefficient  
S.E.M .......... Standard Error of Measurement
The Likert scales as administered to the pilot group were considered satisfactory in that form. However, some explanation needed to be undertaken at the administration stage to clarify any difficulties the respondents might have in view of the fact that English was the second language for the majority of respondents. The researcher decided to be present throughout all administrations of the questionnaire. The geography teacher was to be co-opted as a well-informed assistant to boost the morale of the respondents.

The respondents were to be briefed on the purpose of the study and on how to complete the instrument. They were to be encouraged to ask questions and seek advice about any aspect of the instrument that concerned them during the administration period. Even though the items to measure the other variables of home background, teacher, peer group and previous academic achievement were not subjected to a pilot exercise the researcher was of the feeling that the respondents were not going to have any difficulties since most of the items had been used before and the researcher was providing the explanation before the actual administration.
Data Collection Phase

Organization and Administration

Before the actual administration of the questionnaire in a selected number of Swaziland high schools, approval was sought from the Swaziland Ministry of Education. The Ministry of Education in turn referred the researcher to the Principals of individual schools selected. The researcher made attempts to contact the principals by telephone, but this proved unsuccessful due to the fact that most schools could not be reached by telephone. As a result the researcher had to drive to the selected schools personally to make arrangements for the administration of the questionnaire. On arrival at each school the researcher reported to the principal and explained the purpose of the exercise. The principal then introduced the researcher to the geography teacher who then took over the proceedings.

All the principals and geography teachers of the schools visited were receptive. Six of the schools were in urban areas and the other six in rural areas. Of the twelve schools ten were co-educational, one was boys only and one was girls only. Both the single-sex schools were in urban areas.
Most of the teachers were supportive of the study. Wherever possible the teachers were asked to sacrifice a morning period for the administration of the instrument. The researcher felt that in the morning the students would be in the right frame of mind to complete the questionnaire. Moreover, most of the schools reserved their afternoon sessions for extracurricular activities and it was felt that any afternoon arrangements might interfere with extracurricular activities.

The administration of the questionnaire was programmed for a 40 minute period but wherever possible a double period was requested from the geography teacher at each school so that an extra 40 minutes could be utilised to explain the instrument to the respondents. After introduction by the subject teacher, the researcher briefed the students about the aims and importance of the study. To initiate good rapport with the students, the researcher told the students that they were at liberty to express themselves in either English or SiSwati when asking questions. This was necessary since most schools in Swaziland have a rigid regulation against the use of any language other than English for communication. This was meant to assure the students and encourage them to seek assistance whenever they felt the need necessary.
With the assistance of the subject teacher, each student was given the questionnaire to read for a few minutes before the actual completion period began. The students were encouraged to ask questions if they needed any clarification at any stage of the administration. Both the geography teacher and the researcher were present at all times during the administration of the questionnaire to attend to any questions from the respondents. Most of the students completed the instrument in 40 minutes and, including question and collection times, the total time, taken was 60 minutes on average.

The final sample

The final sample for the study comprised 435 Form 2 (Year 9) students drawn from six rural and six urban schools. Of this sample 188 were boys comprising 43.2 per cent and 247 were girls comprising 56.8 per cent of the total sample. Thirty five boys attended a boys only school and thirty three girls a girls only school. Both the single sex schools were located in urban areas. Ten of the schools were co-educational and another 2 were single sex schools, one for boys and one for girls, both situated in an urban environment. The actual sample collected was 500 pupils but 65 cases were rejected because they had failed to respond to a number of items or because they were suspected of having
completed the questionnaire in a mischievous way. The number of rejected cases represented 12.8 per cent of the final sample, which was considered to be satisfactory, considering the fact that some of the respondents had problems interpreting the items of the instrument.

In addition to the student responses the researcher requested the geography teacher at each school visited to produce the students' aggregate scores from the beginning of the school year in January to the end of June. The teachers also had to provide information on their highest academic qualification, whether pre-service or in-service.

Conclusion

This chapter restated the research questions for the investigation. The survey design was adopted for the study because survey design produces findings quickly thus assuring the co-operation of the subjects. The sample of 435 Swazi students was drawn from across Swaziland and the instrument administered was adapted from previously validated items wherever possible. Part of the instruments was piloted in February, 1990. The final data collection was undertaken in June 1990. The final data collected and their analysis are presented in the following chapter.
CHAPTER V

DATA ANALYSIS

Overview

This chapter discusses the procedures employed in the analysis of the data collected in Swaziland in July 1990. The discussion is presented in three stages. First, the forty Likert scale items were factor-analysed to determine the relationships among the five items in each of the eight variables listed in Chapter IV. Second, a general discussion of the response patterns of the subjects is presented. This is followed by a discussion of the intercorrelations among the respective variables of home background, teacher, previous academic achievement and peer group, and a discussion of the variable of gender which was subjected to a t-test to determine whether there was any significant difference between the male and female responses.

For the purpose of the computations for the analysis, the SAS statistics programme was used to compute measures of central tendency, measures of variability and correlations among the variables. These computations were undertaken on a WANG PC 250/16 computer.
The forty Likert scale items employed to measure the attitudes of Swazi students to geography were subdivided into eight variables on the basis of the wording of each of the items and its relationship to the main factors. Each of the variables comprised five items. The eight variables and the factor loadings for each of the items are presented in Table III.

As the values in Table III show, most of the items in each of the variables loaded well except items 3 and 19 in variable 3, item 28 in variable 4 and item 8 in variable 8. The researcher decided on a loading of 0.3 as the threshold value. The threshold value of 0.3 is consistent with the advice of Comrey (1973) who suggested that loadings below 0.32 are considered as poor, 0.45 fair, 0.63 very good and those in excess of 0.71 are excellent.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interest in subject</td>
<td>1</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>25</td>
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</tr>
<tr>
<td></td>
<td>33</td>
<td>0.53</td>
</tr>
<tr>
<td>2. Perceived value of subject.</td>
<td>2</td>
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<tr>
<td></td>
<td>10</td>
<td>0.64</td>
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<tr>
<td></td>
<td>18</td>
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</tr>
<tr>
<td></td>
<td>26</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>34</td>
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</tr>
<tr>
<td>3. Attitude to subject teacher</td>
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</tr>
<tr>
<td></td>
<td>11</td>
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</tr>
<tr>
<td></td>
<td>19</td>
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<tr>
<td></td>
<td>27</td>
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</tr>
<tr>
<td></td>
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<td>4. Class management</td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>28</td>
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</tr>
<tr>
<td></td>
<td>36</td>
<td>0.62</td>
</tr>
<tr>
<td>5. Perception of own ability</td>
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</tr>
<tr>
<td></td>
<td>13</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>0.65</td>
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<tr>
<td></td>
<td>29</td>
<td>0.56</td>
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<tr>
<td></td>
<td>37</td>
<td>0.58</td>
</tr>
<tr>
<td>6. Attitude to other students</td>
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<tr>
<td></td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>30</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>38</td>
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</tr>
<tr>
<td>7. Perceived teacher attitude to students</td>
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<tr>
<td></td>
<td>15</td>
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</tr>
<tr>
<td></td>
<td>23</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>0.61</td>
</tr>
<tr>
<td>8. Attitude to homework</td>
<td>8</td>
<td>-0.22</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>0.62</td>
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<tr>
<td></td>
<td>40</td>
<td>0.60</td>
</tr>
</tbody>
</table>
On the whole the items loaded well into their respective variables except the four items discussed above. Item 25 'The thought of going to a geography lesson makes me feel good' loaded exceptionally well. Other items with exceptionally high loadings were items 10, 'I feel that I learn a lot in geography'; 17, 'Most things we learn about in geography are interesting'; 21, 'I am usually proud of the work I do in geography'; 24, 'Doing geography homework helps me to understand the subject'; 27, 'My teacher makes geography easier to understand'; 30, 'I am happy to work with most of the students in my geography class' 32, 'If I needed help to do my geography homework, I would not be able to get it'; 36, 'In my geography class, students finish their work early are usually left with nothing to do'; 38, 'Many of the students in my geography class just want to waste time; 39, 'Our geography teacher is not interested in our opinions' and 40, 'My parents do not encourage me to do my homework'. All these items with high loadings were simply-worded and were interpreted correctly by the respondents.

Item 3 "My geography teacher does not allow me to work at my own speed" had a factor loading of 0.21 which was just below the threshold of 0.3 set up by the researcher. This could be attributed to students' comprehension rather than to mathematical reasons. The negative wording may have caused
problems for some of the respondents who might not have been aware that 'strongly agree' would be reverse-scored to 'strongly disagree'. Item 8 'I can usually cope with the geography homework we are given' had a factor loading of -0.22. The item might have presented conceptual problems for the respondents who might not have understood the meaning of the word 'cope'.

Item 19 'My geography teacher will seldom help students who are having difficulty with school work' had a factor loading of -0.58. The negative loading might have resulted from the reverse scoring. No apparent reason for the negative loading of Item 28 could be found.

Response patterns

The conceptual model for the study presented in Chapter III proposed that peer group, teacher qualification, home background, and previous academic achievement all have associations with students' attitudes toward their school subjects in general and to geography in particular. As mentioned in Chapter IV the main focus of the study was to assess the attitudes of Swazi students toward geography as well as to determine if there was any association between the educational environments and the expressed attitudes. The design of this study,
however, precluded the determination of causality since it was aimed at assessing the degree of relationship between the educational environments of school, home background, peer group, teacher and previous achievement. According to Moore (1983) only experimental and quasi-experimental research designs can determine causality.

In general the students displayed positive attitudes toward geography with the means in the upper end of the scale. The scale range of the Likert scales being 1 - 4). Most of the items had means above 3.00 except items 8, 11, 16, 19, 20, 23, 28, 29, 31, 34, 36 and 38 all of which had means below 3.00. This was an indication that Swazi students generally had positive attitudes toward geography.

Of these items, items 8 'I can usually cope with the geography homework we are given'; and 16 'We get too much homework in geography' both relate to attitude to homework. Items 11 'The geography teacher usually arranges interesting things for us to do' 19 'My geography teacher will seldom help students help students who are having difficulty with school work' relate to attitude to subject teacher. Items 20, 'Activities in this geography class are carefully planned'; 28, 'Boys are most likely to be asked to answer questions during our geography class' and 36,
'In my geography class, students who finish their work early are left with nothing to do' relate to class management. Items 23, 'Our geography teacher seems to like most of the students in this class' and 31, 'I feel that I can speak to my geography teacher about things that are in my mind' relate to perceived teacher attitude to students. Item 29 'In my geography lessons I usually don't understand the work we are given relates to perception of own ability. Item 38 'Many of the students in my geography class just want to waste time' relates to attitude to other students. In general the items with means below 3.00 had to do with the teacher in one way or another. Such a scenario probably means that the teachers are perceived to be less effective by their students.

The standard deviations for each of the items ranged between 0.6724 and 1.061. These moderately high standard deviations imply that the students' responses did not vary much from the mean score, signifying the homogeneity of the responses. (See Appendix C).

**INTERCORRELATIONS AMONG VARIABLES**

Prior to discussing the findings of the intercorrelations among the variables of the Likert scales on the one hand and the variables of teacher, home background, previous academic achievement and peer group on the other, mention must be made that
the correlations do not indicate causality but rather the degree of relationship among the variables. The Pearson Correlation coefficients for the different variables are displayed in Table IV.

As Table IV shows, the intercorrelations among the variables are low, indicating that there seems to be very little relationship between expressed attitudes and the students' home backgrounds, teacher qualification, students' academic achievement and peer influence. High correlations would have implied that the variables of home background as indicated by parents' employment and education, teacher qualification, previous academic achievement and peer group have significant influence on the attitudes of Swazi students to geography. However, the probabilities of the correlations occurring by chance indicate that some of the correlations, though low are statistically significant at the .05 level of significance. The following subsections discuss the intercorrelations.
### Table IV
INTERCORRELATIONS AMONG THE VARIABLES

<table>
<thead>
<tr>
<th></th>
<th>PEMP</th>
<th>PEDUC</th>
<th>TQUAL</th>
<th>ACHIEVE</th>
<th>PEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intsub</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.04</td>
<td>0.15</td>
<td>0.00</td>
</tr>
<tr>
<td>Valsub</td>
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<td>0.12</td>
<td>0.15</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Atteac</td>
<td>-0.06</td>
<td>0.06</td>
<td>-0.03</td>
<td>0.12</td>
<td>0.03</td>
</tr>
<tr>
<td>Manage</td>
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<td>0.06</td>
<td>-0.01</td>
<td>0.07</td>
<td>0.01</td>
</tr>
<tr>
<td>Abilit</td>
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<td>0.08</td>
<td>-0.14</td>
<td>0.16</td>
<td>-0.04</td>
</tr>
<tr>
<td>Attstu</td>
<td>0.04</td>
<td>-0.03</td>
<td>-0.10</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Tattst</td>
<td>-0.05</td>
<td>0.11</td>
<td>-0.03</td>
<td>0.07</td>
<td>-0.12</td>
</tr>
<tr>
<td>Homewk</td>
<td>-0.05</td>
<td>0.16</td>
<td>-0.03</td>
<td>0.14</td>
<td>-0.06</td>
</tr>
</tbody>
</table>

**PEMP:** Parents' employment  
**PEDUC:** Parents' education  
**TQUAL:** Teacher's qualification  
**ACHIEVE:** Students' academic achievement  
**PEER:** Peer group  
**INSTUB:** Interest in the subject  
**VALSUB:** Perceived value of the subject  
**ATTEAC:** Attitude to subject teacher  
**MANAGE:** Class management  
**ABILIT:** Perceived own ability  
**ATTST:** Attitude to other students  
**TATTST:** Perceived teacher attitude to students  
**HOMEWK:** Attitude to homework
Parents' employment

The correlations between parents' employment and attitudes to geography were generally low, ranging between -.06 for attitude to subject teacher and .01 for teacher's class management. None of these correlations is significant at the .05 level of significance. This would suggest that in Swaziland parents' employment probably has very little effect on the attitude of students towards geography. The negative correlations resulted from the fact that parents' employment was reverse-coded with the highest number indicating the least prestigious employment and vice versa. The correlations, though low, indicated that contrary to previous research findings by Keeves (1972), and Schibeci (1985) the parents' employment does not seem to affect the attitudes of students toward geography. This finding however concurs with the findings of Lockheed, Fuller and Njirongo (1987) as discussed in Chapter II.

Keeves (1972) and Schibeci (1985) found a significant correlation between parents' employment and the attitudes and academic achievements of students in New South Wales and Western Australia respectively. Lockheed et al. (1987), however, found no correlation between the socio-economic status of parents and the attitudes of their children toward school subjects. Interestingly both Keeves and
Schibeci undertook their investigations in a developed country while Lockheed et al. undertook theirs in a developing country, Malawi, which falls into the same category as Swaziland. It would seem that the occupations of parents in developed countries have more impact on the attitudes of students than in developing countries.

The fact that most Swazi students do not stay with their parents while attending school might offer some explanation for the apparent lack of influence of the parents' employment on the attitudes of students. Most Swazi children stay either with relatives whose homesteads are near to a secondary or high school or stay in boarding schools. In either case the students only stay with their parents for at most 150 days per year since each school year is approximately 190 days and some schools have holiday classes to finish the syllabus as early as possible for each school year. For example, the researcher left his parental home at the age of twelve to attend a boarding school in Manzini. Since then he has never spent more than two weeks at one time with his parents. Thus it is not surprising that the parents' occupation does not seem to contribute much in the
determination of students' attitudes toward geography. As the foregoing discussion shows it seems as if the occupations of parents in Swaziland do not affect students' attitudes toward geography significantly.

Parents' education

Like parents' employment, parents' education had very low correlations with the attitudes of Swazi students toward geography. Only the correlation between education and perceived value of the subject, education and perceived teacher attitude to students and education and homework were statistically significant at the .05 level of significance. This could be an indication that, logically, the parents' education had very little effect on the students' attitudes to geography. The most positive correlation (.16) although weak, was that between parents' education and students' attitudes to their homework. This was not surprising in view of the fact that the parents with higher levels of education are likely to encourage their children to complete homework so that they might achieve well academically. The pressure could act as a positive reinforcement to the students to exert more effort and aspire to reach the levels of their parents. The other weak positive correlation between
parents' education and perceived value of the subject signifies the influence which the parents' education has on the students' perceptions of the worth of their school subjects. This is, perhaps, a predictable result since one would expect parents with high education to be in a position to inculcate positive attitudes in their children.

Highly educated parents are most likely to stay with their children in town and this puts these parents at an advantage in attempts to influence their children's attitudes toward their school subjects. On the other hand parents who are not so well-educated do not pay much attention to whether their children develop positive attitudes toward their school subjects or not. However, as pointed out in Chapter II, parents in Third World countries like their children to get formal education which is perceived to help the child achieve success in the modern world. The weak correlations between parents' education and employment and students' attitudes could be an indication that other factors contribute more in the determination of Swazi students' attitudes toward their school subjects.

The correlation between perceived teacher attitude to students and parents' education was also statistically significant. This might be an indication that the highly educated parents have the
ability to influence their children to have positive attitudes toward their teachers. Generally in Swaziland children of educated parents relate better with teachers because they more or less know what the teachers expect of them, unlike children of less educated parents who do no know how to satisfy teacher expectations. On the whole the findings of the study on parents' education show that parents' education has very little effect on the attitudes of Swazi students toward geography.

Teacher qualification

On the whole, teacher qualification had negative correlations with students' attitudes except interest in the subject and perceived value of the subject. The correlation between teacher qualification and interest in the subject is not statistically significant at the .05 level of significance. Nevertheless, the teacher's qualification seemed to affect the students' interest in the subject as well as the student's perception of the value of geography. This could have resulted from the introduction of career guidance and counselling to schools in Swaziland. This programme is meant to make students aware of the vocational value of all the subjects they are doing so that they would choose their subjects with a purpose in mind.
The negative correlations which are statistically significant at the .05 level of significance are those between teacher qualification and the child's perceived own ability on the one hand and the teacher qualification and perceived teacher attitude on the other. This is of interest since it signifies that the higher the teacher's qualification the less the student feels confident and the more negative the child's perception of the teacher's attitude toward his students. Such an occurrence might result from the fact that highly educated teachers in Swaziland do not relate well to their students who, in most cases, come from economically disadvantaged backgrounds. On the other hand, the majority of the highly qualified teachers come from well-to-do homes. The intervening social distance between the students and their teacher generates a poor teacher-student rapport. In the researcher's own personal experience children seemed to relate better to teachers who did not distance themselves from the children. Most of those teachers were those with lower qualifications. Such an assertion, however, has not been proved by empirical research.

The low correlation between teacher qualification and the variables of the Likert scale might also be explained by referring to Eltis' (1985) investigation into the recruitment of teacher trainees in Scotland. The findings revealed that the
majority of applicants for teacher training were not the best academically qualified compared to other professions such as medicine. Arguably such teachers are not likely to be motivated enough to inculcate positive attitudes in their students.

The correlation analysis of teacher qualification and Swazi students' attitudes toward geography showed that there was very little relationship between teacher qualification and students' attitudes. An explanation for this scenario might be the perceived lack of rapport between highly qualified teachers and their students, as well as the assertion that candidates for teacher training are arguably not the best academically qualified compared to other professions and as a result they cannot inculcate positive attitudes to their students.

Previous academic achievement

The correlations between students' previous academic achievement and the other variables were all positive, though relatively low. The highest correlation (.15) was between achievement and perception of own ability followed by interest in the subject (.15) and attitude to homework (.14). The other correlations are extremely low and not deemed to be of significance.
The correlations showed that those students who perceive themselves as being able to do geography also achieve highly, and have interest in geography and enjoy doing their homework. On the contrary, those students who perceive geography as a useful subject do not necessarily achieve highly. Class teacher's management, perceived teacher attitude to students and attitude to other students all have low correlations with the students' achievement, an indication that these variables do not affect the students' achievement.

The findings on students' achievement and attitudes generally agree with Jongeling's (1973) investigation into students attitudes toward mathematics and their relationship to achievement. Jongeling found that there was some correlation, though low, between achievement in mathematics and attitudes to mathematics. This finding is of special interest since the present study was undertaken in a developing country whilst Jongeling's was undertaken in Western Australia which is a state in a developed country. Previous academic achievement seems to be vital in the determination of attitudes in both developed and developing countries.
Peer group

As mentioned in chapter IV, students self-report was used to gauge the influence of the peer group on the attitudes of students toward geography. The analysis showed that peer group influence had very little effect on the attitude of Swazi students toward geography. The highest correlation (−.12) was negative and was between peer group and perceived teacher attitude to students. This was followed by attitude to homework (−.06) which was also negative, perception of own ability (−.04) and perceived value (.04) of the subject which were negative and positive respectively. (See Table IV). None of the correlations was significant at the .05 level of significance. Surprisingly, in contrast with previous findings, there was no correlation between students' interest in the subject and the peer influence. Extremely low correlations of very little significance were those between peer influence and class management and attitude to other students.

The findings of this study, though not in complete agreement with previous investigations, lend credence to Harnqvist's (1985) assertion that peer influence on its own is not easy to determine. Factors such as family background, characteristics of
the community and the social composition of the school all interact in the determination of the students' attitudes toward their subjects.

The fact that Swaziland has a homogeneous population with one main language in addition to English could have enhanced the influence of the peer group on the attitudes of other students toward geography. Such a state of affairs would be expected in Swaziland because, in general, people of the same ethnic origin relate more closely with each other than people who come from different ethnic groups and speak different languages. It is possible that the self-report method did not work as effectively as the researcher intended. Some of the subjects might not have given true responses on the amount of influence their peers had on their choice of subjects.

As the findings reveal, peer group did not seem to have much influence on the attitudes of Swazi students toward geography. One can only speculate that the self-report method used to gauge the students' perception of their peer influence was either not effective enough or there are other factors that influence students' attitudes more than peer groups.
Gender

The t-test to determine whether there was a significant difference between the responses of the male and female students to the Likert scales revealed that there was no significant difference in attitudes to geography between males ($M = 112.8$) and females ($M = 112.7$), $t(433) = 0.03$, $f > 0.05$.

Gender, as it seems, does not affect the attitudes of Swazi students to geography. The finding is in sharp contrast to Braun's (1976) and Bank's (1985) findings that girls show more positive attitudes toward their school subjects. The findings cited, however, are both from developed countries and one would expect some differences between findings from developed countries and those from developing countries as is the case in this investigation. The differences could result from the different upbringings and social exposure children from developed countries have compared to developing countries.
Summary

This chapter presented the analysis of the data collected and the findings. The forty items of the Likert scale questionnaire were sub-divided into eight variables each comprising of five items. These items were factor-analysed to determine the relationships among the five items in each variable. Most of the items had reasonable factor-loadings.

A general overview of the response patterns of the respondents showed that the respondents had positive attitudes toward geography and the standard deviations from the means were moderately high signifying that the responses of the subjects were almost homogeneous.

The findings of the analysis revealed that, contrary to previous research findings, parents' employment and education, teacher qualification, previous academic achievement and peer group seemed to have very little relationship with attitudes of Swazi students to geography. The low correlations between attitudes on the one hand and the variables of home background, teacher, previous academic achievement on the other seem to indicate that findings from developed countries cannot be necessarily held true for developing countries. Also the fact that there was no significant difference
between male and female Swazi students' attitudes toward geography shows that research findings from developed countries are, in most cases different to those from developing countries. The next chapter presents the summary, conclusions and implications of these findings.
CHAPTER VI

SUMMARY, CONCLUSIONS AND IMPLICATIONS

INTRODUCTION

In this study an attempt was made to assess Swazi students' attitudes toward geography. An inventory of forty Likert scale items compiled by the Research Branch of the West Australian Ministry of Education was adopted for the assessment of Swazi students' attitudes toward geography. The forty items were subdivided into eight variables each comprising of five items. The five items in each of the variables were factor-analysed to determine their factor-loadings. Thirty six of the items had reasonably high loadings and were included in the final analysis.

The investigation addressed three major questions:
1. What are the attitudes of Swazi students toward Geography?

2. Is there any association between expressed attitudes and the variables of home background, teacher, previous academic achievement, peer group and gender?
3. Is there any significant difference between male and female Swazi students' attitudes towards geography?

The means of the students' responses were computed and correlation analysis between expressed attitudes on the one hand and the exogenous variables on the other was carried out. A t-test was computed to determine the difference between male and female students' attitudes toward geography.

Results

This section summarises the results of the data analysis as described in the previous chapter. For clarity, results with respect to each of the variables of home background, teacher, previous academic achievement and peer group, are summarised separately.

Home background

This variable was subdivided into parents' education and parents' employment. Generally, parents' education and employment seemed to have very little effect on the attitudes of Swazi students toward geography.
The low correlations indicate that most of the parents in Swaziland do not have much impact on the attitudes of their children toward their school subjects. This finding would tend to support previous findings by Lockheed et al that in developing countries the home background of the student does not seem to have much effect on the attitude of the students toward their school subjects. This could be an indication that the teacher is more effective in inculcating students' attitudes toward their school subjects.

The teacher

For the teacher, the variable considered for the study was the teacher's qualification expressed in the number of years the teacher took for the training. The correlations between teacher qualification and students' attitudes were extremely low, indicating that the teacher's qualification had very little effect on the attitudes of Swazi students toward geography. This is in contrast with previous findings which state that the teacher plays a role in influencing students' attitudes.

Although the correlations were extremely low, they indicated some relationship between teacher qualification and students' attitudes. The highest correlation, though still relatively low, was between
teacher qualification and perceived value of the subject. This could be an indicator that the better qualified teachers are in a position to influence their students to attach value to geography as a subject. As discussed in Chapter V, such a finding might have resulted from the Swaziland Government introduction of career guidance in schools with the purpose of encouraging students to make informed choices of their subjects.

The low correlation between teacher qualification and students' attitudes may be an indication that the qualification of the teacher on its own has very little effect on the attitudes of students to their school subjects. Other variables such as the teacher's skills of teaching, teacher experience, teacher rapport with students and the teacher expectancy effect may have more influence on the students than the teacher's qualification.

The results also showed that teacher qualification, especially in developing countries, forms a narrow dimension in the evaluation of teachers. Medley (1985) proposed that teachers should be judged by their effect, that is the result of their teaching as depicted in the scores earned by the teacher's pupils on measures of knowledge, skills and values that pupils are supposed to acquire as the
result of teaching. Such an evaluation would be appropriate for geography teachers since knowledge, skills and values form the core of the social studies curriculum.

The assessment of process (how the teacher behaves), function (how the teacher gets the students to behave) and effectiveness (changes the teacher brings about) could also help in the investigation of the teacher's role in influencing students' attitudes to geography.

Previous academic achievement

Previous academic achievement had low correlations with all the variables of attitude. Significantly, however, the correlations were positive, an indication that those students who score highly in general also have positive attitudes toward geography.

This study also revealed that previous academic achievement was not the main determinant of the students' attitudes towards their school subjects. On the contrary, Swazi students expressed highly positive attitudes toward geography while at the same time their academic achievement was not consistently high and they tend to ignore geography at tertiary
level. The 'Attitude-achievement paradox among economically disadvantaged Black American adolescents' as propounded by Mickelson (1990) might offer some explanation for this finding. In a study Mickelson stated that Blacks have a reverence for education but the reverence was not translated into high achievement.

Mickelson (1990) explains the paradox by stating that all students have two sets of attitudes toward their school subjects. The first set of attitudes, known as abstract attitudes, embody the belief that schooling is a vehicle for success and upward mobility. The second set, known as concrete attitudes reflect 'the diverse empirical realities that people experience with respect to returns on education from the opportunity structure' (p. 45).

Abstract attitudes cannot predict achievement behaviour and vary relatively little in one's life while concrete attitudes vary in accordance with their perception and understanding of how adults who affect their lives fare in the world of employment. The design of the questionnaire was such that the Likert scale measured the abstract attitudes rather than the concrete attitudes, and as such, the findings reflect highly positive attitudes. This could explain the researcher's assertion that even though Swazi students select geography as one of
their school subjects they fail to take it at a higher level than secondary school. On the other hand if concrete attitudes were to be assessed they would most likely reveal how a student's experiences and subsequently expectations have been affected by the family, community and the school.

Peer group

Contrary to previous research findings, peer groups did not seem to have any correlation with the attitudes of Swazi students toward geography. Previous studies on peer influence were mostly undertaken in developed countries and the findings might not necessarily apply to developing countries due to the differences in the ways in which the peers relate to each other. The fact that most Swazi children are normally shy and reserved insulates them from peer influence as opposed to developed countries where peers relate to each other openly.

The findings on peer influence also revealed that the self-report of the students might not have provided realistic responses as some of the students may not have liked to be seen as being subservient to their peers.
Gender

The results of the t-test to determine whether there was any significant difference in attitude to geography between males and females revealed that there was no significant difference.

The lack of any significant difference between the attitudes of the two genders toward geography in Swaziland might be an indication that developing countries do not discriminate between the sexes in school. An assertion this one could be viewed as a contradiction when one considers the fact that in most developing countries there is a dearth of egalitarianism resulting in males and females having clearly defined chores. One would expect such a set-up to generate different attitudes between boys and girls.

CONCLUSION

Attitudes of Swazi students toward geography and their relationships with the variables of teacher, previous academic achievement, peer group and home background formed the main focus for this study. Results of this study indicate that Swazi students generally have positive attitudes toward geography. However, contrary to previous findings, this investigation did not support previous research
results on the amount of influence of the exogenous variables of teacher, peer group, previous academic achievement and home background on Swazi students' attitudes toward geography.

The correlations between the variables and students' attitudes were in most cases low, indicating that attitudes of Swazi students are, in most cases not related to the exogenous variables. Some other extraneous variables must be responsible for the shaping of the attitudes of Swazi students. Most of the findings cited in the literature review were based on investigations undertaken in developed countries which have different living standards to those of Swaziland. This could account for the apparent disparity between the findings of the present investigation and previous research findings.

It is very likely that those variables considered to be instrumental in the determination of attitudes in developed countries are not as vital in developing countries. Such variables as birth order, household chores, employment opportunities and others may be vital in the determination of attitudes in developing countries.
According to the findings of this study, some aspects of attitude toward geography correlate highly with the exogenous variables of previous academic achievement and teacher qualification while correlating lowly with home background and peer group. The correlations, however, are in stark contrast to previous findings as mentioned in Chapter II. Could this be an indication that, in developing countries, home background and peer group do not have any effect on the attitudes of students? Also worthy of note is the finding that there is no difference between boys' and girls' attitudes toward geography. This could have interesting implications for educational practice. These implications are addressed in the next sub-section.

IMPLICATIONS FOR EDUCATIONAL PRACTICE

This study revealed that the most important variable in the determination of Swazi students' attitudes toward geography was previous academic achievement. This means that the teacher has to make sure that the students master his subject if they are to achieve highly and thus develop positive attitudes. On the other hand low achievement may be a result of negative attitudes which could have been developed earlier on in the students' academic life. Such attitudes, once developed, are difficult to change.
Teacher qualification, another important variable, correlated lowly with the students' attitudes. This is of interest in Swaziland since there is a belief that the more qualified a teacher is the less he will be able to teach effectively. There is a belief among the Swazis that highly qualified teachers tend to teach at a level which is too high for the students thus rendering the teacher less effective. Although this has not been proved by empirical research, the findings of this study do lend some credence to belief in this myth. The Swaziland government and the teacher training institutions in Swaziland might be able to conduct some form of research on how best to prepare teachers for the different subjects.

At present teacher training for secondary schools in Swaziland is undertaken by the William Pitcher Teachers' College and the University of Swaziland. These two institutions also work in close association with the National Curriculum Centre which was established to develop curricula which would provide as much diversification as possible in the secondary schools. This involved the introduction of practical, vocationally oriented
subjects into schools so that students who could not proceed to tertiary institutions would be absorbed into the employment opportunities which are open to them.

In addition, the Swaziland Ministry of Education established the Department of Educational Testing and Guidance which oversees the counselling of students, as well as guiding them on how they can utilize the subjects they do at secondary school in the world of employment. The findings of the present investigation imply that teachers should work in close association with the Ministry of Education as well as the employment sector in order to ensure that their subjects are relevant and are seen to be relevant by their students. This necessitates the teaching of knowledge, skills and values in the case of geography so that the students would, in addition to academic qualification, be able to pass the knowledge to others, be able to perform practical skills such as map-reading, drawing and interpretation and also be able to co-exist with other fellow human beings and solve problems amicably.

Surprisingly, peer group did not seem to make much impact on the attitudes of Swazi students. For the teacher this could be a sign that the previous research findings on the relationship between peer
group and attitudes is over-exaggerated, at least in developing countries. A short-coming of this study, however, is that the peers had to make self-reports. Some of them might have given false reports about the influence of their peers.

The apparent lack of peer influence might be an indicator that Swazi students are individualistic and do not work in co-operation with each other. This poses an additional burden to the geography teacher since, as mentioned earlier, one of the major aims of geography is to teach values which govern one's behaviour. The geography teacher might be expected to encourage the students to work together at all times and share ideas.

The influence of the home background, as mentioned in Chapter V, did not seem to be as much as studies in developed countries had revealed. In developed countries the schools complement what the students experience at home. In the developing countries, however, the home and the school are two different environments, in most cases unrelated and the child has to learn to adapt to both at the same time. Hence, whatever the child learns at home is not applicable at school. May be the best solution is to channel the curriculum in such a way that home experiences have some relevance even at school and vice versa.
In the case of Swaziland it is only about ten years since students started to be taught that their traditions were just as good as the foreign traditions imported by the colonialists and missionaries. Before then, as soon as the children left their parental homes, those children were compelled to forget about the traditions observed at home. But on returning home the same child had to revert to the traditional way of life. This discrepancy between the traditional and western forms of education might assist the geography teacher to teach about the importance of a people's traditions and respect for other people's ways of life. Although this aspect of the geography curriculum is not clearly spelt out in the Swaziland geography syllabus, it forms an important part of many social studies curriculums such as the Western Australian K - 10 social studies syllabus. Attitudes of sensitivity, tolerance, respect for the truth, respect for the rights of individuals and the desire to participate in the social process in a responsive way are mentioned clearly in the W.A. K - 10 social studies curriculum. Geography teachers in Swaziland could gain a lot if the importance of value education could be emphasized.
The lack of significant differences between boys' and girls' attitudes toward geography might be of great help to teachers since it is an indication that the non-egalitarianism of the Swazi society does not have much influence on the students. Teachers of geography could exploit this to emphasize the non-sexism of education in general. Gone are the days when the different sexes were forced to do different subjects because some subjects were perceived to be too difficult for another gender. Geography, as a social science could go far in implementing the equality, not only of the sexes but, of mankind in general.

IMPLICATIONS FOR FURTHER RESEARCH

As mentioned in Chapter II, very little research has been conducted on the attitudes of students toward social studies in general and geography in particular. Most of the previous investigations have been conducted in developed countries and the findings do not necessarily apply to developing countries. Thus it becomes difficult for any researcher to try and apply the findings to developing countries. Investigations into attitudes of students toward their school subjects in
developing countries might form an important area of research. Such research can also go far in evaluating different curricula which were inherited from the colonial times.

Since this study revealed that the variables of home background and peer group did not have much effect on the attitudes of students, a search for other variables which might affect attitudes can be of considerable importance. Variables such as birth order, size of the family and distance travelled to and from school might produce some interesting results for a third world country such as Swaziland. In addition, the lack of significant difference between boys' and girls' attitudes toward geography in Swaziland can be exploited to determine the underlying reasons for such findings. An investigation which would take into consideration such variables as hobbies and other activities which can be described as geographical might produce useful findings.

The fact that the assessment of attitudes toward school and school subjects only takes into account the abstract attitudes rather than concrete attitudes as stated by Mickelson (1990) renders attitude assessment less rewarding, especially in developing countries. Future research would go far in unravelling the attitude-achievement paradox if
the concrete attitudes rather than the abstract attitudes were assessed. Concrete attitudes are more relevant in the determination of achievement than abstract attitudes.

The fact that Swazi students generally have positive attitudes toward their school subjects but avoid studying the subjects further than high school is an indication that further research needs to be conducted on why some students do not want to pursue studies in geography in post-secondary school institutions. A longitudinal research design in which a cohort of students is studied from secondary school to tertiary institutions may provide useful findings.

Finally, the study revealed that Swazi students expressed positive attitudes toward geography and that the expressed positive attitudes had low correlations with the variables of home background, teacher, peer group and previous academic achievement. These findings, however, should be treated as tentative since the investigation was undertaken over a short period and the curriculum is revised now and again to bring it up to date with recent social and educational developments. Plans are underway for the selection of students who would write the O-Level school certificate examination as early as Year 8. The curriculum invariably has to be
geared towards catering for students who would not be expected to write their school certificate examinations as well as those who would sit for their school certificate examinations in preparation for tertiary education.
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APPENDIX A

STUDENTS' QUESTIONNAIRE

The purpose of this questionnaire is to find out about your opinions and feelings about one of your school subjects, namely, geography. However, some background information is needed before you can complete the section on your opinions about geography. Any information you give will be treated with confidentiality and it will not be disclosed to any other person.

Part A: Background Information

1.(a) Name_________________________

   (b) Gender  Male (1)  Female (2)

2. Describe the present or last main occupation of your father (or male guardian) and your mother (or female guardian). Be as precise and detailed as possible, stating the nature and grade of the occupation, e.g. high school teacher, subsistent farmer etc.
3. What is the highest educational level your mother and father completed? Circle one number in each column. If necessary make a guess and write down the name of any qualification that you do not know where to place.

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Some primary school</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(b) Completed primary school</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>(c) Less than four years secondary school</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>(d) Four years secondary school</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(e) Technical trade certificate or other training after secondary school</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>(f) Five or six years secondary schooling</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>(g) Some university subjects or similar college level studies after secondary school</td>
<td>7</td>
<td>7</td>
</tr>
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</table>
(h) A tertiary level diploma
e.g. SCOT (please specify)


(i) Completed university degree

(j) Other qualification (Please specify)

4 (a) Write down the names of your three best friends in Form 2.

NAMES

1.
2.
3.

4 (b) In your opinion, would you consider your three best friends to have influenced you to select geography as one of your subjects. Put a tick mark ( ) against the answer you think best describes your friends' influence.

Yes, to a great extent ( )
Yes, to some extent ( )
Not at all ( )
Part B: Attitudes to Geography

Before you commence, practise on the sample below.

Place a circle around:

4 if you STRONGLY AGREE with the statement;
3 if you AGREE with the statement;
2 if you DISAGREE with the statement;
1 if you STRONGLY DISAGREE with the statement.

*******************************************************
I enjoy going to a soccer match.

4 3 2 1

If you agree with this statement you will circle the 3.

*******************************************************

1. I usually like geography.

4 3 2 1

2. I find geography less useful than other subjects.

4 3 2 1

3. My geography teacher does not allow me to work at my own speed.

4 3 2 1
4. My geography teacher always explains what he/she would like us to do.
   4 3 2 1

5. In my geography class I don't try to do work that I find difficult.
   4 3 2 1

6. I like most of the students in my geography class.
   4 3 2 1

7. My geography teacher is very understanding.
   4 3 2 1

8. I can usually cope with the geography homework we are given.
   4 3 2 1

9. Geography lessons are usually boring.
   4 3 2 1

10. I feel that I learn a lot in geography.
    4 3 2 1
11. The geography teacher usually arranges interesting things for us to do.
   4 3 2 1

12. The teacher is not able to control the students in geography classes.
   4 3 2 1

13. I can usually handle the work I am given in geography.
   4 3 2 1

14. The students in my class do not pay attention to what the teacher is saying.
   4 3 2 1

15. My geography teacher is not interested in whether or not the students can handle the work.
   4 3 2 1

16. We get too much homework in geography.
   4 3 2 1

17. Most things we learn about in geography are interesting.
   4 3 2 1
18. What we do in geography will help me understand more of the world around me.
   4 3 2 1

19. My geography teacher will seldom help students who are having difficulty with school work.
   4 3 2 1

20. Activities in this geography class are carefully planned.
   4 3 2 1

21. I am usually proud of the work I do in geography.
   4 3 2 1

22. Some of the students in this geography class prevent me from working.
   4 3 2 1

23. Our geography teacher seems to like most of the students in this geography class.
   4 3 2 1

24. Doing geography homeworks helps me to understand the subject.
   4 3 2 1
25. The thought of going to a geography lesson makes me feel good.
   4 3 2 1

26. I don't expect to make much use of what I learn in geography.
   4 3 2 1

27. My teacher is able to make geography easier to understand.
   4 3 2 1

28. Boys are most likely to be asked to answer questions in our geography class.
   4 3 2 1

29. In my geography lessons I usually don't understand the work we are given.
   4 3 2 1

30. I am happy to work with most of the students in my geography class.
   4 3 2 1
31. I feel that I can speak to my geography teacher about things that are in my mind.
   4 3 2 1

32. If I needed help to do my geography homework I would not be able to get it.
   4 3 2 1

33. I don't enjoy any of the activities we do in geography.
   4 3 2 1

34. If I do well in geography it will help me to get a job.
   4 3 2 1

35. My geography teacher embarrasses students who do not know the right answer.
   4 3 2 1

36. In my geography class, students who finish their work early are usually left with nothing to do.
   4 3 2 1
37. In my geography class I usually try to do as well as I can.
        4 3 2 1

38. Many of the students in my geography class just want to waste time.
        4 3 2 1

39. Our geography teacher is not interested in our opinions.
        4 3 2 1

40. My parents don't encourage me to do my homework.
        4 3 2 1

THANK YOU FOR YOUR CO-OPERATION
APPENDIX B

OCCUPATIONAL CODING CATEGORIES

As adapted from Currie (1980:84)

1. Upper professionals
2. Graziers, managerial
3. Lower professionals
4. Shop proprietors
5. Farmers
6. Clerical workers
7. Craftsmen
8. Armed services, shop assistants, service workers
APPENDIX C

Means and standard deviations for the Likert scale items

Maximum -- 4
Minimum -- 1

N = 435

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<th>Standard deviation</th>
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